



Cat[®] 730 EJ

Articulated Truck

The Cat[®] 730 EJ features a world-class cab, re-engineered using global operator feedback to advance comfort and ease of operation. Enhancements include class-leading levels of performance and new features, such as Advanced Automatic Traction Control (AATC), Assisted Ejecting Control, Automatic Retarder Control (ARC), and a fuel-saving economy mode.

Proven Reliability

- Cat C13 engine delivers proven reliability across a variety of applications.
- Terrain-based throttle control smooths throttle input over rough terrain to improve ride quality.
- Enhanced reliability through commonality and design simplicity with long life to overhaul.
- Minimized impact of emission control system allows excellent response and ample power.
- Engine compression brake improves response and increases retarding power for controlled descent of grades.
- Aftertreatment technologies reduce emissions, including reducing NOx emissions by 80%.

Versatility

- 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.
- Ejecting the load without raising the body maintains machine stability, allowing load dispersal on inclines, side slopes, and in very soft underfoot conditions, especially on landfill sites.
- The truck can eject in areas with reduced overhead clearance, such as around overhead lines or in tunneling and underground operations.
- The body design virtually eliminates material sticking to the body, which increases productivity, improves fuel efficiency, and lowers cost per ton.
- The ejector blade is made from high-strength steel and uses technology similar to that proven in Cat wheel tractor-scrapers.
- A three-stage, high-speed, double-acting cylinder is specifically designed for horizontal mounting and smooth load ejection.

Durability

- All structures and components are proven through extensive testing and customer experience.
- Advanced suspension allows for greater speed over rough terrain, while softening impact loads.
- Front suspension oscillates ± 6 degrees for a smooth ride.
- Frames are designed to handle torque loads, decrease hitch area stress, and optimize suspension geometry.
- Frames are robot-welded for maximum durability.

Achieve Greater Productivity

- Advanced Automatic Traction Control (AATC) decreases wheel slippage, delivering maximum traction and productivity. Fully automatic, no operator action.
- Advanced Productivity Electronic Control Strategy (APECS) and Electronic Clutch Pressure Control (ECPC) deliver smooth gear changes with improved acceleration and increased productivity.
- Automatic Retarder Control (ARC) manages the retarder without any operator interaction. Fully automatic, 100% of the time.
- New Assisted Ejecting Control allows automatic ejecting of the load.
- Combined eject/transmission lever, exclusive to Caterpillar, places multiple controls on the transmission lever, incorporates park brake, and reduces operator interaction by as much as 50%.



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Boost Fuel Efficiency

- Economy mode reduces fuel use without affecting productivity and can be engaged with a single button.
- Next-generation machine design improves fuel economy with minimized maintenance costs and the same great power and response.
- Advanced Mechanically-Actuated Electronically Controlled Unit Injection (MEUI)TM-C injector platforms deliver increased injection pressures and more precise fuel rates.
- The Cat NOx Reduction System (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 NOx emissions.

Easy, Comfortable Operator Environment

- Newly styled and updated dash puts controls within easy reach and features LED-illuminated rocker switches.
- Simple, intuitive control and display layouts allow the operator to focus on safe machine operation, while maintaining productivity.
- Spacious cab with seats positioned for optimal operator and trainer visibility.
- Touchscreen allows easy monitoring and adjustment of systems.
- Make and receive hands-free calls via the optional Bluetooth[®] equipped stereo.
- Improved automatic climate control system makes maintaining the correct temperature easier. In-cab noise has been reduced by 4 dB.
- Increased and improved storage prevents cabin clutter and is heated or cooled by the HVAC system

Technology That Gets Work Done

- Integrated systems give you the ability to make timely, fact-based decisions to maximize efficiency, improve productivity, and lower costs.
- Product LinkTM system connects to each machine wirelessly, allowing you to monitor location, hours, fuel use, productivity, idle time, and diagnostic codes.
- Operator can view real-time load weights on the touchscreen display.
- External payload indicator lights alert the loader when to stop, reducing the risk of machine overloading.
- Stability assist software reports information via online VisionLink[®], increasing awareness of machine history if a rollover has occurred.

Built-In Safety Features

- Cat Detect with stability assist provides audible and visual alerts to the operator if the machine is approaching an unstable angle during operation.
- Operator-presence detection system applies parking brake if gear is engaged and operator is not seated.
- Emergency brake switch (tertiary) allows operator to bring the machine to a safe stop in the unlikely event of both main and secondary brake circuits failing.
- Hill Assist reduces potential roll-back on grades.
- Waiting brake applies the service brakes when neutral is selected and button is pressed, allowing quick and easy control of the machine while dumping and loading.

Reduced Maintenance Costs

- Durable design and easier servicing mean maximized uptime and reduced service costs.
- Universal joints are lubricated for life, eliminating any maintenance.
- Coolant formula improves component life by reducing corrosion.
- Entire machine is designed for greater ease of maintenance with side-tilting cab, electrically raised hood, access panels, and data connector.

Standard and Optional Equipment

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

| | Standard | Optional | | Standard | Optional |
|---|----------|----------|--|----------|----------|
| OPERATOR ENVIRONMENT | | | | | |
| Air conditioning with R134a refrigerant | ✓ | | Roof-mounted High Intensity Discharge (HID) work lights | | ✓ |
| Combined gear selection and eject control lever | ✓ | | POWER TRAIN | | |
| Liquid Crystal Display (LCD) | ✓ | | Auto shift six-speed forward and single-speed reverse transmission | ✓ | |
| Mirrors: extensive arrangement for improved visibility | ✓ | | Cat C13 engine | ✓ | |
| Mirrors, heated motorized | | ✓ | CX31 transmission | ✓ | |
| Machine operation monitoring system | ✓ | | Cat Clean Emission Module (CEM) and exhaust aftertreatment package | ✓ | |
| Radio, Bluetooth stereo system | | ✓ | Differentials: standard with automatic clutched inter- and cross-axle differential locks | ✓ | |
| Seats: operator – fully adjustable, air suspension, retractable lap belt; trainer – padded with retractable lap belt | ✓ | | Dual circuit oil immersed, enclosed brakes – all wheels | ✓ | |
| Seat, heated/cooled | | ✓ | Retarder: engine compression brake | ✓ | |
| Seat belt, four-point | | ✓ | Three axle, six-wheel drive | ✓ | |
| Secondary steering – electro-hydraulic | ✓ | | SAFETY | | |
| Sun visor | ✓ | | Reverse alarm | ✓ | |
| Tilt and telescopic steering wheel | ✓ | | Rearview camera | ✓ | |
| Touchscreen display incorporating the rearview camera video feed | ✓ | | ROPS/FOPS cab | ✓ | |
| Windshield wiper and washer, two-speed, intermittent (front) | ✓ | | GUARDS | | |
| TECHNOLOGY | | | Axle | ✓ | |
| Cat Detect with Stability Assist | ✓ | | Crankcase | ✓ | |
| Cat Production Measurement payload monitoring system | | ✓ | Radiator | ✓ | |
| Product Link: PL631E or PL641E dependent on location and licensing agreement | ✓ | | Rear window | ✓ | |
| Product Link Elite: PLE631E (satellite), PLE641E (cellular) | | ✓ | OTHER | | |
| ELECTRICAL AND LIGHTING | | | Auto lube installation for automatic greasing of bearings | | ✓ |
| Batteries (x2) maintenance free | ✓ | | Cold weather coolant -51°C (-60°F) | | ✓ |
| Cold weather start attachment | | ✓ | Exhaust heated body | | ✓ |
| Electrical system: 24-volt, 10A 24- to 12-volt converter | ✓ | | Fast fuel fill | | ✓ |
| Engine block heater | | ✓ | Fuel additive – anti-waxing | | ✓ |
| Ether start | | ✓ | Mud flaps: wheel arch and body mounted with transportation tiebacks | ✓ | |
| Flashing LED beacon | | ✓ | Hydraulic tailgate | ✓ | |
| 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 | ✓ | | S-O-S SM sampling valves | ✓ | |
| Main disconnect switch | ✓ | | Sound suppression (optional outside EFTA*) | | ✓ |
| | | | Tires, six 750/65 R25 radial | ✓ | |
| | | | Vandalism protection: lockable caps | ✓ | |
| | | | Wheel chocks | | ✓ |

*EFTA countries are EU countries plus Iceland, Norway, Lichtenstein, and Switzerland.

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Technical Specifications

Engine

| Engine | | |
|---|-----------|---------------------|
| Engine Model | C13 | |
| Gross Power – SAE J1995 | 280 kW | 375 hp |
| Net Power – SAE J1349 | 274 kW | 367 hp |
| Engine 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 ³ |
| <ul style="list-style-type: none"> The power ratings apply at an engine speed of 1,800 rpm when tested under the conditions for the specified standard in effect at the time of manufacture. The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, aftertreatment, 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 U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final, and Japan 2014 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 Derating Below | 3810 m | 12,500 ft |
| Peak Engine Torque Gross (SAE J1995) | 2141 N·m | 1,579 lbf·ft |
| Peak Engine Torque Net (ISO 14396:2002) | 2120 N·m | 1,564 lbf·ft |
| Peak Engine Torque Speed | 1,200 rpm | |

Weights

| | | |
|---------------|-------------|---------|
| Rated Payload | 27.1 tonnes | 30 tons |
|---------------|-------------|---------|

Body Capacities

| | | |
|----------------|---------------------|----------------------|
| Heaped SAE 2:1 | 16.9 m ³ | 22.1 yd ³ |
| Struck | 13.5 m ³ | 17.7 yd ³ |

Transmission

| Speed | km/h | mph |
|-----------|------|-----|
| Forward 1 | 8 | 5 |
| Forward 2 | 15 | 9 |
| Forward 3 | 22 | 14 |
| Forward 4 | 34 | 21 |
| Forward 5 | 47 | 29 |
| Forward 6 | 55 | 34 |
| Reverse 1 | 9 | 6 |

Standards

| | |
|----------|------------------------|
| Brakes | ISO 3450:2011 |
| Cab/FOPS | ISO 3449:2005 Level II |
| Cab/ROPS | ISO 3471:2008 |
| Steering | ISO 5010:2019 |

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 CO₂ equivalent of 1.716 metric tonnes.

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 | 15 750 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 |

Blade Eject/Retract

| | |
|--------------|------------|
| Eject Time | 12 seconds |
| Retract Time | 15 seconds |

AEXQ3064-00 (10-2020)
Build Number: 04A
(N Am, Eur, Aus-NZ, Jpn)