



374

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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オフロード法2014年
基準適合

374 Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C15	
Engine Power – ISO 9249	361 kW	484 hp
Engine Power – ISO 14396	362 kW	485 hp
Bore	137 mm	5.39 in
Stroke	171 mm	6.73 in
Displacement	15.2 L	928 in ³
Biodiesel Capability	Up to B20 ⁽¹⁾	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- ISO 9249 is net power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator with engine speed at 1,700 rpm.
- Advertised power is tested per the specified standard in effect at the time of manufacture.

⁽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	6.52 rpm	
Maximum Swing Torque	298 kN·m	220,000 lbf·ft

Weights

Operating Weight	71 700 kg	158,200 lb
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- Long Variable Gauge undercarriage, Reach boom, R3.60VB (11'10") stick, SD 3.30 m³ (4.32 yd³) bucket, 650 mm (26") HD double grouser shoes and 11.24 mt (24,780 lb) counterweight.

Track

Standard Track Shoes Width	650 mm	26 in
Number of Shoes (each side)	47	
Number of Track Rollers (each side)	8	
Number of Carrier Rollers (each side)	3	

Drive

Maximum Gradeability	39.7°/83%	
Maximum Travel Speed	4.1 km/h	2.5 mph
Maximum Drawbar Pull	491 kN	110,359 lbf

Hydraulic System

Main System – Maximum Flow – Implement	896 L/min (× 2 pumps)	237 gal/min (× 2 pumps)
Swing System – Maximum Flow	247 L/min	65 gal/min
Maximum Pressure – Equipment – Implement	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	35 000 kPa	5,076 psi
Boom Cylinder – Bore	190 mm	7 in
Boom Cylinder – Stroke	1792 mm	71 in
Stick Cylinder – Bore	210 mm	8 in
Stick Cylinder – Stroke	2118 mm	83 in
VB Bucket Cylinder – Bore	190 mm	7 in
VB Bucket Cylinder – Stroke	1433 mm	56 in
WB Bucket Cylinder – Bore	200 mm	8 in
WB Bucket Cylinder – Stroke	1457 mm	57 in

Service Refill Capacities

Fuel Tank Capacity	920 L	243 gal
Cooling System	71 L	19 gal
Engine Oil (with filter)	62 L	16 gal
Swing Drive	20 L	5 gal
Final Drive (each)	32 L	9 gal
Hydraulic System (including tank)	620 L	164 gal
Hydraulic Tank (including suction pipe)	326 L	86 gal
DEF Tank	80 L	21 gal

Standards

Brakes	ISO 10265:2008
Cab/FOGS	ISO 10262:1998

Sound Performance

ISO 6395 (external)	108 dB(A)
ISO 6396 (inside cab)	73 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- 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

	650 mm (26") HD Double Grouser Shoes	
	Weight kg (lb)	Ground Pressure kPa (psi)
Base Frame with Track Rollers and Carrier Rollers		
11.24 mt (24,780 lb) Counterweight + Long Variable Gauge Undercarriage Base Machine		
Reach Boom + R3.60VB (11'10") Stick + 3.30 m ³ (4.32 yd ³) SD bucket	71 700 (158,200)	106 (15)
Mass Boom + M3.0WB (9'10") Stick + 4.40 m ³ (5.75 yd ³) XD bucket	75 000 (165,300)	111 (16)

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

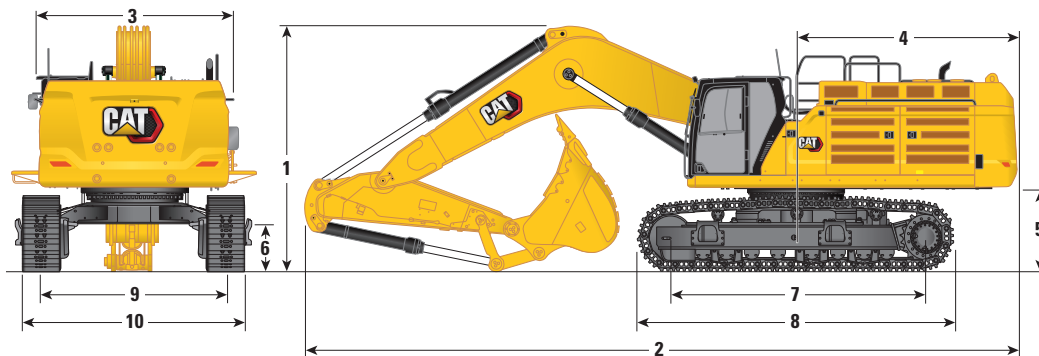
Major Component Weights

	kg	lb
Base Machine Weight: including upperframe, undercarriage, counterweight, boom cylinders, without boom, stick, bucket, stick cylinder, bucket cylinder, tracks, without fuel 612 kg (1,349 lb), operator 75 kg (165 lb), with hydraulic oil 184 kg (406 lb), diesel exhaust fluid 49 kg (108 lb)		
With 11.24 mt (24,780 lb) Counterweight, Swing Frame and Base Frame	48 030	105,880
Track Shoes:		
650 mm (26") HD Double Grouser Track Shoes	8220	18,110
Two Boom Cylinders	1400	3,080
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	860	1,880
Counterweight:		
11.24 mt (24,780 lb) Counterweight	11 240	24,780
Swing Frame:		
Standard Swing Frame	6450	14,210
Long Variable Gauge Undercarriage:		
Base Frame with Double Flange Track Rollers and Carrier Rollers	18 850	41,560
Booms (including lines, pins, stick cylinder):		
Reach Boom 7.8 m (25'7")	6960	15,330
Mass Boom 7.0 m (23'0")	7510	16,560
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R3.60VB (11'10")	3760	8,280
Mass Stick M3.00WB (9'10")	4400	9,710
Buckets (without linkage):		
3.00 m ³ (3.92 yd ³) Severe Duty for VB	3740	8,240
3.30 m ³ (4.32 yd ³) Severe Duty for VB	3940	8,680
4.40 m ³ (5.75 yd ³) Extreme Duty for WB	5950	13,110

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Dimensions

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



Boom Options

Reach Boom
7.8 m (25'7")

Mass Boom
7.0 m (23'0")

Stick Options

Reach Stick
R3.60VB (11'10")

Mass Stick
M3.00WB (9'10")

1 Machine Height:

Cab Height	3559 mm	11'8"	3559 mm	11'8"
FOGS Height	3702 mm	12'1"	3702 mm	12'1"
Handrails Height	3982 mm	13'0"	3982 mm	13'0"
With Boom/Stick/Bucket Installed	4519 mm	14'9"	4902 mm	16'0"
With Boom/Stick Installed	4287 mm	14'0"	4463 mm	14'7"
With Boom Installed	3896 mm	12'9"	3896 mm	12'9"
With Boom/Stick/Bucket Installed (with auxiliary lines)	4555 mm	14'11"	4918 mm	16'1"
With Boom/Stick Installed (with auxiliary lines)	4319 mm	14'2"	4496 mm	14'9"
With Boom Installed (with auxiliary lines)	4033 mm	13'2"	4033 mm	13'2"

2 Machine Length:

With Boom/Stick/Bucket Installed	13 652 mm	44'9"	12 856 mm	42'2"
With Boom/Stick Installed	13 625 mm	44'8"	12 702 mm	41'8"
With Boom Installed	11 855 mm	38'10"	11 011 mm	36'1"
With Boom/Stick/Bucket Installed (with auxiliary lines)	13 652 mm	44'9"	12 856 mm	42'2"
With Boom/Stick Installed (with auxiliary lines)	13 625 mm	44'8"	12 702 mm	41'8"
With Boom Installed (with auxiliary lines)	11 855 mm	38'10"	11 056 mm	36'3"

3 Upperframe Width:

Without Walkways	3470 mm	11'4"	3470 mm	11'4"
With Walkways	4508 mm	14'9"	4508 mm	14'9"
Walkways Width	536 mm	1'9"	536 mm	1'9"

4 Tail Swing Radius

4171 mm	13'8"	4171 mm	13'8"
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5 Counterweight Clearance without Shoe Lug

1494 mm	4'10"	1494 mm	4'10"
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6 Ground Clearance without Shoe Lug

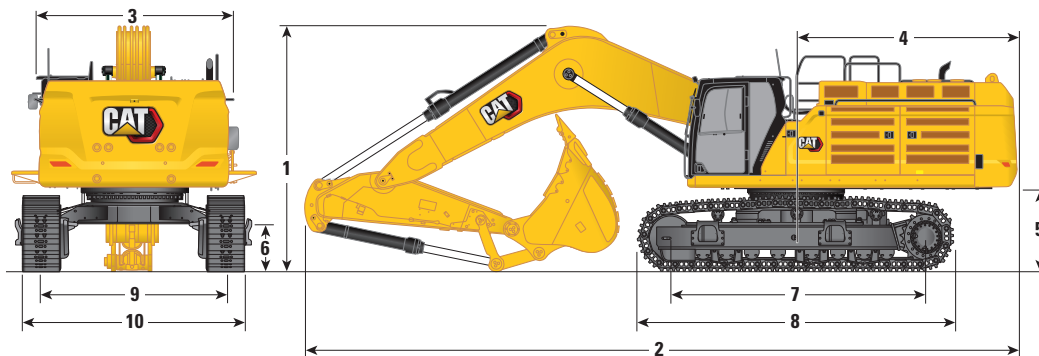
782 mm	2'6"	782 mm	2'6"
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Dimensions *(continued)*

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

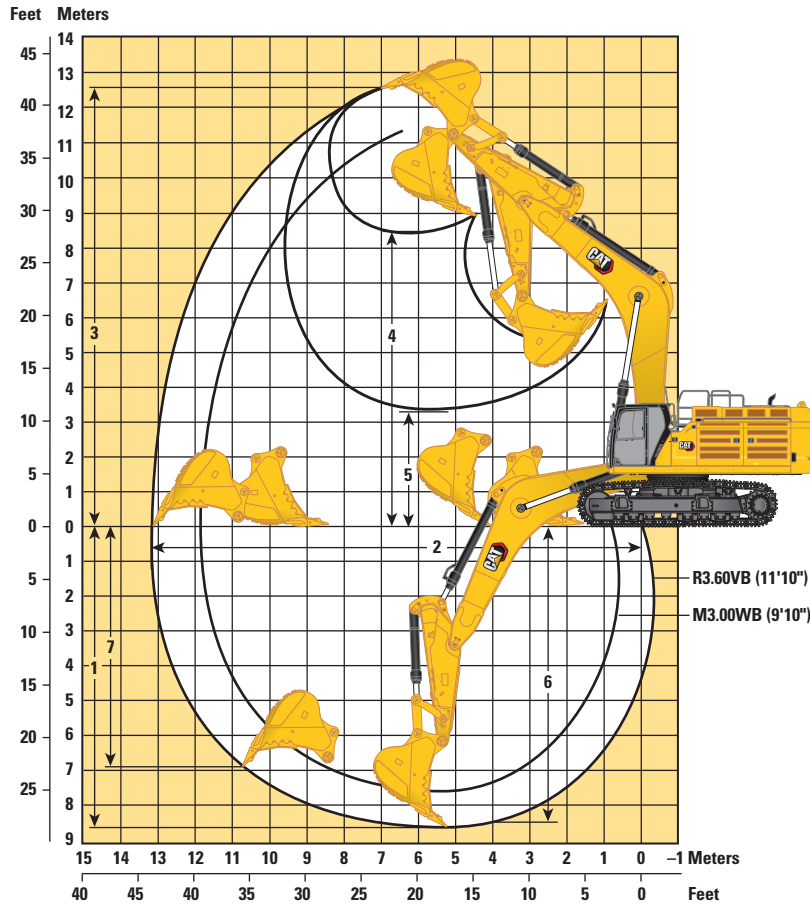


Boom Options	Reach Boom 7.8 m (25'7")		Mass Boom 7.0 m (23'0")	
Stick Options	Reach Stick R3.60VB (11'10")		Mass Stick M3.00WB (9'10")	
7 Length to Center of Rollers	4705 mm	15'5"	4705 mm	15'5"
8 Track Length with Double Grouser Shoes	5873 mm	19'3"	5873 mm	19'3"
9 Track Gauge:				
Retracted with Double Grouser Shoes	2750 mm	9'0"	2750 mm	9'0"
Extended with Double Grouser Shoes	3410 mm	11'2"	3410 mm	11'2"
10 Undercarriage Width – Retracted (without steps):				
650 mm (26") Shoes	3400 mm	11'1"	3400 mm	11'1"
Undercarriage Width – Retracted (with steps):				
650 mm (26") Shoes	3678 mm	12'0"	3678 mm	12'0"
Undercarriage Width – Extended (without steps):				
650 mm (26") Shoes	4060 mm	13'3"	4060 mm	13'3"
Undercarriage Width – Extended (with steps):				
650 mm (26") Shoes	4338 mm	14'2"	4338 mm	14'2"
Bucket Type	SD		XD	
Bucket Capacity	3.30 m ³	4.32 yd ³	4.40 m ³	5.75 yd ³
Bucket Tip Radius	2240 mm	7'4"	2310 mm	7'6"

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Working Ranges and Forces

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



Boom Options	Reach Boom 7.8 m (25'7")		Mass Boom 7.0 m (23'0")	
Stick Options	Reach Stick R3.60VB (11'10")		Mass Stick M3.00WB (9'10")	
1 Maximum Digging Depth	8570 mm	28'1"	7660 mm	25'1"
2 Maximum Reach at Ground Line	13 160 mm	43'2"	11 860 mm	38'10"
3 Maximum Cutting Height	12 550 mm	41'2"	11 170 mm	36'7"
4 Maximum Loading Height	8430 mm	27'7"	7220 mm	23'8"
5 Minimum Loading Height	3310 mm	10'10"	3050 mm	10'0"
6 Maximum Depth Cut for 2240 mm (8'0") Level Bottom	8440 mm	27'8"	7520 mm	24'8"
7 Maximum Vertical Wall Digging Depth	6910 mm	22'8"	3970 mm	13'0"
Bucket Digging Force (ISO)	358 kN	80,550 lbf	406 kN	91,330 lbf
Stick Digging Force (ISO)	295 kN	66,390 lbf	322 kN	72,450 lbf
Bucket Type	SD		XD	
Bucket Capacity	3.30 m ³	4.32 yd ³	4.40 m ³	5.75 yd ³
Bucket Tip Radius	2240 mm	7'4"	2310 mm	7'6"

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Bucket Specifications and Compatibility

	Width		Capacity		Weight		Fill	Long Variable Gauge Undercarriage	
								11.24 mt (24,780 lb) Counterweight	
	mm	in	m ³	yd ³	kg	lb	%	7.8 m (25'7") Reach	7.0 m (23'0") Mass
No Coupler									
Severe Duty	1650	65	2.50	3.27	3009	6,634	90	●	
	1950	77	3.00	3.92	3660	8,068	90	●	
	1750	70	3.30	4.32	3634	8,068	90	●	
Severe Duty	1950	77	4.10	5.36	4821	10,628	90		●
Extreme Duty	2050	81	4.40	5.75	5762	12,703	90		⊙
Maximum load with pin-on (payload + bucket)							kg	10 035	12 680
							lb	22,123	27,955

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)

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.

Truck Pass Match

Model	Bucket Size	Hauler	725	730	730 EJ	735	740 EJ	740 GC	745	770G	772G	773G	775G	777G
		Capacity – metric tonnes (short tons)	24 (26.5)	28 (31)	27.1 (30)	32 (35.3)	38 (42)	36.3 (40)	41 (45.2)	38.2 (42.1)	46.8 (51.6)	55.3 (61)	64.6 (71.3)	96.6 (106.4)
		Material												
374	4.4 m ³ (5.75 yd ³)	Earth		4	4	4-5	5-6	5	6	5-6	6-7	8		
		Limestone	4	4-5	4-5	5	6	6	7	6	8			
			Earth					Limestone						
Material Density		1600 kg/m ³ (2,697 lb/yd ³)					1540 kg/m ³ (2,596 lb/yd ³)							
Fill Factor		100%					90%							
Minimum Passes		4					4							
Maximum Passes		8					8							

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Attachments Offering Guide

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

Match

* Working range front only

No Match

PIN-ON ATTACHMENTS

Undercarriage		Long Variable Gauge	
Counterweight		11.24 mt (24,780 lb)	
Boom Type		Reach	Mass
Stick Length		3.60 m (11'10")	3.00 m (9'10")
Hydraulic Hammers	H180 S	✓	✓
	H190 S	✓	✓
	H215 S	✓	✓
Mobile Scrap and Demolition Shears	S3070	✓	✓
	S3070 Flat Top	✓	

CAT PIN GRABBER COUPLER ATTACHMENTS

Undercarriage		Long Variable Gauge	
Counterweight		11.24 mt (24,780 lb)	
Boom Type		Reach	
Stick Length		3.60 m HD (11'10")	
Hydraulic Hammers	H180 S		✓
	H190 S		✓
	H215 S		✓*
Mobile Scrap and Demolition Shears	S3070		✓*

BOOM-MOUNT ATTACHMENTS

Undercarriage		Long Variable Gauge	
Counterweight		11.24 mt (24,780 lb)	
Boom Type		Reach	Mass
Mobile Scrap and Demolition Shears	S2090	✓	✓
	S3090	✓	✓
	S3090 Flat Top	✓	

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
BOOMS, STICKS AND LINKAGES			CAB (continued)		
7.0 m (23") Mass boom		✓	Parallel wiper with washer	✓	
7.8 m (25'7") Reach boom		✓	Fixed glass laminated skylight	✓	
3.00 m (9'10") Mass stick		✓	LED dome light	✓	
3.60 m (11'10") Reach stick		✓	Floor welcome light	✓	
Bucket Linkage, VB family without lifting eye, Cat Grade		✓	Roller front sunscreen	✓	
Bucket Linkage, WB family without lifting eye, Cat Grade		✓	Roller rear sunscreen	✓	
CAB			Rear window emergency exit	✓	
Sound suppressed cab with viscount mounts	✓		Washable floor mat	✓	
High-resolution 254 mm (10") LCD touchscreen monitor	✓		Beacon ready	✓	
Additional high-resolution LCD touchscreen monitor for Cat Grade Advanced 2D and 3D		✓	ELECTRICAL SYSTEM		
Automatic bi-level air conditioner	✓		Maintenance-free 1,400 CCA batteries (×2)	✓	
Jog dial and shortcut keys for monitor control	✓		Centralized electrical disconnect switch	✓	
Keyless push-to-start engine control	✓		Chassis light	✓	
Height-adjustable console, infinite with no tool	✓		LED boom and cab lights		✓
Tilt-up left-side console	✓		ENGINE		
Cat Stick Steer		✓	Cold start block heater		✓
Heated and cooled seat with automatic adjustable suspension	✓		Three selectable modes: Power, Smart, Eco	✓	
51 mm (2") orange seat belt	✓		Automatic engine speed control	✓	
Bluetooth® integrated radio (including USB, aux port and microphone)	✓		Up to 4500 m (14,764 ft) altitude capability	✓	
2 × 12V DC outlets	✓		52° C (126° F) high-ambient cooling capacity	✓	
Document storage	✓		-18° C (0° F) cold start capability	✓	
Rear head storage net and lunchbox storage net	✓		-32° C (-25° F) cold start capability		✓
Cup and bottle holders	✓		Hydraulic reverse fan	✓	
Fixed one-piece windshield	✓		Double element filter with integrated pre-cleaner air filter	✓	
			Three vertical side-by-side cooling system	✓	
			95 Amp alternator	✓	

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374 Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
HYDRAULIC SYSTEM			TECHNOLOGY		
Boom and stick regeneration circuit	✓		Cat Product Link™	✓	
Electronic main control valve	✓		Work tool recognition	✓	
Dedicated closed loop swing circuit	✓		Work tool tracking*	✓	
Automatic hydraulic oil warmup	✓		Laser catcher		✓
Automatic swing parking brake	✓		Cat Grade with 2D and offset memory	✓	
High performance hydraulic return filter	✓		Cat Grade with Advanced 2D		✓
Two speed travel	✓		Cat Grade with 3D connectivity:		✓
Bio hydraulic oil and filter	✓		– Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓	
Advanced tool control		✓	– Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓	
SAFETY AND SECURITY			Cat Payload:	✓	
Caterpillar One Key security system	✓		– Static weigh		
Lockable external tool/storage box	✓		– Semi-automatic calibration		
Lockable door, fuel, and hydraulic tank locks	✓		– Payload/cycle information		
Lockable fuel drain compartment	✓		– USB reporting capability		
Service platforms with anti-skid plate	✓		2D E-Fence:	✓	
Right-hand handrail and handhold (ISO 2867:2011 compliant)	✓		– E-ceiling		
Standard visibility mirror package	✓		– E-floor		
Signaling/warning horn	✓		– E-swing		
Ground-level secondary engine shutoff switch	✓		– E-wall		
Rear and right-hand-sideview cameras	✓		– E-cab avoidance		
360° visibility		✓	Lift Assist	✓	
Walkway	✓		Auto hammer stop	✓	
Tilt-up walkway		✓	Remote Services capability	✓	
SERVICE AND MAINTENANCE			Cat Command remote control		✓
Auto lube ready	✓		UNDERCARRIAGE AND STRUCTURES		
Grouped location for engine oil and fuel filters	✓		Long variable gauge undercarriage	✓	
Scheduled Oil Sampling (S·O·S SM) ports	✓		Towing eye on base frame	✓	
Electric refueling pump with auto shutoff		✓	Two-piece full-length track guiding guards		✓
			Swivel guard	✓	
			Grease lubricated track	✓	
			11.24 mt (24,780 lb) counterweight	✓	
			650 mm (26") HD double grouser track shoes	✓	
			HD bottom guard	✓	
			HD travel motor guard	✓	

*Paired with PL161 attachment locator

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- LH/RH electrical pedal for tool control
- Dual exit rear window kit
- Front windshield laminated glass (P5A glass, EU demolition regulation)
- Joystick with horizontal sliders

ELECTRICAL

- 1,800 lumen LED premium surround lights

SAFETY AND SECURITY

- Bluetooth key fob
- 76 mm (3") retractable seat belt

GUARDS

- FOGS (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
- Full protecting vandalism guard
- Rain protector for front windshield plus cab light cover

OTHER ATTACHMENTS

- GNSS antennae

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.

AEXQ2873-02 (12-2021)
Replaces AEXQ2873-01
Build Number: 07B
(Japan)

