

# 730 EJ

## Articulated Truck



### Engine

Engine Model – U.S. EPA Tier 4 Final/ EU Stage IV	Cat® C13 ACERT™	
Gross Power – SAE J1995	280 kW	375 hp
Net Power – SAE J1349	274 kW	367 hp
Net Power – ISO 14396	276 kW	370 hp

The reference to Tier 4 Final/Stage IV includes U.S. EPA Tier 4 Final, EU Stage IV, Japan 2014 (Tier 4 Final), and Korea Tier 4 Final emission standards.

### Weights

Rated Payload	27.1 tonnes	30 tons
<b>Body Capacities</b>		
Heaped SAE 2:1	16.9 m <sup>3</sup>	22.1 yd <sup>3</sup>

## 730 EJ Articulated Truck Key Features

- *World-class cab and operator environment*
- *Advanced Productivity Electronic Control Strategy (APECS)*
- *Advanced Automatic Traction Control (AATC)*
- *Cat Connect – Cat Production Measurement, Product Link™/VisionLink®*
- *Combined hoist/transmission lever*
- *Economy mode*
- *Cat Detect with Stability Assist*
- *Automatic Retarder Control (ARC)*
- *Cab touchscreen display*
- *Assisted Ejecting Control*
- *Hill Assist*
- *Waiting brake*
- *Machine speed limiting*
- *All axle wet brakes*
- *Wide tire option*

## Contents

Engine .....	4
Transmission .....	6
Automatic Features .....	7
Ease of Operation.....	8
Operator Environment.....	10
Suspension and Braking.....	11
Durability and Reliability .....	12
Integrated Technologies.....	13
Versatility.....	14
Serviceability .....	15
Complete Customer Support.....	16
Sustainability .....	17
Safety .....	18
Specifications.....	19
Standard Equipment.....	25
Optional Equipment.....	26
Notes.....	27





**The Cat 730 EJ with a 16.9 m<sup>3</sup> (22.1 yd<sup>3</sup>)/27.1 tonnes (30 tons) capacity, offers demonstrated reliability and durability, high performance and productivity and a new world-class cab to improve operator comfort and ease of operation.**

**Updating the successful 730C2 EJ to include the new cab design makes the 730 EJ a more attractive proposition for our customers. Class leading levels of performance and new features such as Advanced Automatic Traction Control (AATC) and Assisted Ejecting Control create operator comfort, making a productive machine all day long. The machines retain all axle enclosed wet brakes and Advanced Productivity Electronic Control Strategy (APECS).**

# Engine

Optimized Performance, Proven Reliability





Every Tier 4 Final/Stage IV Cat engine with ACERT Technology is equipped with a combination of proven electronic, fuel, air and aftertreatment components. The right technologies fine-tuned for the right applications result in:

- High machine performance across a variety of applications.
- Enhanced reliability through commonality and simplicity of design.
- Maximized uptime and reduced cost with world-class support from the Cat dealer network.
- Minimized impact of emission systems: designed to be transparent to the operator without requiring interaction.
- Durable designs with long life to overhaul.
- Delivering better fuel economy with minimized maintenance costs while providing the same great power and response.

### **Advanced MEUI™-C Injector**

Advanced MEUI-C injector platforms deliver increased injection pressures and more precise fuel rates. These durable injectors enhance responsiveness while controlling soot.

### **Innovative Air Management**

All Cat engines feature innovative air-management systems that optimize airflow and enhance power, efficiency and reliability.

### **Cat NO<sub>x</sub> Reduction System (NRS)**

The NRS captures and cools a small quantity of exhaust gas, then routes it back into the combustion chamber where it drives down combustion temperatures and reduces NO<sub>x</sub> emissions.

### **Aftertreatment Technologies**

The aftertreatment solution utilized for Tier 4 Final/Stage IV products is the next evolutionary step for Cat engines with ACERT Technology. To meet the additional 80 percent reduction in NO<sub>x</sub> emissions required by Tier 4 Final/Stage IV emission standards, Caterpillar engineers only needed to add one new system to the already proven aftertreatment solution in use, Selective Catalytic Reduction (SCR).

### **Diesel Exhaust Fluid (DEF)**

Cat engines equipped with a Selective Catalytic Reduction (SCR) system inject Diesel Exhaust Fluid (DEF) into the exhaust to reduce NO<sub>x</sub> emissions. DEF is a precisely mixed solution of 32.5 percent high purity chemical grade urea and 67.5 percent de-ionized water.



# Transmission

## Class Leading Transmission Technology

The Cat CX31 six-speed forward, single-speed reverse transmission features Advanced Productivity Electronic Control Strategy (APECS) and Electronic Clutch Pressure Control (ECPC) which deliver smooth gear changes with improved acceleration and higher productivity.

- Speed hold/limiting function allows the machine speed to be limited in 1 km/h or 1 mph steps to conform to site speed restrictions.
- Gearshifts have been significantly improved to maintain direct drive lock-up, and eliminate dropping into converter drive. Reducing the use of torque converter drive helps maintain ground speed and gradeability.
- Variable shift points used based on the operating conditions, which also aid in maintaining ground speed during gear changes on grades.
- Critical gearshifts maintain direct drive lock-up, and eliminate dropping into converter drive. This maintains ground speed during shifts on grades.
- The transmission automatically modifies shift points to best suit operating conditions and performance.
- Retarding levels are automatically reduced on lesser grades in lower gears.



### **Torque Converter**

Large capacity torque converter, configured for off-highway applications, allows the higher engine power to be transmitted more efficiently to the lower power train.

### **Engine Compression Brake**

Improves retarding response and increases retarding power.



## Automatic Features

### Ease of Use, Improved Performance

#### **Advanced Automatic Traction Control (AATC)**

Proactive application of the inter- and cross-axle differential locks is 'on-the-go' and fully automatic. The operator does not have to think about when and where to engage either diff lock. Sensors monitor the machine and wheel speeds, enabling instant response in high rolling resistance conditions. Operation is seamless and smooth, eliminating wheel slip for maximum traction and therefore productivity.

Clutches are automatically disengaged when ground conditions allow, maximizing efficiency when steering or when on uneven ground.

AATC reduces tire and driveline abuse, eliminating lost machine efficiencies caused by improper manual operation of the differential clutches and reducing the cost of premature tire replacement.

#### **Automatic Retarder Control (ARC)**

In automatic mode, use of the retarder is much easier for the operator. As with AATC, a number of machine operating aspects are monitored. If required, the engine compression brake is engaged automatically to control machine speed when descending a grade. The system can help towards eliminating engine overspeed, improving safe machine operation and reducing cycle times, yet still having the flexibility of manual control if needed.

#### **Assisted Dumping System**

Ejecting the load can be done automatically with the new Assisted Ejecting Control. Flick the new ejector body eject/retract switch and the machine will apply the service brakes, switch the transmission to neutral and eject the body at the required engine rpm. Returning the ejector blade is done the same way, flick the switch and the machine will automatically return the blade onto the body. Two flicks, eject/retract.

#### **Hill Assist**

Hill Assist reduces potential 'roll-back' on grades. If an operator stops the machine on a grade, when taking his foot off the service brake pedal, the machine will automatically hold the service brakes to prevent machine rolling backwards.

#### **Waiting Brake**

Waiting brake applies the service brakes when neutral gear is selected, allowing quick and easy control of the machine at the load or dump area.



## Ease of Operation

Designed for Operators, by Operators

### Control Layout

The new cab is designed to make all aspects of machine operation as simple as possible for every operator. The controls and gauges are easy to read and straightforward to use, allowing the operator to focus on safe machine operation while maintaining productivity.

### **Combined Hoist/Transmission Lever**

Unique to Cat articulated trucks, the combined hoist/transmission lever provides easy, intuitive control of gears and hoist functions. The new assisted hoist system gives improved control to the operator, allowing for faster cycle times and less control movements.

Offering both automatic and manual options, the system gives operators flexibility to choose their preferred method of control. When using the automatic system to eject a load, the machine neutralizes the transmission, applies the service brakes and ejects the body fully at the required engine rpm. Automatic use can reduce operator interactions by up to 50 percent, compared to the previous model, depending on the site ejecting procedure.

Also incorporated into the lever are waiting brake, transmission hold, machine speed limiter and parking brake selection. This gives operation a more automotive feel. No separate park brake switch is now needed; you just push the lever into park.



### **Dashboard**

The newly styled and updated dash puts all controls within easy reach of the operator. It features LED illuminated rocker switches for easy use in all operating conditions. The fit and finish delivers an automotive feel with the industrial strength you would expect from Caterpillar.

### **Touchscreen Display**

The updated touchscreen dash mounted display allows the operator to monitor and adjust various levels of machine performance and conditions, as well as machine warning categories. These include configuration settings, operator and machine totals, service information, various machine status parameters, machine payload information (when fitted), stability assist, and the video feed from the rearview camera.

### **Bluetooth® Stereo Connectivity**

Make and receive hands free calls via the optional Bluetooth equipped stereo with clearer quality due to the quieter cab and upgraded speakers.



# Operator Environment

## Improved Productivity with a Comfortable and Confident Operator

### Spacious Two-Person Cab

The large open cab offers a comfortable working space for both the operator and an additional person (e.g. training purposes). The second seat is fully padded with a backrest and a wide, retractable seat belt for a secure and comfortable ride. Positioned adjacent to the operator, the seat gives the trainer a clear view of the instrument panel, controls and the road ahead.

### Increased and Improved Storage

A new large side storage box is heated or cooled by the HVAC system depending on operator preference. Twin cup holders and multiple storage spaces have also been introduced to help give operators an uncluttered workspace.

### Air Suspension Seat

The new air suspension seat gives an increased range of adjustments over previous offerings including fore/aft isolation, which dramatically reduces horizontal vibrations and jolts. This provides a greater number of operators with the ability to tailor their seating position for a more comfortable working day.

### Cab Atmosphere

The improved automatic climate control system gives you the option to maintain the temperature desired by the operator. A reduction to in-cab noise 72 dB (-4 dB from previous model) contributes to a more comfortable working environment for the operator, all day, every day.



## Suspension and Braking

Performance with Comfort

All three axles have oscillating A-frames with lateral tie rods, controlling sideways movement of the axle and providing stability. In conjunction with suspension system, it allows the operator to travel at speed over rough terrain and softens impact loads on structures and components.



### Front Suspension

Large bore, low-pressure cylinders are purpose designed for off-road applications and offer a soft, smooth ride for the operator. The front suspension oscillates  $\pm 6^\circ$  to assist in providing a smooth ride. Suspension mounting points are integrated into the axle housing, increasing reliability.

### Rear Suspension

Comprised of a walking beam and Caterpillar designed long life rear suspension mounts; the rear suspension system provides a reliable and stable ride for excellent travel over rough terrain and aids load retention.

### All Axle Enclosed Wet Brakes

The oil-immersed system is a multi-disc, multi-plate design. Enclosing the brakes prevents the ingress of contaminants. This protects the system, extends life, and reduces replacement costs while improving machine uptime.

# Durability and Reliability

## Proven Structures and Components



### Front Frame

The front frame design features a large box section and wide, stiff frame beams to handle torque loads. The divergent frame design decreases stress in the hitch area and optimizes suspension geometry. The frame design makes maximum use of robotic welding for increased durability.

### Rear Frame

Twin-box construction minimizes stress concentrations and provides low weight with long service life.

### Suspension

The three-point oscillating axle front suspension provides excellent ride quality. It also protects the truck from adverse road conditions by absorbing shock loads that would reach the frame.

### Articulating/Oscillating Hitch

The articulating hitch provides the truck with steering articulation, and the oscillation helps provide all-wheel ground contact in rough terrain.

### Hitch Construction

Field proven two-piece construction features a durable cast steel head bolted to a hard wearing forged steel tube.

### Ejector Body Design

The 730 EJ has a large target area to provide consistently high load-carrying capacity. Eject blade and body design aids in clean material discharge, maximizing production and avoiding carry-back.

### Output Transfer Gear (OTG)

Distributes drive to the tractor and trailer and includes a wet clutch differential lock for optimum traction in poor underfoot conditions.

### Service Brakes

Dual-circuit, all wheel braking system. The full power hydraulic system actuates enclosed, oil immersed, multi-disc, multi-plate brakes with independent front and rear circuits and accumulators.

### Parking Brake

Located on the center axle in an elevated position, it is spring applied and hydraulically released.

# Integrated Technologies

## Monitor, Manage, and Enhance Job Site Operations

### LINK Technologies

LINK technologies, like Product Link, wirelessly connect you to your equipment, giving you valuable insight into how your machine or fleet is performing. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes through the online VisionLink user interface so you can make timely, fact-based decisions to maximize efficiency, improve productivity, and lower costs.

### PAYLOAD Technologies

PAYLOAD technologies, like Cat Production Measurement, bring payload weighing to the cab to help optimize job site efficiency and productivity. Operators can view real-time load weights on the integrated display and know precisely when target is achieved, while cab-mounted external payload lights on all four corners, signal the loader operator when to stop, reducing the risk of machine overloading. Operators can track daily productivity from the cab, with quick access to truck payload weights, loads and cycle counts, and daily totals; or remotely via LINK technologies.

### Cat Detect with Stability Assist

Cat Detect with Stability Assist warns the operator if machine is approaching a pre-set angle during operation; when driving and tipping. If using the assisted hoist, the machine will stop ejecting the body and give an audible and visual warning. The system monitors angles of tractor, trailer and grade independently. This increases operator awareness of machine stability during operation. All tractor and/or trailer rollover events are logged and reported via VisionLink.



Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:



**Equipment Management** – increase uptime and reduce operating costs.



**Productivity** – monitor production and manage job site efficiency.



**Safety** – enhance job site awareness to keep your people and equipment safe.

# Versatility

## Pushing the Operating Envelope

### Spreading

The truck can eject and spread the material while moving, reducing additional spreading and dozing equipment. 'On-the-go' ejecting results in faster cycle times and reduced power train loads.

### Stability

Ejecting the load without raising the body increases stability, allowing load dispersal on inclines, side slopes and in very soft underfoot conditions especially on landfill sites.

### Overhead Clearance

The truck can eject in areas with reduced overhead clearance, such as around overhead lines or in tunneling and underground operations.

### Carry-Back

The body design eliminates material sticking to the body, which increases productivity, improves fuel efficiency and lowers cost per ton.

### Body

Reinforced body is made from thick high-yield, heat-treated Brinell hardened steel (Brinell 400 on the base and sides) that provides exceptional durability. Ejector top rails are made from high-strength alloy steel. For optimum durability and wear life, the ejector body is designed to work in applications where the material consists of rocks smaller than 152 mm (6 in) in diameter.

### Blade

The ejector blade is made from high-strength steel and uses technology similar to that proven in Cat wheel tractor-scrapers.

### Cylinder

A three-stage, high-speed, double-acting cylinder is specifically designed for horizontal mounting and smooth load ejection.

The 730 EJ shares the versatility of the standard 730 Articulated Truck, operating in the same conditions, but offering unique capabilities that stretch the operation envelope.



# Serviceability

## Maximize Uptime and Reduce Costs



### Service Points

Service points are mounted on the left side of the engine under the electrically raised hood:

- Engine dipstick and fill cap
- Transmission dipstick and fill cap
- Air cleaner, fuel water separator and fuel filters
- Electrically operated fuel-priming pump
- Coolant level indicator and fill cap are outside the cab

### Long Service Intervals

Changes to oil change intervals, volumes and the type of oil required will help lower maintenance costs and machine downtime.

### Lubrication Points

Lubrication points are grouped in the hitch area for ease of servicing. Universal joints are lubed for life, eliminating any maintenance. An autolube system is also optional and now includes alerts via Product Link for low grease levels.

### Radiator

The radiator package is located behind the cab, which provides protection from frontal impacts and offers easy access to the inlet and outlet sides of the radiator.

### Extended Life Coolant

Extended Life Coolant extends the change interval and improves component life by reducing corrosion.

### Electrical Service Center

Located inside the cab, this service center provides a power port, diagnostic connector and Cat Data Link connector.

### Cat Data Link Connector

The Cat Data Link connector provides a plug-in using a laptop with Electronic Technician (ET) software.

### Service Access

The cab tilts to the side to provide easy access underneath, which simplifies access to the transmission, drive shafts and hydraulic pumps. Machine electrical and hydraulic interfaces are located on the external right-hand side of the cab, behind a removable body panel providing easy access.



# Complete Customer Support

## A Commitment to Your Success

### **Selection**

Make comparisons of the machines you are considering before you buy. Your Cat dealer can help.

### **Purchase**

Consider the resale value; compare productivity and day-to-day operating costs and fuel consumption.

### **Operation**

For the best operating techniques to increase productivity and your profit, turn to your Cat dealer for the latest training literature and trained staff.

### **Maintenance**

Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S-O-S<sup>SM</sup> and Technical Analysis help you avoid unscheduled repairs.

### **Replacement**

Repair or rebuild? Your Cat dealer can help you evaluate the costs so you can make the right choice.

### **Product Support**

Your local Cat dealership will be with you every step of the way with its unsurpassed worldwide parts support, trained technicians and customer support agreements.

### **cat.com**

For more complete information on Cat products, dealer services and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com).

# Sustainability

## Making Sustainable Progress Possible



All Cat articulated trucks are designed to maximize efficiency and productivity while conserving natural resources.

### **Air Quality**

The Cat C13 ACERT engine incorporating the Cat Clean Emission Module (CEM) meets Tier 4 Final/Stage IV emission standards, and has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel or up to B20 biodiesel blended with ULSD. All fuels must have no more than 15 ppm sulfur in the U.S., 10 ppm sulfur in the EU.

### **Recycle Waste**

The Caterpillar Design, Manufacturing, Assembly and Test Site at Peterlee in England recycles 98 percent of all waste produced with zero waste to landfill.

### **Second Life**

Cat articulated trucks are fully supported by the Cat Reman Service, providing same-as-new performance and reliability at a fraction of the cost of new parts, while reducing the negative impact on the environment.

# Safety

## Designed into Every Machine

### Safety Features

- Seat belt in use indicator (four-point seat belt available as an option)
- Operator presence detection (prevents gear engagement when operator is not seated)
- Additional mirror for front of machine visibility
- Cab mounted, wide angled, folding mirrors
- Heated mirrors (optional)
- Blade extended visual indicator
- Cab integral Roll Over Protection System (ROPS) and Falling Object Protection System (FOPS)
- Electro-hydraulic secondary steering system automatically activates in forward/reverse or when stationary if low pressure is sensed; can be manually selected for machine recovery purposes
- Extensive handrails
- External electrical system disconnect switch for easy access from outside of the machine
- Fire extinguisher in-cab mounting point
- Ground level external engine fuel cut-off switch provides easy access outside of the machine
- In-cab emergency brake switch (tertiary)
- Internal and external grab handles
- LED-flashing beacon (optional)
- Maximum speed limiter
- Multiple camera compatible
- New access lights
- Rearview camera system is fitted as standard
- Reversing indicator
- Slip resistant walkways – punched steel plate
- The parking brake functions are spring applied and hydraulic released
- Cat Detect with Stability Assist

### Product Safety

Caterpillar has been and continues to be proactive in developing machines that meet or exceed safety standards. Safety is an integral part of all machine and system designs.



# 730 EJ Articulated Truck Specifications

## Engine

Engine Model	Cat C13 ACERT	
Gross Power – SAE J1995	280 kW	375 hp
Net Power – SAE J1349	274 kW	367 hp
Net Power – ISO 14396	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>

- The power ratings apply at rated speed of 1,800 rpm when tested under the conditions for the specified standard.
- 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 730 EJ meets Tier 4 Final/Stage IV emission standards.
- DEF used in Cat SCR systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241-1. ISO 22241-1 requirements are met by many brands of DEF, including those that carry the AdBlue or API certifications.

No Engine De-rating Below	3810 m	12,500 ft
Peak Engine Torque Gross (SAE J1995)	2141 N·m	1,579 lbf-ft
Peak Engine Torque Net (ISO 14396)	2120 N·m	1,564 lbf-ft
Peak Engine Torque Speed	1,200 rpm	

## Weights

Rated Payload	27.1 tonnes	30 tons
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## Body Capacities

Heaped SAE 2:1	16.9 m <sup>3</sup>	22.1 yd <sup>3</sup>
Struck	13.5 m <sup>3</sup>	17.7 yd <sup>3</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)
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- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 is 72 dB(A), for the cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- 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 noisy environments.

# 730 EJ Articulated Truck Specifications

## Operating Weights

Front Axle – Empty	15 750 kg	34,723 lb
Center Axle – Empty	5540 kg	12,214 lb
Rear Axle – Empty	5310 kg	11,707 lb
Total – Empty	26 600 kg	58,643 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

## Body Plate

High strength Brinell HB450 wear resistant steel

## Service Refill Capacities

Fuel Tank	412 L	108.8 gal
DEF Tank	20 L	5.3 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

## Eject/Retract Times

Eject Time	12 Seconds
Retract Time	15 Seconds

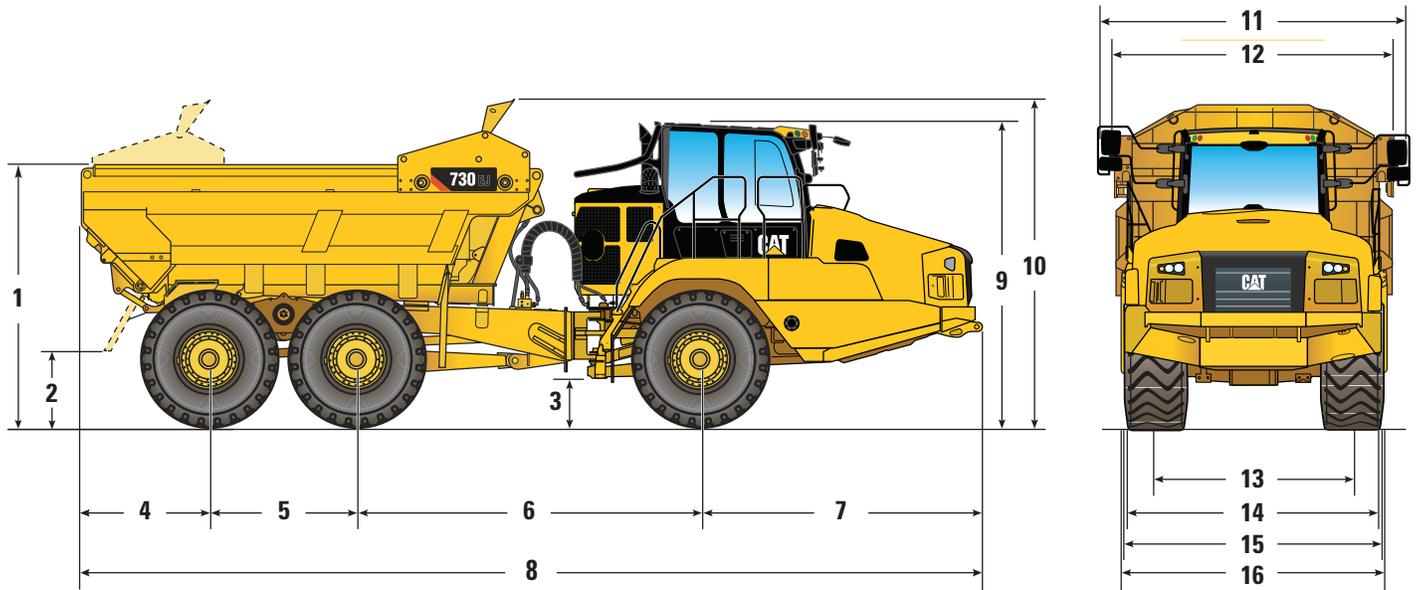
## Standards

Brakes	ISO 3450 – 2011
Cab/FOPS	ISO 3449 Level II – 2005
Cab/ROPS	ISO 3471 – 2008
Steering	ISO 5010 – 2007

# 730 EJ Articulated Truck Specifications

## Dimensions

All dimensions are approximate.



	mm	ft/in
1	3030	10'0"
2	886	3'0"
3	516	1'8"
4	1487	4'11"
5	1700	5'7"
6	3979	13'1"
7	3210	10'6"
8	10 376	34'0"

	mm	ft/in
9	3473	11'4"
10	3750	12'3"
11*	3518	11'6"
12	3251	10'8"
13	2275	7'6"
14**	2950	9'8"
15***	3013	9'11"
16****	3082	10'1"

- \* Over Mirrors
- \*\* Over Fenders
- \*\*\* Over Free Tire Width
- \*\*\*\* Over Tire Bulge

# 730 EJ Articulated Truck Specifications

## Turning Circle

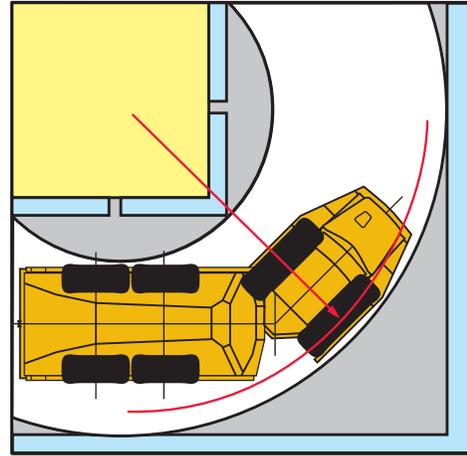
Dimensions are for machines equipped with 750/65 R25 tires.

### Turning Dimensions

Steer Angle – 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	349F/349F XE		336F/336F XE	
Passes	4-5		5-6	

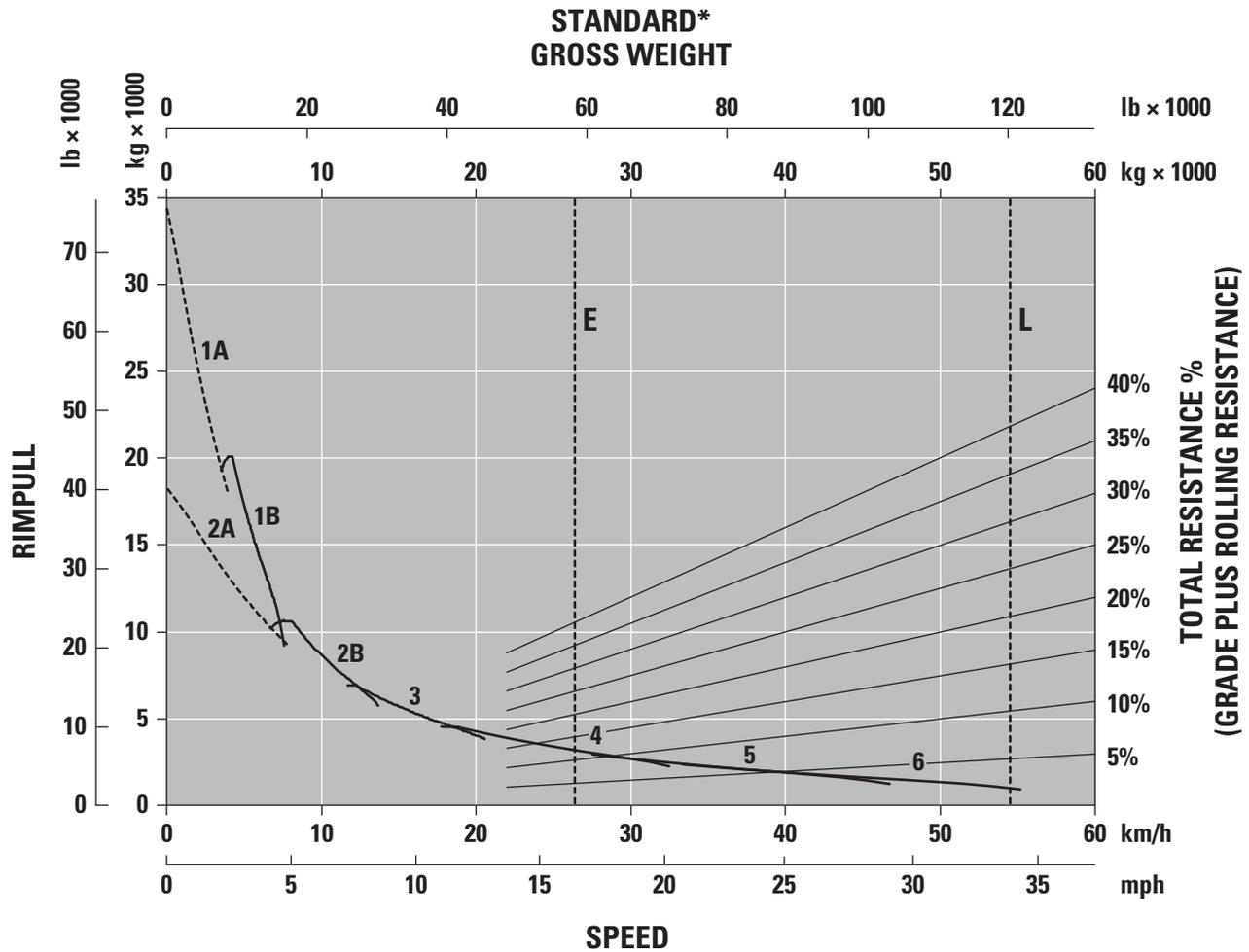
Wheel Loaders	972M/972M XE	966M/966M XE	962M	950M
Passes	3-4	4	4-5	5

An optimum system match gives you a major productivity advantage. The 730 EJ is an excellent match for the Cat 349F and 336F 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.

# 730 EJ Articulated Truck Specifications

## 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.



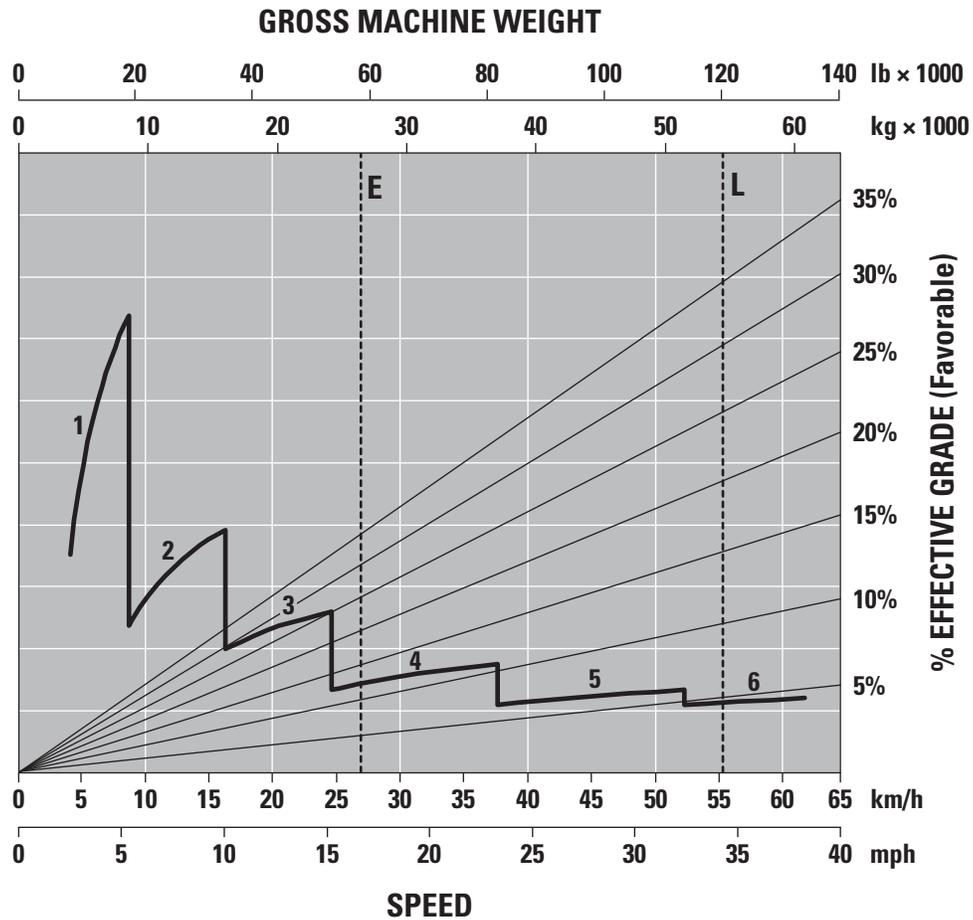
- 1A – 1st Gear (Converter Drive)
- 1B – 1st Gear (Direct Drive)
- 2A – 2nd Gear (Converter Drive)
- 2B – 2nd Gear (Direct Drive)
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear

- E – Empty 26 395 kg (58,190 lb)
- L – Loaded 54 515 kg (120,186 lb)
- \* at sea level

# 730 EJ Articulated Truck Specifications

## 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 26 395 kg (58,190 lb)
- L – Loaded 54 515 kg (120,186 lb)

## Standard Equipment

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

### OPERATOR ENVIRONMENT

- Air conditioning with R134A refrigerant
- Adjustable air vents
- Combined gear selection and eject control lever
- Glass windows:
  - Front, laminated and tinted
  - Sides and rear, toughened and tinted
- Heater and defroster with four-speed fan
- Mirrors: extensive arrangement for improved visibility
- Machine operation monitoring system includes:
  - Action lamp
  - Engine oil pressure
  - Primary steering system
  - Left and right turn signal
  - High beam
  - Coolant temperature
  - Tachometer
  - Parking brake
  - Fuel level
  - Transmission oil temperature
  - Brake system
  - Transmission hold
  - Eject control
  - Hydraulic system
  - Charging system
  - Retarder
  - Transmission fault
  - Traction control system
  - Check engine lamp
- Liquid Crystal Display (LCD):
  - Alert indicator
  - Selected gear and direction
  - Speed or auto shift
  - Review Operation and Maintenance Manual (OMM)
  - Primary steering failure warning
  - Seat belt warning
  - Secondary steering failure warning
  - Diesel Particulate Filter (DPF) regeneration filter
  - Machine Security System (MSS) ready
  - Secondary steering energy source engaged
  - Hour meter
  - Retarder active

- Seats:
  - Operator: fully adjustable, air suspension
  - Trainer: padded with lap belt
- Secondary steering – electro hydraulic
- Storage:
  - Cup holder
  - Flask receptacle
  - Under seat storage
  - Door pocket
  - Behind operator seat storage
  - Coat hook
- Sun visor
- Tilt and telescopic steering wheel
- Touchscreen display incorporating the rearview camera video feed
- Retractable belt: Operator seat and second seat
- Windows opening both sides, tinted
- Windshield wiper and washer, two speed, intermittent (front)
- Windshield wiper and washer, two speed (rear)

### CAT CONNECT TECHNOLOGIES

- Product Link: PLE631 or PLE641 dependent on location and licensing agreement
- Cat Detect with Stability Assist

### ELECTRICAL AND LIGHTING

- Batteries (two) maintenance free
- Electrical system: 24-volt, 10A 24- to 12-volt converter
- Horn
- 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
- Main disconnect switch
- Remote starting receptacle (cables not included)

### POWER TRAIN

- Auto shift six-speed forward and one reverse transmission
- Cat C13 ACERT engine
- Cat Clean Emission Module (CEM) and exhaust aftertreatment package
- 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

- Rear window
- Radiator
- Crankcase
- Axle
- Front dump body spill guard

### OTHER STANDARD EQUIPMENT

- Mud flaps: wheel arch and body mounted with transportation tiebacks
- S·O·S sampling valves
- Tires, six 750/65 R25 radial
- Vandalism protection: lockable caps
- Sound suppression (only standard in Europe)
- Underslung tailgate

## Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- Auto lube installation for automatic greasing of bearings
- Bluetooth radio stereo system
- Cat Production Measurement payload monitoring system
- Cold weather coolant  $-51^{\circ}\text{C}$  ( $-60^{\circ}\text{F}$ )
- Cold weather start attachment
- Engine block heater
- Ether start
- Exhaust heated body
- Fast fuel fill
- Flashing LED beacon
- Four-point seat belt
- Fuel additive – anti-waxing
- Heated rearview motorized mirrors
- Machine Security System (MSS)
- Product Link Elite: PLE631 (satellite), PLE641 (cellular)
- Roof mounted High Intensity Discharge (HID) work lights
- Sound suppression (only standard in Europe)
- Heated/cooled seat
- Infrared glass – high ambient cab
- Window blinds
- Wheel chocks



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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Build Number: 04A

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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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