

735

ARTICULATED TRUCK



Gross Power (SAE J1995:2014)
Operating Weight

306 kW (410 hp)
32 tonnes (35.3 tons) Rated Payload

Two engine emission options are available:
Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA and
Noncertified configuration that is equivalent to U.S. EPA Tier 2 and EU Stage II.



The Cat® 735 articulated truck redefines operator efficiency, even in the most demanding environments. It significantly reduces the necessary operator input by about half, while offering enhanced comfort and performance features. The 735 line is engineered to accelerate your operation's productivity and profitability.

THE CAT® 735

OPERATOR EMPOWERMENT AND EFFICIENCY



NEXT-GENERATION ARTICULATED TRUCKS

Caterpillar engineered its line of articulated trucks, leveraging operator feedback from around the world to enhance its world-class cab design.

- | | |
|---|-------------------------------|
| + HOIST-ASSIST SYSTEM | + STABILITY ASSIST |
| + ADVANCE AUTOMATIC TRACTION CONTROL SYSTEM | + DYNAMIC ROLLOVER PROTECTION |
| + AUTOMATIC RETARDER CONTROL | + HEIGHT LIMITING FEATURE |
| | + AUTO WAIT BRAKE |

Cat articulated trucks are ready to boost your business, providing innovative ways to get more work done.

RELIABLE PERFORMANCE

The redesigned dump body provides easier loading and maximum payload, while the C13A engine delivers the power you require, combined with relentless reliability.

BUILT-IN SAFETY

The 735 is designed for safe and convenient access with ground level service, and Dynamic Rollover Protection applies brakes when needed to help prevent rollovers.

IMPROVED OPERATOR EFFICIENCY

Easily set job parameters with Body Height and Machine Speed Limiting, while improving operating behavior with optional Operator Coaching.

*All comparisons made to 735 04A

MATCH AND MOVE MORE

ACHIEVE EVEN GREATER PRODUCTION WITH AN
OPTIMIZED LOADING TOOL



Cat 352 EXCAVATOR

4-5 PASSES



Cat 336 EXCAVATOR

5-6 PASSES



Cat 972/972 XE WHEEL LOADERS

3-4 PASSES



Cat 950/962/966/966 XE WHEEL LOADERS

4-5 PASSES



»»» **THE CAT 735 IS OPTIMALLY MATCHED
WITH VARIOUS SIZES OF LOADING TOOLS.**





COMFORT AND CONTROL

A simplified multi-function lever provides easy and intuitive control of both hoist and transmission. This combined lever also integrates automatic hoist functions, a machine speed limiter, and a wait brake for enhanced operational efficiency.



EMISSIONS

Two engine emission options are available:

1. Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
2. Noncertified configuration that is equivalent to U.S. EPA Tier 2 and EU Stage II.



DURABILITY

Advanced suspension allows higher speed over rough terrain. Frames are robot-welded for maximum durability, and all structures and components are proven through experience and testing.



PERFORMANCE

Advanced Automatic Traction Control (AATC) delivers maximum traction and increased productivity. Improved acceleration and increased speed performance on grades is also achieved with 2F start.



DESIGNED FOR OPERATORS, BY OPERATORS



SAFETY

Cat Detect with Stability Assist gives the operator an audible and visual alert if the front or rear of the machine approaches an unsafe angle. Fully Automatic Retarder Control (ARC) controls speed when operating down grades.



CAB

Featuring a world-class cab with automatic climate control, greater visibility, ample storage, a quiet environment, and substantial legroom for superior operator comfort.



TRACTION

AATC is a terrain-based system that proactively applies differential locks to avoid wheel spin, protecting tires from unnecessary wear and increasing traction and efficiency. AATC proactively senses slope, grades, and acceleration rates.



FUEL

Next generation design has the ability to improve fuel economy. With one button, optional Eco mode can reduce fuel use without affecting productivity.



INSTRUMENTS

Well-lit gauges. Touchscreen for easy monitoring and adjustment of systems (with real-time load weights).



CONTROLS

Combined hoist/transmission lever incorporates park brake. Machine Speed Limiter and Waiting Brake can be selected from the lever.



A QUIET, SAFE WORKSPACE

BUILDS OPERATOR CONFIDENCE



VISIBILITY

- Glass area improves rear-quarter visibility
- Incorporated rearview camera
- Cab-mounted mirrors for reduced vibration and improved visibility
- Integrated payload lights

ENVIRONMENT

- Quiet and spacious cab
- Automatic climate control
- Ample storage in cab

OPERATION

- Simple, intuitive controls and displays
- Touchscreen for easy monitoring and control
- Sliding windows for better communication and ventilation

MAXIMIZING OPERATOR EFFICIENCY IN THE TOUGHEST CONDITIONS

- + DURABLE SUSPENSION FOR GREATER SPEED OVER ROUGH TERRAIN
- + MACHINE PROTECTION SYSTEMS
- + OSCILLATING FRONT SUSPENSION FOR A SMOOTH RIDE
- + ROBOT-WELDED FRAMES FOR MAXIMUM DURABILITY
- + DIRECTIONAL SHIFT PROTECTION FOR POWERTRAIN
- + MACHINE WAKE UP
- + LOW-PROFILE EXHAUST STACK ELIMINATES THE NEED FOR REMOVAL TO TRANSPORT
- + RE-ENGINEERED CAB USING GLOBAL FEEDBACK FOR EASIER OPERATION
- + EASIER TO OPERATE – SUITED FOR A WIDE RANGE OF OPERATOR EXPERIENCE



INTEGRATED TECHNOLOGIES

SOLUTIONS TO MAKE WORK EASY AND EFFICIENT

Cat Equipment Management telematics technology helps take the complexity out of managing your jobsites by gathering data generated by your equipment, materials, and people and serving it up to you in customizable formats.



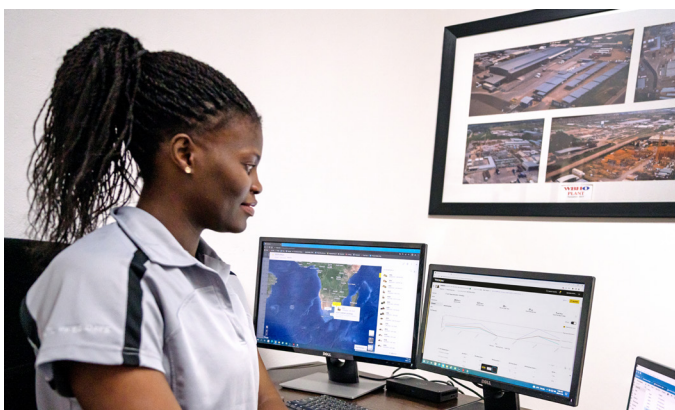
VISIONLINK™

VisionLink takes the guesswork out of managing your entire fleet – regardless of size or equipment manufacturer.* Review equipment data from your desktop or mobile device to maximize uptime and optimize assets. With interactive dashboards, VisionLink makes it easier for operations of all sizes to make informed decisions that lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription-level options, your Cat dealer can help you determine what you need to connect your fleet and manage your business.

The Productivity features of VisionLink gather and summarize machine telematics and jobsite data from all your equipment – regardless of the manufacturer.*

Actionable information such as idle time, fuel burn, location, payload, load counts, total cycles, and more are transmitted to the web platform for users to access anywhere via a mobile, tablet, or desktop device – on or off the jobsite.

* Data field availability can vary by equipment manufacturer. VisionLink™ subscription required for advanced data features. Availability may vary by region, consult your Cat dealer for more details.



OPERATOR COACHING

Cat Operator Coaching allows operators of all experience levels to take their efficiency and productivity to the next level. With tips and data at their fingertips, operators can track and improve their productivity through everyday work on the jobsite. Gain data-based insights towards operators and operations when you pair Operator Coaching with VisionLink.



MAXIMIZE UPTIME AND REDUCE COSTS

SERVICEABILITY



LONG SERVICE INTERVALS

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

EXTENDED LIFE COOLANT

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

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.

ELECTRICAL SERVICE CENTER

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

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.

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.

SERVICE POINTS

Service points are mounted on the left-hand 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

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

ENGINE		
Engine Model	Cat® C13A	
Gross Power (SAE J1995)	306 kW	410 hp
Net Power (SAE J1349)	298 kW	400 hp
Engine Power (ISO 14396)	301 kW	404 hp
Bore	130 mm	5.1 in
Stroke	157 mm	6.2 in
Displacement	12.5 L	763 in³
No Engine Derating Below	3810 m	12,500 ft
Peak Engine Torque Gross (SAE J1995:2014)	2206 N·m	1,627 lbf·ft
Peak Engine Torque Net (SAE J1349:2011)	2185 N·m	1,612 lbf·ft
Peak Engine Torque Speed	1,200 rpm	

- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Advertised power is tested at 1,800 rpm.
- Net 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 298 kW (400 hp) per the SAE reference conditions.
- Two engine emission options are available:
 1. Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
 2. Noncertified configuration that is equivalent to U.S. EPA Tier 2 and EU Stage II.

WEIGHTS		
Rated Payload	32 tonnes	35.3 tons

BODY CAPACITIES		
Heaped SAE 2:1	20 m³	26.2 yd³
Struck	16 m³	20.9 yd³

TRANSMISSION		
Forward 1	8.0 km/h	5.0 mph
Forward 2	15 km/h	9.0 mph
Forward 3	23.0 km/h	14.0 mph
Forward 4	35.0 km/h	22.0 mph
Forward 5	48.0 km/h	30.0 mph
Forward 6	57.0 km/h	35.0 mph
Reverse 1	9.0 km/h	6.0 mph

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

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 maximum cooling fan's 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 (when not properly maintained or doors/windows open) for extended periods or in noisy environments.

OPERATING WEIGHTS		
Front Axle – Empty	14 580 kg	32,143 lb
Center Axle – Empty	5110 kg	11,266 lb
Rear Axle – Empty	4890 kg	10,781 lb
Total – Empty	24 580 kg	54,190 lb
Front Axle – Rated Load	4054 kg	8,938 lb
Center Axle – Rated Load	13 973 kg	30,805 lb
Rear Axle – Rated Load	13 973 kg	30,805 lb
Total – Rated Load	32 000 kg	70,548 lb
Front Axle – Loaded	18 634 kg	41,081 lb
Center Axle – Loaded	19 083 kg	42,071 lb
Rear Axle – Loaded	18 863 kg	41,586 lb
Total – Loaded	56 580 kg	124,737 lb

BODY PLATE THICKNESS		
Front Plate	7 mm	0.28 in
Base Plate	13 mm	0.51 in
Side Plates	11 mm	0.43 in

SERVICE REFILL CAPACITIES		
Fuel Tank	400 L	105.7 gal
Cooling System	83.0 L	21.9 gal
Steering/Hoist Hydraulic System	110 L	29.1 gal
Engine Crankcase	38 L	10 gal
Transmission	56 L	12.3 gal
Output Transfer Gear (OTG)	25.0 L	5.5 gal
Final Drives (each)	125.0 L	33.0 gal
Axles (each)	26/28/26 L	6/8/08 gal

BODY HOIST	
Raise Time	12 Seconds
Lower Time	11 Seconds

STANDARD AND OPTIONAL EQUIPMENT

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
10-inch touchscreen display with Cat rearview camera	•	
Air conditioning	•	
Combined gear selection and hoist control lever	•	
Machine operation monitoring system	•	
Mirrors, exterior	•	
Mirrors, heated motorized		•
Operator seat belt, four-point		•
Radio, Bluetooth® stereo system		•
Seat, heated/cooled		•
Seats: operator – fully adjustable, air suspension, retractable lap belt; trainer – padded with retractable lap belt	•	
Secondary steering – electro hydraulic	•	
Secondary touchscreen display		•
Sun visor	•	
Tilt and telescopic steering wheel	•	
Windshield wiper and washer, two-speed, intermittent (front)	•	
TECHNOLOGY	STANDARD	OPTIONAL
Cat® Detect with Stability Assist	•	
Cat Payload monitoring system		•
Operator Coaching		•
Product Link™ Cellular PLE643	•	
Product Link Dual PLE683		•
Push to Start with Operator ID	•	
VisionLink	•	
ELECTRICAL AND LIGHTING	STANDARD	OPTIONAL
Batteries (x2) maintenance-free	•	
Cold weather start attachment (2 additional batteries)		•
Engine block heater		•
Ether start		•
Electrical system: 24V, 10A 24V to 12V converter	•	
Flashing LED beacon		•
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	•	
Roof-mounted LED work lights		•

POWERTRAIN	STANDARD	OPTIONAL
Auto shift six-speed forward and single speed reverse transmission	•	
Cat C13A engine	•	
CX31 transmission	•	
Differentials: standard with automatic clutched inter- and cross-axle differential locks	•	
Dual circuit oil immersed, enclosed brakes – all wheels	•	
Automatic Retarder: engine compression brake and hydraulic	•	
Three axle, six-wheel drive	•	
SAFETY	STANDARD	OPTIONAL
Body Height Limiting	•	
Dynamic Rollover Protection	•	
Multi-view camera with object detection		•
Reverse alarm	•	
Rearview camera	•	
Rollover protective structure/falling objects protective structure (ROPS/FOPS) cab	•	
Seat belt, 4 point harness		•
GUARDS	STANDARD	OPTIONAL
Crankcase	•	
Radiator	•	
Rear window	•	
OTHER	STANDARD	OPTIONAL
Auto lube installation for automatic greasing of bearings		•
Bare chassis (no body) standard wheel base		•
Body liners		•
Cold weather coolant -51°C (-60°F)		•
Collision Avoidance Ready*		•
Exhaust heated body		•
Fast fuel fill		•
Fuel additive – anti-waxing		•
Mud flaps: wheel arch and body mounted with transportation tiebacks	•	
Scissor tailgate		•
S•O•S SM	•	
Tires, six 750/65 R25	•	
Vandalism protection: lockable caps	•	
Wheel chocks		•

*South Africa only.



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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