

# Cat® 725 Articulated Truck

The Cat® 725 features a world-class cab design based on operator feedback to advance comfort and ease of operation. Features include hoist-assist system, advance automatic traction control system, automatic retarder control, stability-assist, dynamic rollover protection, height limiting feature, and auto wait brake.

#### **Proven Reliability**

- Cat C13B engine delivers proven reliability across a variety of platforms.
- 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 emissions systems allows excellent response and ample power.
- Hydraulic retarder improves response and increases retarding power for controlled descent of grades.

# **Durability**

- All structures and components are proven through extensive testing and customer experience.
- Advanced suspension allows 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.
- Directional shift protection protects the powertrain when quickly moving from reverse to forward or forward to reverse.
- Designed dump body provides reinforced top edge on side rail.

# **Achieve Greater Productivity**

- Advanced Automatic Traction Control (AATC) decreases wheel slippage, delivering maximum traction and increased productivity. Fully automatic with no operator action.
- Automatic Retarder Control (ARC) manages the retarder without any operator interaction. Fully automatic 100% of the time.
- Combined hoist/transmission lever, exclusive to Caterpillar, places multiple controls on transmission lever, incorporates park brake, and reduces operator interaction by as much as 50%.
- Machine wake up initiates machine systems when truck is de-isolated or cab door is opened.
- Low profile exhaust stack reduces overall height and eliminates the need for removal to transport.

### **Boost Fuel Efficiency**

- Economy mode reduces fuel use without affecting productivity and can be engaged with a single button.
- This machine design improves fuel economy with minimized maintenance costs and the same great power and response.
- Innovative air-management systems optimize airflow and enhance power and fuel efficiency.
- Fully automatic retarder control helps prevent engine overspeed, protects powertrain components without any operator intervention.



#### Cat® 725 Articulated Truck

#### **Easy, Comfortable Operator Environment**

- Simple, intuitive control and display layouts allow operator to focus on safe machine operation, while maintaining productivity.
- An optional system uses four discrete cameras to enhance operator visibility around the machine, while an integrated detection system provides both visual and audible alerts to indicate the presence of nearby objects.
- The HVAC system is now managed through the primary display with controls accessible via the jog dial or touchscreen for enhanced operator convenience.
- Cab-mounted mirrors for excellent visibility, reduced vibration, and easy folding.
- Front visibility mirror gives an improved view immediately in front of the machine.
- · Touchscreen allows easy monitoring and adjustment of systems.
- · Sliding windows improve ventilation and communication.
- The cab features dedicated storage solutions for everyday items, ensuring convenience and organization for the operator, granting comfort and room for movements.

#### **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 Link<sup>TM</sup> system connects to each machine wirelessly, allowing you to monitor location, hours, fuel use, productivity, idle time, and diagnostic codes.
- 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.
- Improved payload technology allows operators to view real-time load weights on the integrated display. Updated software and sensors provide accurate data.

#### **Built-In Safety Features**

- Unique safety feature Dynamic Roll Protection supports rollover prevention and works in parallel with the already successful Cat Detect with Stability Assist, reducing downtime and safety repairs from machine rollover events.
- Seat belt indicator provides audible and visible alert if seatbelt is not latched while the machine is on.
- Operator-presence detection system applies parking brake if gear is engaged and operator is not seated.
- In-cab tertiary brake switch allows operator to bring the machine to a safe stop in the unlikely event of both main and secondary brake circuits failing.
- Integrated payload lights (when Cat Payload Monitoring (CPM)
  option is fitted) with wide angle beam lights on all cab roof corners
  provide clear visibility to loading tool operator and site controllers.
- Secondary steering activates automatically if low pressure is sensed in primary system.
- Ground-level fuel fill and diesel exhaust fluid (DEF) fill tanks.
- Hill Assist reduces potential rollback on grades.
- Auto Wait 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 flexi fender reduces the risk of permanent damages and reduces repair 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 Cat Data Link connector.
- Extended service intervals for the engine and transmission: 1,000 and 2,000 hours, respectively. Doubled from previous models, resulting in lower total cost of ownership.

# **Standard and Optional Equipment**

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Air conditioning	✓	
Auto wait brake	✓	
Combined gear selection and hoist control lever	✓	
Electronic OMM	✓	
10-inch touchscreen display with Cat® rearview	✓	
camera		
Heater and defroster with four-speed fan	✓	
Infrared glass, high ambient cab		<b>√</b>
Mirrors, exterior	<b>√</b>	
Mirrors, heated motorized		✓
Machine operation monitoring system	✓	
Operator seat belt, four-point		✓
Radio, Bluetooth® stereo system		<b>√</b>
Seats: operator – fully adjustable, air suspension,	$\checkmark$	
retractable lap belt; trainer – padded with		
retractable lap belt		
Seat, heated/cooled		<b>√</b>
Secondary display for multi-view camera		<b>√</b>
Secondary steering – electro hydraulic	✓	
Secondary touchscreen display		✓
Sun visor	✓	
Tilt and telescopic steering wheel	$\checkmark$	
Windshield wiper and washer, two-speed,	./	
intermittent (front)	•	
Window blinds		<b>√</b>
Windows (tinted) opening both sides	✓	
Window wiper and washer, two-speed (rear)	$\checkmark$	
TECHNOLOGY		
Cat Detect with Stability Assist	✓	,
Cat Payload monitoring system		$\checkmark$
Operator Coaching		✓
Product Link Cellular PLE643	✓	
Product Link Dual PLE683		<b>√</b>
Push to Start with Operator ID		
VisionLink		
ELECTRICAL AND LIGHTING	•	
Batteries (x2) maintenance-free	<b>√</b>	
Cold weather start attachment (2 additional	•	
batteries)		$\checkmark$
Daylight Running Lights	✓	
LED Rear Step Lights	✓	
LED Rear Work Lights		✓
Engine block heater		✓
Ether start		<b>√</b>
Electrical system: 24-volt, 5A 24- to 12-volt	✓	
converter		
Flashing LED beacon		$\checkmark$

	Standard	Optiona
ELECTRICAL AND LIGHTING (CONTINUED)		
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	<b>√</b>	
Roof-mounted LED work lights		<b>✓</b>
POWERTRAIN		
Auto shift six-speed forward and single speed	✓	
reverse transmission		
Cat C13B engine		
CX31 transmission		
Clean Emissions Module (CEM) and exhaust	•	
aftertreatment package  Differentials: standard with automatic clutched		
inter- and cross-axle differential locks	•	
Dual circuit oil immersed, enclosed brakes – all	<b>√</b>	
wheels		
Retarder: engine compression brake	✓	
Three axle, six-wheel drive	✓	
SAFETY		
Body Height Limiting	✓	
Dynamic Rollover Protection	✓	
Machine Speed Limiting	✓	
Reverse alarm	✓	
Rollover protective structure/falling objects		
protective structure (ROPS/FOPS) cab	$\checkmark$	
GUARDS		
Crankcase	✓	
Radiator	<b>√</b>	
Rear window	<b>√</b>	
OTHER		
Auto lube installation for automatic greasing		<b>√</b>
of bearing		
Bare chassis (no body) standard wheel base		<b>√</b>
Body liners		<b>√</b>
Cold weather coolant -51°C (-60°F)		<b>√</b>
Exhaust heated body		<b>√</b>
Fast fuel fill		<b>√</b>
Fuel additive – anti-waxing		<b>√</b>
Mud flaps: wheel arch and body mounted with	✓	
transportation tiebacks		
Scissor tailgate		✓
S•O•S <sup>SM</sup> sampling valves	✓	
Sound suppression (standard in some	✓	
countries)*		
Tires, six 23.5R25, radial	✓	
Tires, six 750/65R25, radial		<b>√</b>
Vandalism protection: lockable caps	✓	
Wheel chocks		✓

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

## Cat® 725 Articulated Truck

#### **Technical Specifications**

	Engine	
Engine Model	C138	3
Gross Power – SAE J1995	263 kW	352 hp
Net Power – SAE J1349	257 kW	345 hp
Engine Power – ISO 14396	259 kW	347 hp
Bore	130 mm	5.12 in
Stroke	157 mm	6.18 in
Displacement	12.5 L	763 in <sup>3</sup>

- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Advertised power is tested at 1,700 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 257 kW (345 hp) per the SAE reference conditions.
- Meets U.S. EPA Tier 4 Final, EU Stage V, Japan 2014, and Korea Stage V emission standards.
- Diesel exhaust fluid (DEF) used in Cat SCR systems must meet the requirements outlined in ISO 22241-1:2006. ISO 22241-1 requirements are met by many brands of DEF, including those that carry the AdBlue or API certifications.

No Engine Derating Below	3,810 m	12,500 ft
Peak Engine Torque Gross (SAE J1995:2014)	1941 N⋅m	1,431 lbf-ft
Peak Engine Torque Net (SAE J1349:2011)	1712 N⋅m	1,263 lbf-ft
Peak Engine Torque Speed	1,200 rpm	

Weights		
Rated Payload	24 tonnes	26.5 tons

Body Capacities		
Heaped SAE 2:1	15 m³	19.6 yd³
Struck	11.5 m³	15 yd³
Tailgate Heaped SAE 2:1	15.9 m <sup>3</sup>	20.8 yd <sup>3</sup>
Tailgate Struck	12 m³	15.7 yd³

Transmission		
Speed	km/h	mph
Forward 1	8.0	5.0
Forward 2	15.0	9.0
Forward 3	22.0	14.0
Forward 4	34.0	21.0
Forward 5	47.0	29.0
Forward 6	55.0	34.0
Reverse 1	9.0	6.0

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		69±2 dB(A)

- The declared dynamic operator sound pressure level is 69±2 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 or when not properly maintained or doors/windows open for extended periods or in noisy environments.

Operating Weights		
Front Axle – Empty	14 260 kg	31,438 lb
Center Axle – Empty	4540 kg	10,009 lb
Rear Axle – Empty	4310 kg	9,502 lb
Total – Empty	23 110 kg	50,949 lb
Front Axle – Rated Load	2524 kg	5,564 lb
Center Axle – Rated Load	10 738 kg	23,673 lb
Rear Axle – Rated Load	10 738 kg	23 673 lb
Total – Rated Load	24 000 kg	52,911 lb
Front Axle – Loaded	16 784 kg	37,002 lb
Center Axle – Loaded	15 278 kg	33,682 lb
Rear Axle – Loaded	15 048 kg	33,175 lb
Total – Loaded	47 110 kg	103,860 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
Scow Plate	13 mm	0.51 in

Service Refill Capacities			
Fuel Tank	400 L	105.7 gal	
Cooling System	83.0 L	21.9 gal	
Steering/Hoist Hydraulic System	123.0 L	32.5 gal	
Engine Crankcase	43.0 L	11.4 gal	
Transmission	47.0 L	12.4 gal	
Output transfer gear	25.0 L	6.6 gal	
Final Drives (each)	125.0 L	33.0 gal	
Axles (each)	26/28/26 L	6/8/08 gal	
Diesel Exhaust Fluid (DEF) Tank	34.0 L	9.0 gal	

Body Hoist	
Raise Time	12 Seconds
Lower Time	8 Seconds

AEXQ3699-00 (09-2025) Build Number: 05A (N Am, Europe, Aus-NZ, Japan)

