

# 730 EJ Articulated Truck

## **Technical Specifications**

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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Engine		
Engine Model	Cat® C13	
Gross Power (SAE J1995:2014)	280 kW	375 hp
Net Power (SAE J1349:2011)	274 kW	367 hp
Engine (ISO 14396:2002)	276 kW	370 hp
Bore	130 mm	5.1 in
Stroke	157 mm	6.2 in
Displacement	12.5 L	763 in <sup>3</sup>

- Advertised power is tested at 1,800 rpm.
- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler, and fan at minimum speed.
- Net power when the fan is at maximum speed is 274 kW (367 hp) per the SAE reference conditions.
- The C13 emits equivalent to U.S. EPA Tier 2/EU Stage II or U.S. EPA Tier 3/EU Stage IIIA.

No Engine Derating Required Below	3990 m	13,100 ft
Peak Engine Torque Gross (SAE J1995:2014)	1830 N•m	1,350 lbf-ft
Peak Engine Torque Net (SAE J1349:2011)	1810 N•m	1,335 lbf-ft
Peak Engine Torque Speed	1200 rpm	

Weights		
Rated Payload	27.1 tonnes	30 tons

#### **Air Conditioning System**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.1 kg of refrigerant which has a CO<sub>2</sub> equivalent of 1.716 metric tonnes.

Heaped SAE 2:1	$16.9 \text{ m}^3$	22.1 yd
Struck	13.5 m <sup>3</sup>	17.7 yd <sup>2</sup>
Transmission		
Forward 1	8 km/h	5 mph
Forward 2	15 km/h	9 mph
Forward 3	22 km/h	14 mph
Forward 4	34 km/h	21 mph
Forward 5	47 km/h	29 mph
Forward 6	55 km/h	34 mph
Reverse 1	9 km/h	6 mph
Sound Levels		
Interior Cab	72 dB(A)	

- The declared dynamic operator sound pressure level is 72 dB(A) when ISO 6396:2008 is used to measure the value for an enclosed cab. The measurement was conducted at 70% of the cooling fan's maximum speed. The sound level may vary at different cooling fan speeds. The measurement was conducted with the cab doors and the cab windows closed. The cab was properly installed and maintained.
- Hearing protection may be needed when operating with an open operator station and cab or when not properly maintained or doors/ windows open for extended periods or in noisy environments.

Operating Weights		
Front Axle – Empty	15 230 kg	33,576 lb
Center Axle – Empty	5600 kg	12,346 lb
Rear Axle – Empty	5380 kg	11,861 lb
Total – Empty	26 210 kg	57,783 lb
Front Axle – Rated Load	650 kg	1,433 lb
Center Axle – Rated Load	13 225 kg	29,156 lb
Rear Axle – Rated Load	13 225 kg	29,156 lb
Total – Rated Load	27 100 kg	59,745 lb
Front Axle – Loaded	15 880 kg	35,009 lb
Center Axle – Loaded	18 825 kg	41,502 lb
Rear Axle – Loaded	18 605 kg	41,017 lb
Total – Loaded	53 310 kg	117,528 lb

<b>Body I</b>	Plate
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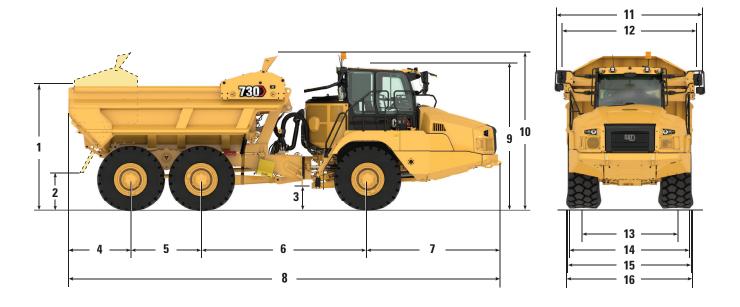
High-strength Brinell HB450 wear resistant steel

Blade Eject/Retract	
Eject time	12 seconds
Retract time	15 seconds

Service Refill Capacities	3		
Fuel Tank	412 L	108.8 gal	
Cooling System	83 L	21.9 gal	
Hydraulic System	110 L	29.1 gal	
Engine Crankcase	38 L	10 gal	
Transmission	47 L	12.4 gal	
Final Drives/Differential	125 L	33 gal	
Output Transfer Gear Box	24 L	6.3 gal	
Standards			
Brakes	ISO 3450:	ISO 3450:2011	
Cab/FOPS	ISO 3449:	ISO 3449:2005 Level II	
Cab/ROPS	ISO 3471:	ISO 3471:2008	
Steering	ISO 5010:	ISO 5010:2019	

#### **Dimensions**

All dimensions are approximate.



	mm	ft/in
1 Load over Height	3027	9'11"
2 Ground Clearance to Body Height	886	2'11"
3 Ground Clearance	516	1'8"
4 Rear Axle Center to Body Rear	1487	4'11"
5 Mid Axle to Rear Axle Center	1700	5'7"
6 Mid Axle to Front Axle (Centers)	3979	13'1"
7 Front Axle Center to Machine Front	3210	10'6"
8 Overall Length	10 376	34'0"
<b>9</b> Ground Height to Top of Cab	3473	11'4"
10 Height Transport Position	3751	12'4"
11 Overall Width	3676	12'1"
12 Body Width	3251	10'8"
13 Track Width	2275	7'6"
14 Width over Fenders	2950	9'8"
15 Width over Free Tire	3013	9'11"
16 Max Laden over Tire Bulge	3082	10'1"

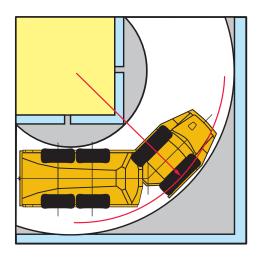
#### **Turning Circle**

Dimensions are for machines equipped with 750/65 R25 tires.

Turning Dimensions		
Steer Angle – From Center Left/Right	45°	
SAE Turning Radius	7470 mm	294 in
Clearance Radius	8075 mm	318 in
Inside Radius	3849 mm	152 in
Aisle Width	5424 mm	214 in

#### **Steering**

Lock to Lock 4.75 seconds @ 60 rpm



#### **Optimal Loader/Truck Pass Matching**

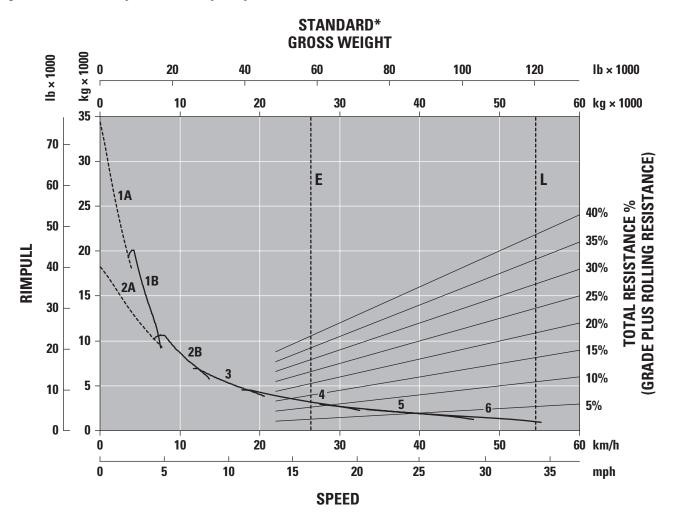
Hydraulic Excavators	349/352	336
Passes	4-5	5-6

Wheel Loaders	972M/972M XE	966M/966M XE	962 <b>M</b>	950M
Passes	3-4	4	4-5	5

An optimum system match gives you a major productivity advantage. The 730 EJ is an excellent match for the Cat 349/352 and 336 Hydraulic Excavators; and Cat 972M, 966M, 962M and 950M Wheel Loaders. Having matched loading and hauling tools results in increased production and lower system costs per unit of volume moved.

#### **Gradeability/Speed/Rimpull**

To determine performance, read from Gross Weight down to % Total Resistance. Total Resistance equals actual % grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Usable Rimpull depends on traction available.

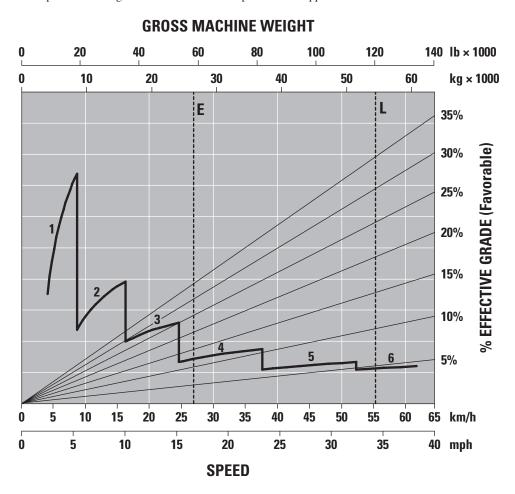


- 1A 1st Gear (Converter Drive)
- 1B 1st Gear (Direct Drive)
- 2A 2nd Gear (Converter Drive)
- 2B 2nd Gear (Direct Drive)
- $3-3rd\ Gear$
- 4-4th Gear
- 5 5th Gear
- 6 6th Gear

- E Empty 25 980 kg (57,277 lb)
- L Loaded 54 100 kg (119,270 lb)
- \* at sea level

#### **Retarding Performance**

To determine performance, read from Gross Weight down to % Effective Grade. Effective Grade equals actual % favorable grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Retarding effect on these curves represents full application of the retarder.



- 1 1st Gear
- 2 2nd Gear
- 3 3rd Gear
- 4 4th Gear
- 5 5th Gear
- 6 6th Gear

- E Empty 25 980 kg (57,277 lb)
- L Loaded 54 100 kg (119,270 lb)

## 730 EJ Articulated Truck Standard & Optional Equipment

#### **Standard and Optional Equipment**

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

	Standard	Option
PERATOR ENVIRONMENT		
Air conditioning with R134a refrigerant	✓	
Combined gear selection and eject control lever	✓	
Liquid Crystal Display (LCD)	$\checkmark$	
Mirrors: extensive arrangement for improved visibility	✓	
Mirrors, heated motorized		✓
Machine operation monitoring system	✓	
Operator seat belt, four-point		✓
Radio, Bluetooth® stereo system		✓
Seats: operator – fully adjustable, air suspension, retractable lap belt; trainer – padded with retractable lap belt	✓	
Seat, heated/cooled		✓
Secondary steering – electro-hydraulic	✓	
Sun visor	✓	
Tilt and telescopic steering wheel	✓	
Touchscreen display incorporating the rearview camera video feed	✓	
Windshield wiper and washer, two-speed, intermittent (front)	✓	
ECHNOLOGY		
Cat® Detect with Stability Assist	✓	
Cat Production Measurement payload monitoring system		✓
Product Link™: PL631E or PL641E dependent on	✓	
location and licensing agreement		
Product Link Elite: PLE631E (satellite), PLE641E		✓
(cellular)		
LECTRICAL AND LIGHTING		
Batteries (x2) maintenance free	✓	
Cold weather start attachment		<b>√</b>
Electrical system: 24-volt, 10A 24- to 12-volt	✓	
converter		
Engine block heater		<b>√</b>
Ether start		<b>√</b>
Flashing LED beacon		<b>√</b>
Lighting systems: cab interior, two head lamps, two width marker, two reversing, work light/cab access light, two stop/tail lights, front and rear direction indicators	<b>√</b>	
Main disconnect switch	✓	
Roof-mounted High Intensity Discharge (HID) work lights		✓

	Standard	Optional
POWER TRAIN		
Auto shift six-speed forward and single-speed reverse transmission	✓	
Cat C13 engine	✓	
CX31 transmission	✓	
Differentials: standard with automatic clutched inter- and cross-axle differential locks	✓	
Dual circuit oil immersed, enclosed brakes – all wheels	✓	
Retarder: engine compression brake	✓	
Three axle, six-wheel drive	✓	
SAFETY		
Reverse alarm	✓	
Rearview camera	✓	
ROPS/FOPS cab	✓	
GUARDS		
Axle	✓	
Crankcase	✓	
Front dump body spill guard, integral part of fabricated body	✓	
Radiator	✓	
Rear window	✓	
OTHER		
Auto lube installation for automatic greasing of bearings		✓
Cold weather coolant -51°C (-60°F)		✓
Exhaust heated body		✓
Fast fuel fill		✓
Fuel additive – anti-waxing		✓
Mud flaps: wheel arch and body mounted with transportation tiebacks	✓	
Hydraulic tailgate	✓	
S.O.S™ sampling valves	✓	
Sound suppression (optional outside EFTA*)		✓
Tires, six 750/65 R25 radial	✓	
Vandalism protection: lockable caps	✓	
Wheel chocks		$\checkmark$

<sup>\*</sup> EFTA countries are EU countries plus Iceland, Norway, Lichtenstein, and Switzerland.

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

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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AEXO3063-01 (3-2022) Build Number: 04A (Afr-ME, Aus-NZ, CIS, Indonesia, Pacific Islands, S Am)



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