# Hydraulic Excavators XE155UCR

axci

Rated Power: 121 hp Operating Weight: 36,596 lb Bucket Capacity: 0.85 yd<sup>3</sup>

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## **Technical Specifications**

#### Engine

Weight

Designed to deliver superior performance and fuel efficiency, the Cummins Tier 4 Final diesel engine fully meets the emissions regulations. To optimize machine performance, the engine uses high-pressure fuel injectors, a VGT ™ turbocharger inter-cooler, and electronic engine controls. 4-cycle water-cooled, turbocharged, Selective Catalytic Reduction (SCR) with a Diesel Particulate Filter (DPF).

Model	Cummins B4.5
No. of cylinders	4
Rated power at 2200 rpm	
(SAE J1995)	121 hp at 2200 rpm
Max. torque at 1500 rpm	369 lb.ft
Idle (low - high)	950-1100 rpm
Piston displacement	1.2 gal
Bore × stroke	4" × 5"
Starter	24 V × 6.4 hp
Batteries - Alternator	2 × 12 V-70 A/24 V
Air filter	Donaldson's the latest PSD air filter and pre-filtered dust separator

#### Hydraulic system

The XICS (XCMG intelligent Control System) is the brain of the excavator - minimizing fuel consumption and enabling the efficiency of the hydraulic system to be optimized for all working conditions. To harmonize the operation of the engine and the hydraulics, the XICS is connected to the engine's electronic control unit (ECU) via a data transfer link.

• The hydraulic system enables independent and combined operations – 2-speed travel offers either increased torque or high travel speed

• Cross-sensing pump system and auto-deceleration system improves fuel efficiency.

• 7 attachment modes, 4 power modes - flow and pressure control of auxiliary hydraulic circuits from the control panel

Computer controlled pump flow control

#### > Pumps flow & system pressure

Main pumps, type:	2 × variable displacement tandem axial piston pumps
Maximum flow at 1800 rpm	2×30 gal/min
Pilot pump, type:	Gear pump
Maximum flow at 1800 rpm	4.8 gal/min
Relief valve settings:	
Pressure up	4,978/5,405 psi
Travel	4,978 psi
Swing	3,627 psi
Pilot	569 psi

#### Undercarriage

Extremely robust construction throughout - made of high-quality, durable materials, with all welded structures designed to limit stresses.

- Lifetime lubricated track rollers, idlers and sprockets fitted with floating seals
- Track shoes made of induction-hardened alloy with triple grouser
  Heat-treated connecting pins
- Hydraulic track adjuster with shock-absorbing tension mechanism

#### >Number of rollers and track shoes per side

Upper rollers (standard shoe)	2
Lower rollers	7
Number of links and shoes per side	46
Overall track length	12'3"

#### Cab

Optimal climate control is provided by the integrated air-conditioning and heating system. An automatically- controlled fan supplies the pressurized and filtered cab air, which is distributed throughout the cab from multiple vents. The fully adjustable heated air suspension operator's seat includes a seat belt. The operator can adjust the ergonomic seat and joystick console separately according to his preferences.

#### >Noise emission

Noise level LpA(IOS 6396)	73 dB(A)
Noise level LwA(IOS 6395)	99 dB(A)

	Shoe width (in.)	Operating weight (lb)	Ground pressure (psi)
Triple grouser	24"	36,751	5.1
inpre greacer	28"	37,148	4.4

## **Technical Specifications**

#### Component weights

Item	Unit	XE155UCR	Remarks
Upper structure without front attachment	lb	19,842	With counterweight
Lower structure assembly	lb	12,059	24" shoe
Front assembly	lb	4,696	Without cylinder
Counterweight	lb	7,275	Standard counterweight
Boom	ft/lb	15'1"/1,993	Not Including bushing
Arm	ft/lb	8'3''/959	Not Including bushing

#### Drive

An independent, high-torque axial piston motor through a planetary reduction gearbox drives each track. Two levers with foot pedals guarantee smooth travel with counter-rotation on demand. The track frame protects the travel motors with hydraulically released multi-disc brakes and planetary gears.

#### > Speed & traction

Travel speed (low - high)	1.8-2.9 mph
Maximum traction	30,124 lbf
Maximum gradeability	35°/70%

#### Hydraulic cylinders

High-strength steel piston rods and cylinder bodies. Shock-absorbing (cushion) mechanism fitted in all cylinders for shock-free operation and extended piston life.

Cylinders	Quantity	Bore × rod diameter × stroke (in)
Boom	2	4.1 × 2.8 × 37
Arm	1	4.5× 3.1 × 44.1
Bucket	1	3.9× 2.8 × 33.5

#### Swing mechanism

The swing mechanism uses an axial piston motor, driving a 2-stage planetary reduction gear for maximum torque bathed in oil.

- Swing bearing: single-row, shear type ball bearing with induction hardened internal gear
- · Internal gear and pinion immersed in lubricant

#### >Swing speed & torque

Maximum swing speed	11.3 rpm
Maximum swing torque	25,077 ft·lb

#### >Fluid capacities

Fuel tank	50 9 gol
Fuertank	52.8 gal
Cooling system (radiator)	5 gal
Urea (DEF) tank	4.5 gal
Hydraulic oil tank	23.8 gal
Engine oil	2.9 gal
Swing drive	0.5 gal
Travel device	2 × 0.6 gal

#### Buckets

		Width (	(in.)		Boom 15'1"
Bucket type	Capacity (yd <sup>3</sup> )			Weight	Arm 8'3"
	SAE	With side cutters	W/o side cutters	(lb) —	Shoe 24"
	0.42	24	24	829	А
GP	0.52	35	35	948	А
GP	0.78	43	43	1,105	В
	0.92	49	49	1,188	С
	0.68	40	40	1,096	А
	0.72	41	41	1,135	А
HD	0.78	44	44	1,164	В
	0.85	46	46	1,186	В
	0.92	50	50	1,254	С
SD	0.68	37	37	1,131	А

### GP: General purpose; HD: Heavy duty; SD: Severe duty;

A: Suitable for materials with a density less than or equal to 2100 kg/m<sup>3</sup> (131.1 lb/ft<sup>3</sup>)

B: Suitable for materials with a density less than or equal to 1800  $kg/m^3\,(112.37~lb/ft^3)$ 

C: Suitable for materials with a density less than or equal to 1500  $kg/m^3$  (93.64 lb/ft<sup>3</sup>)

Based on ISO 10567 and SAE J296, arm length without quick-coupler. For reference only.

## **C** Lifting Capacities

#### XE155UCR

#### Standard track width: 8'6" · W/o bucket (lb)

Lpr (ft)	А	5	ft	1(	0 ft	15	5 ft	20	) ft	25	5 ft		Max. reach	
Lph (ft)	В		( <b></b> =		( <b></b> =	<b>.</b>	( <b></b> =		( <mark>_</mark> ==	<u> </u>	( <b></b> =>		(_ <del>]</del> =	A(ft)
	25			7,850	7,850							5,865	5,865	11'9''
	20					7,210	7,210					4,719	4,719	17'7"
	15			8,335	8,335	9,526	8,159	7,012	5,204			4,454	4,454	21'2"
Boom 15'1'' Arm 8'3''	10			16,229	15,347	11,841	8,423	8,114	4,961			4,432	4,013	22'8"
Shoe 24"	5			18,213	13,539	12,502	7,519	7,850	4,939			4,586	3,925	23'5"
Counterweight 7,275 lb	Ground Line	è		15,920	12,965	11,951	7,012	7,850	4,851			5,160	3,771	22'6"
	-5	11,554	11,554	23,263	13,054	11,466	7,232	7,762	4,586			6,284	4,454	20'12"
	-10	19,933	19,933	18,654	13,539	12,260	7,188					8,996	5,557	17'4''
	-15													

🖞 : Over front

🖼 : Over side or 360°

1. The lifting capacity ratings are based on ISO10567.

2. \* The maximum lifting capacity is limited by hydraulic rather than tipping load.

3. With the machine standing on level and firm ground, the lifting capacity does not exceed 87% of the hydraulic capacity or 75% of the tipping load.

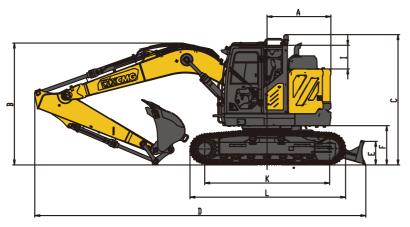
4. The operator should be familiar with the machinery operation and maintenance manuals. Local regulations concerning the operation safety of machinery must be followed at all times.

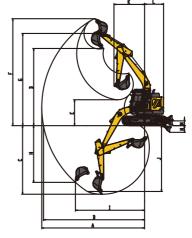
5. The lift diagrams only cover machines that are originally built by the XCMG: without lifting chains and any other lifting equipment.

6. When the excavator is used to lift or handle materials, it must comply with local regulations.



## **Technical Specifications**





#### Working range

XE155UCR		ft
Boom length - ft		15'1"
	Arm length - ft	8'3"
	Bucket capacity - yd³	0.85
А	Max. digging reach	27'3"
В	Max. digging reach(ground)	26'9"
С	Max. digging depth	18'2"
D	Max. unloading height	20'4"
Е	Min. Loading height	6'10''
F	Max. digging height	28'4"
G	Max. bucket pin height	24'5"
Н	Max. vertical wall depth	15'
I	Max. radius vertical	18'4"
J	Max. depth cut for 2440mm(8ft) leve	l bottom 17'5"
К	Min. swing radius	8'1''
L	Min. tail swing radius	5'
Μ	Max. blade lifting height	15"
N	Max. blade cutting depth	14"

#### Digging forces (ISO)

XE155UCR	ft
Boom length - ft	15'1"
Arm length - ft	8'3"
Bucket capacity - yd³	0.85
Bucket (Normal/Press. Up) -lbf	22,256/24,055
Arm (Normal/Press. Up) -lbf	15,872/16,501

#### Dimensions

XE155UCR	ft
Boom length - ft	15'1"
Arm length - ft	8'3"
Bucket capacity - yd <sup>3</sup>	0.85
Tail swing radius	5'
Shipping height (boom)	9'7"
Shipping height (alarm lamp)	10'3"
Shipping length	26'1"
Blade height	23"
Counterweight clearance	37"
Height over cab	9'6''
Upper structure width	8'2"
Cab height above engine hood	22"
Cab width	3'4"
Tumbler distance	9'10"
Track length	12'3"
Undercarriage width	8'6''
Shoe width std.	24"
Track height	33"
Ground clearance	19"
	Boom length - ftArm length - ftBucket capacity - yd³Tail swing radiusShipping height (boom)Shipping height (alarm lamp)Shipping lengthBlade heightCounterweight clearanceHeight over cabUpper structure widthCab height above engine hoodCab widthTumbler distanceTrack lengthUndercarriage widthShoe width std.Track height