

AD63

Underground Articulated Truck



Engine

Engine Model	Cat® C27
Engine Power – EU Stage V Engine – ISO 14396:2002	593 kW 795 hp

Operating Specifications

Nominal Payload Capacity	63 000 kg	138,891 lb
Gross Machine Operating Mass	118 940 kg	262,218 lb
Body Capacities	26.9-38.3 m ³	35.2-50.1 yd ³

AD63 Features

One Supplier

Caterpillar designed and manufactured major power and drive train components for reliability and performance.

High Performance

Ultra-Clean Engine. The Cat® C27 engine offers the perfect balance between power, robust design and economy. In addition, the AD63 truck engine meets the strictest nonroad emission standards (EU Stage V) and is approved by CANMET for use in underground mines.

Improved Power Train

Performance increase of engine torque rise from 18% to 28%, has been coupled with a powertrain ratio update to spread the torque rise. Resulting in superior grade holding capability when your truck needs it most.

Cab

Ergonomically designed with forward facing trainer seat. Cab can be tilted for easy machine maintenance.

Truck Body

Seven body sizes including a new lightweight dump body and two ejector body options and liners ensure optimal performance and reliability in tough mining applications.

Technology

Optional Truck Payload Measurement System (TPMS) includes a digital display board and new Product Link™ Elite (PLE) system is a standard feature.

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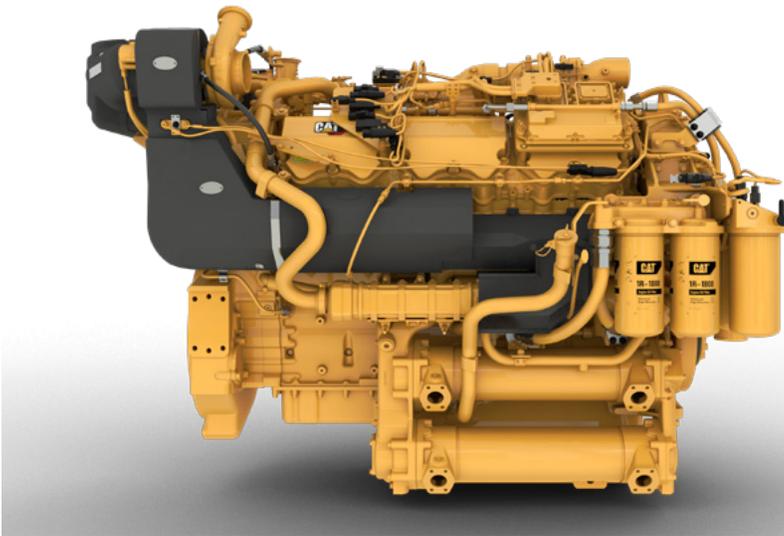
The new 63 tonne (69 tons) AD63 underground articulated truck is powered by the Cat® C27 engine that meets EU Stage V Emission Standards.

The AD63 is designed for high production, low cost-per ton hauling in underground mining applications. Rugged construction and simplified maintenance guarantee long life with low operating costs.

Engineered for performance, designed for comfort, built to last.

Power Train – Engine

The EU Stage V Emissions Cat® C27 engine is designed for power, reliability and efficiency.



Cat C27 Engine

The Cat C27 engine with an EU Stage V emission rating is recommended for mines that require compliance with the most stringent emission standards in underground applications for customers that want to drive down diesel particulate matter and NOx emission while improving overall air quality and maintain a high machine performance. Exhaust and aftertreatment components are carefully guarded and heat wrapped. The Cat C27 Stage V engine doesn't require a regeneration system to achieve EU Stage V emissions, therefore eliminating the need for a Clean Emissions Module (CEM) along with Diesel Exhaust Fluid (DEF). The use of 15 ppm ultra-low sulfur diesel and CJ-4 low ash engine oil are required.

An optional Cat Diesel Particulate Filter (Wall Flow Filter or Flow Through Filter) can be used to further reduce the diesel particulate matter in the exhaust. This solution also requires the use of 15 ppm ultra-low sulfur diesel and CJ-4 low ash engine oil.

Electronic Unit Injection (EUI)

The electronically controlled unit injection fuel system senses operating conditions and regulates fuel delivery for optimum fuel efficiency. The proven high-pressure fuel system provides improved response times and more efficient fuel burn with lower emissions and less smoke.

Electronic Control Module (ECM)

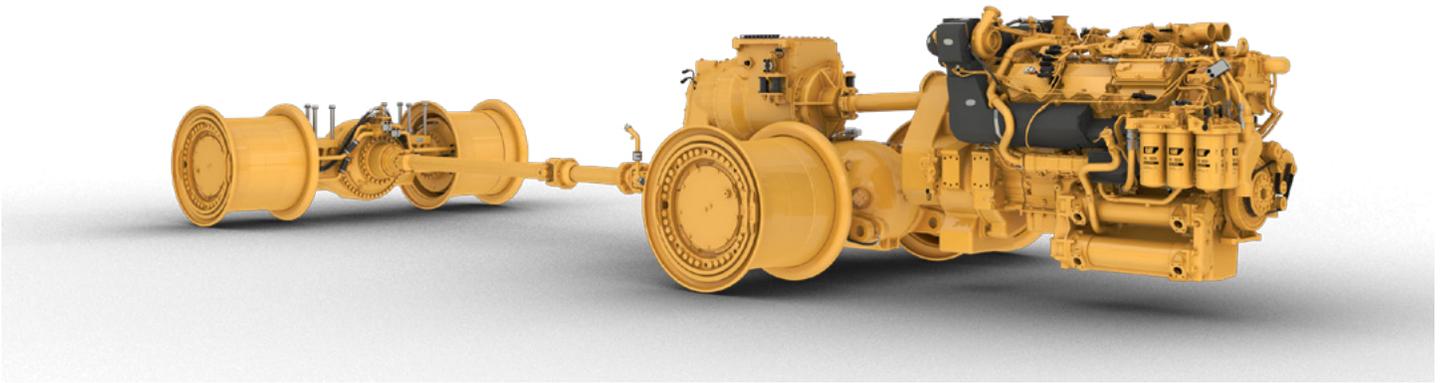
ECM utilizes advanced engine management software to monitor, control and protect the engine utilizing self-diagnosing electronic sensors. The computerized system senses operating conditions and power requirements and adjusts engine for peak performance and most efficient operation at all times.

Design

Caterpillar designed one-piece cast iron block provides maximum strength and durability. Two-piece articulated pistons with forged steel crowns are designed to withstand higher cylinder pressure.

Power Train – Transmission

More power to the ground for greater productivity.



Mechanical Power Train

The Cat mechanical drive power train and power shift transmission provide unmatched operating efficiency and control on steep grades, in poor underfoot conditions, and on haul roads and drives with high rolling resistance.

Transmission

The Cat seven-speed planetary power shift transmission is matched with the direct-injection C27 engine to deliver constant power over a wide range of operating speeds.

Robust Design

Designed for rugged underground mining conditions, the proven planetary power shift transmission is built for long life between overhauls.

New Torque Converter Gear Ratio

The AD63 powertrain features a new torque converter gear ratio to increase peak torque and improve gear retention on variable grades. The optimized transmission shift strategy results in smoother uphill driving and greater operator comfort. The new torque converter also increases rimpull when driving away from a stop.

Torque Converter Lock-up Clutch

Combines maximum rimpull and cushioned shifting of torque converter drive with the efficiency and performance of direct drive. When engaged, lock-up provides superior power train efficiency by delivering more power to the wheels.

The Lock-up clutch quickly releases and re-engages to reduce power train torque loads for smoother shifting, long life and a more comfortable ride.

Smooth Shifting

Individual transmission clutch modulation provides smooth clutch engagements to optimize performance and extend clutch life.

Final Drives

Cat final drives work as a system with the planetary power shift transmission to deliver maximum power to the ground. Built to withstand the forces of high torque and impact loads, final drives provide high torque multiplication to further reduce drive train stress.

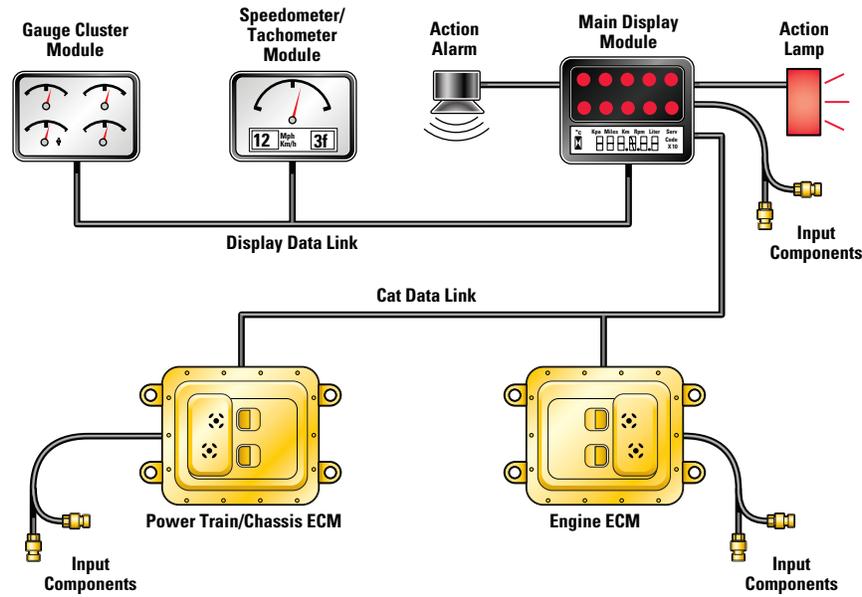
Full Floating Axles

Full floating axles relieve internal stresses and increase durability. Rolled splines also provide increased service life.

Engine/Power Train Integration

Intelligent electronics for overall optimal performance.

CAT MONITORING SYSTEM



Cat Data Link

Electronically integrates machine computer systems to optimize overall power train performance, increase reliability and component life and reduce operating costs.

- **Economy Shift Mode** – Decreases fuel consumption, lowers noise levels and potentially longer engine life.
- **Directional Shift Management** – Regulates engine speed to prevent damage caused by high speed directional changes.
- **Body-up Shift Inhibitor** – Prevents the transmission from shifting above a pre-programmed gear without the body fully lowered.

Electronic Technician (Cat ET)

Cat ET service tool provides service technicians with easy access to stored diagnostic data through Cat Data Link to simplify problem diagnosis and increase availability.

Overspeed Protection

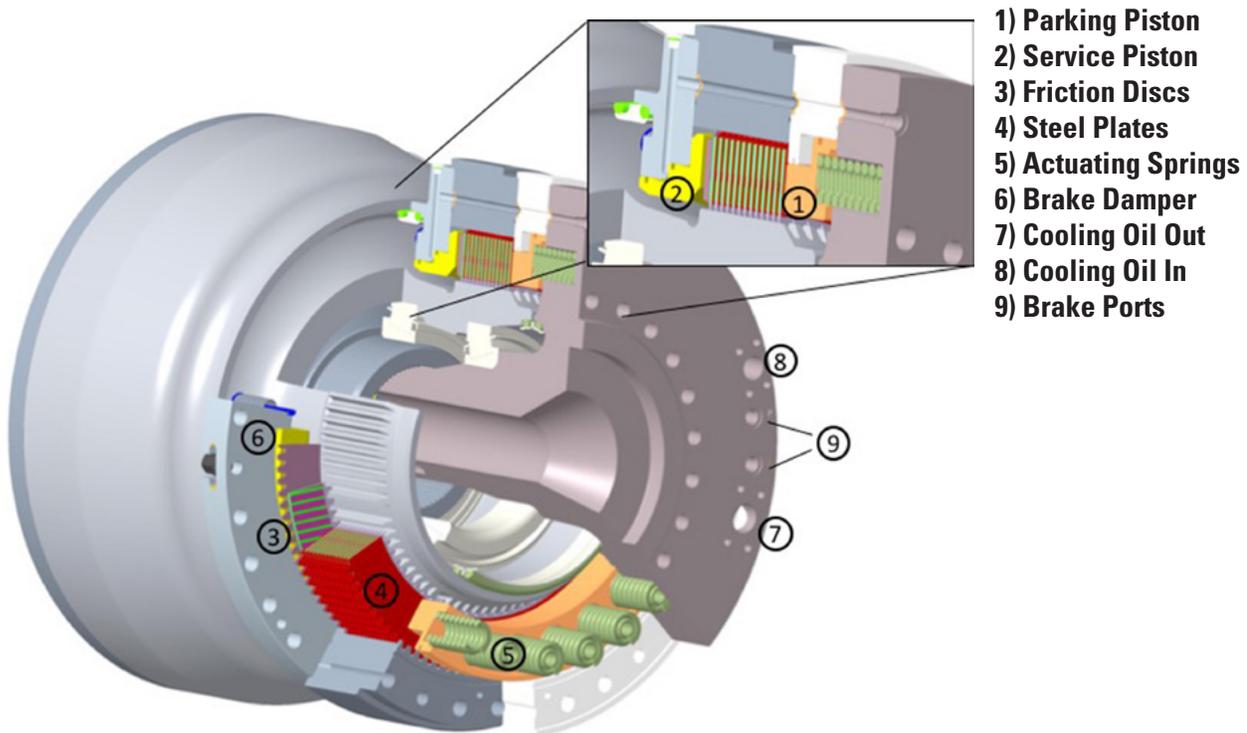
The Automatic Retarder Control (ARC) system provides engine overspeed protection. The ARC will engage the brakes if the following conditions exist at the same time:

- An unsafe engine speed is reached.
- The throttle is being depressed by the operator.

If the transmission has reached maximum programmable or shift lever gear selection, the lockup clutch is deactivated in order to protect the engine against an engine overspeed condition.

Cat[®] Brake System

Superior control for operator confidence.



Integrated Braking System

The Cat oil-cooled braking system delivers reliable performance and control in the most extreme underground mining conditions. The integrated system combines the service, secondary, parking brake and retarding functions in the same robust system for optimum braking efficiency.

Oil-Cooled Multiple Disc Brakes

Four-wheel, forced oil-cooled, multiple disc service brakes are continuously cooled by a water-to-oil heat exchangers for non-fade braking and retarding performance. They are also completely enclosed to prevent contamination and reduce maintenance.

Automatic Retarder Control (ARC)

Electronically controls retarding on grade to maintain optimum engine RPM and oil cooling. Additional braking may be applied using the manual retarder or the brake pedal. ARC also allows the operator to maintain optimum engine speeds for faster downhill hauls and greater productivity. The ARC automatically activates when engine speed exceeds factory preset levels.

Superior Control

Automatic brake modulation offers a smoother ride and greater control, allowing the operator to concentrate on driving.

Operator Comfort

Ergonomically designed for all-day comfort, control and productivity.

The AD63 operator station is ergonomically designed for total machine control in a comfortable, productive and safe environment. All controls, levers, switches and gauges are positioned to maximize productivity and minimize operator fatigue.

Protective Structure

Integral to the cab and frame, both the Rollover Protective Structure (ROPS) and Falling Objects Protective Structure (FOPS) are resiliently mounted to the mainframe to isolate the operator from vibration for a more comfortable ride.

Standard Enclosed Cab

Standard sound-suppressed ROPS cab provides a quiet, secure and comfortable air-conditioned working environment with fresh, pressurized, temperature-controlled air circulation.

Suspension Seat

Ergonomic, fully adjustable suspension seat provides optimal operator comfort. Thick cushions reduce pressure on lower back and thighs. Wide, retractable seat belts provide secure, comfortable restraint.

Steering Column

Comfort wheel with tilt steering provides a comfortable driving position, secure grip and greater control.

Forward Facing Trainer's Seat

Forward-facing trainer seat offering increased space and comfort for the trainer.

Electrical Modular HVAC

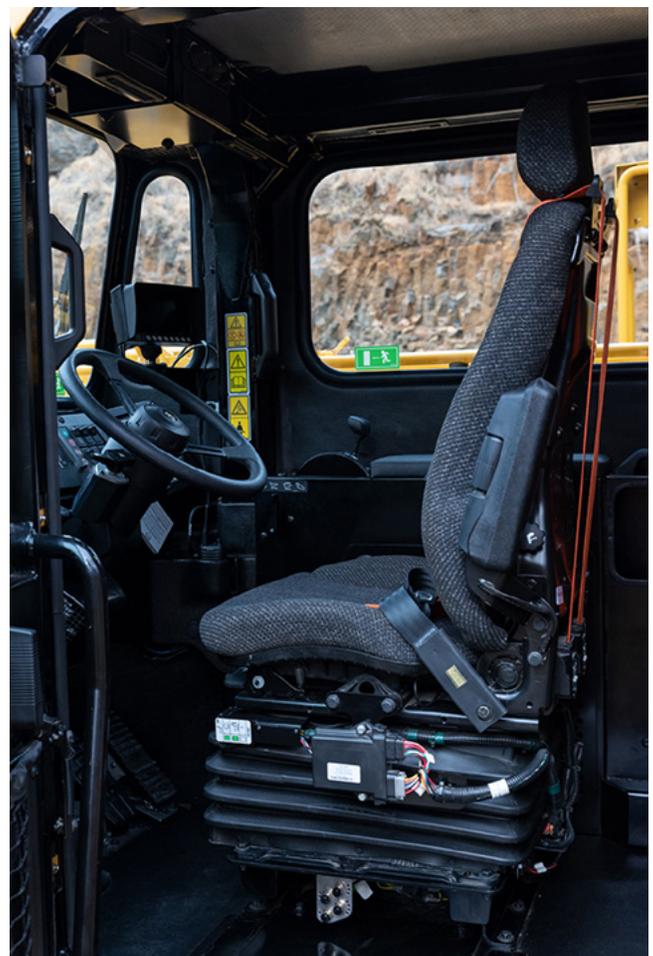
The HVAC system is powered by a battery electric system so that it can be operated when the engine is not running, which pays off in less engine idling and lower operating costs. The ducted ventilation and air conditioning system gives the truck operator full control with nine adjustable louvers for comfortable cooling and efficient defogging.

Monitoring System

Cat Electronic Monitoring System (Cat EMS) continuously provides critical machine data to keep the machine performing at top production levels. Displays are backlit for easy viewing.

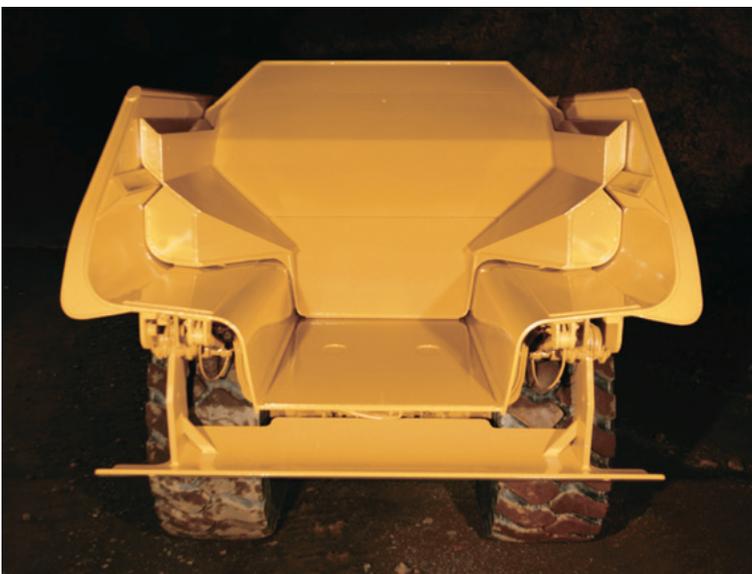
Camera

Optional rear reversing camera to assist operators to navigate the truck safely.



Truck Body Systems

Rugged performance and reliability in tough underground mining applications.



Cat Truck Bodies

Caterpillar offers two specific body styles for the most efficient hauling solutions at the lowest cost-per-ton.

- Dump Body
- Ejector Body

Body Selection

Seven body sizes including a new lightweight dump body and two ejector body options are available for the AD63. Selection of the right body depends on material, haul road, and dump conditions. The better the match of body to application, the greater the efficiency. Your Cat dealer can help you select the right body size and system for your site specific application.

Body Design

Cat truck bodies are designed for optimal strength, capacity and durability. Drawing on years of experience in truck body design, Cat truck bodies are designed for long service life and low cost per ton.

Body/Chassis Integration

Cat truck bodies are designed and matched with the integrated chassis system for optimum structural reliability, durability and long life.

Fast Hoist Cycle Times

Two-stage hoist cylinders provide fast dump cycle times of 13 seconds for raise and 24 seconds for lower with snubbing function enabled to protect frame and components at the end of the lowering cycle.

Truck Payload Management System (TPMS)

The optional TPMS system calculates the payload the truck is carrying and determines truck cycle times. It now offers digital payload scoreboards on both sides of the truck providing the LHD operator with visual real time payload data.

Structures

Rugged Cat structures – the backbone of the AD63's durability.



Frame Design

The frame uses box-section design with stiff frame beams to resist twisting forces. Materials and weld joints are matched to optimize the structural life of the frame.

Articulating/Oscillating Hitch

This system provides steering and oscillation and enables the truck to maintain all wheel ground contact in rough terrain.

Suspension System

Two independent variable rebound suspension cylinders dissipate haul road forces for longer frame life and a comfortable ride. A new cast suspension H-Frame is used to increase service life of the suspension frame.

Serviceability

More time for production.



Service Access

Easy access to daily service points simplifies servicing and reduces time spent on regular maintenance procedures.

Tilt Cab

Maintenance personnel now have the ability to tilt the cab, resulting in improved access to the cab side of the engine, improved brake accumulator access and improved access to engine mounting hardware.

The Tilt cab also allows access to alternator and starter motor without removing belly plates.

Ground-Level Access

Allows convenient servicing to all tanks, filters, lubrication points and compartment drains. Electric fuel priming and remote mounted fuel filters allow for easier serviceability.

Air Filters

Radial seal air filters are easy to change, reducing time required for air filter maintenance. Radiator surround is upsized to improve access to pre-cleaner and filters. Air inlet filters are now forward mounted on radiator surround.

Sight Gauges

Fluid level checks are made easier with sight gauges visible from ground level.

Diagnostics

Cat Electronic Technician (Cat ET) service tool enables quick electronic diagnosis of machine performance and key diagnostic data for effective maintenance and repairs.

Sealed Electrical Connectors

Electrical connectors are sealed to lock out dust and moisture. Harnesses are covered for protection. Wires are color and number coded for easy diagnosis and repair.

Scheduled Oil Sampling

S-O-SSM helps avoid minor repairs becoming major ones. Sample point adapters fitted standard to machine.





Customer Support

Cat dealer services keep underground mining equipment productive.

Dealer Capability

Cat dealers will provide the level of support you need, on a global scale. Dealer expert technicians have the knowledge, experience, training and tooling to handle your repair and maintenance needs, when and where you need them.

Product Support

When Cat products reach the field, they are supported 24/7 by a worldwide network of reliable and prompt parts distribution facilities, dealer service centers, and technical training facilities to keep your equipment up and running.

Service Support

Cat equipment is designed and built to provide maximum productivity and operating economy throughout its working life. Cat dealers will be with you every step of the way with its unsurpassed worldwide parts support, trained technicians and Customer Value Agreements.

Technology Products

Cat dealers offer a range of advanced technology products designed to improve efficiency, productivity and lower costs. Product Link™ Elite (PLE) system is standard equipment to enable data collection and equipment health monitoring. The system enables sharing data across multiple destinations, reduces gaps in data or lost data due to network issues, and has direct connectivity to Caterpillar and Cat dealers for remote support and services, such as condition monitoring.

Replacement

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



Safety

Designed with safety as the first priority.

Product Safety

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

Engine Shutoff Switch

A secondary engine shutoff switch is located at ground level.

Integral ROPS/FOPS Cab

Integral to the cab and frame, the ROPS and FOPS are resiliently mounted to the frame to isolate the operator from vibration for a more comfortable ride.

Brake Systems

Four corner oil-cooled braking system provides excellent control. The service brakes and retarding system are actuated by modulated hydraulic pressure, while the parking brake function is spring applied and hydraulic released. This system assures braking in the event of loss of hydraulic pressure. Park brake anti-roll back strategy is an additional feature.

Operator Present System

The Operator Present System helps to protect the machine and operator from uncontrolled movements. The system automatically engages the parking brake, neutralizes the steering implement and transmission control and shuts down the engine in the event operator fails to apply the park brake prior to exiting the cab.

The engine shutdown configuration can be changed by your Cat dealer using the Cat ET service tool.

Safety Features

Anti-skid upper deck surfaces, new and improved upper deck handrails, 3-point cabin and machine access, additional access now available via the front grill, push out safety glass, excellent visibility, suspension seat, forward passenger/training seat, inertia reel retractable belts, steering frame lock, dual zipper window seal, body retaining pins, automatic retarder control, exhaust heat shielding and firewall, hitch hydraulic hoses – burst protection sleeves fitted, tailgate retaining pins (ejector body), alternate exit via windows, ground level compartment sight glasses. Optional rear vision camera, Ansul Liquid Vehicle System (LVS) available from factory.

SAFETY.CAT.COM

For more complete information on safety, please visit www.cat.com/safety.



Manufacturing

A focus on quality and safety.

The AD63 is designed in Burnie Tasmania (Australia) and manufactured in Rayong Thailand.

Burnie is also home of the Caterpillar Burnie Proving Grounds where a complete Command for Underground test facility and training center is available to customers. A video of this facility is available at www.cat.com/underground.

The Caterpillar underground mining factory in Rayong is one of the newest manufacturing facilities at Caterpillar, with 100 percent focus given to underground hard rock mining products.

The Rayong facility was designed and built by Caterpillar, and is managed and operated by a highly skilled and uniquely diverse team who have embedded the Cat Production System into their culture.

Upon joining the team in Rayong, an employee will undergo 250 hours of training before performing their task on the line. Significantly more education is given to our welders. To ensure they succeed in their tasks, we provide our welders with the latest tooling so that our team can work ergonomically and achieve the weld penetration specified. The quality of your Cat machine starts with this team.

Each step of the manufacturing process has quality control gates, and every single employee is empowered to stop the assembly line to continuously improve safety or the manufacturing process.

A clean environment helps keep components free of contaminants and provides a better work climate. Like all Caterpillar facilities around the world, visitors are most welcome to see where and how their machines are made.



AD63 Underground Articulated Truck Specifications

Engine

Engine Model	Cat® C27	
Engine Power – EU Stage V Engine – ISO14396:2002	593 kW	795 hp
Bore	137.2 mm	5.4 in
Stroke	152.4 mm	6 in
Displacement	27 L	1,650 in ³

- Power ratings apply at a rated speed of 1,800 rpm when tested under the reference conditions for the specified standard.
- All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25° C (77° F). Performance measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15° C (59° F) and fuel inlet temperature 40° C (104° F).

Operating Specifications

Nominal Payload Capacity	63 000 kg	138,891 lb
Gross Machine Operating Mass	118 940 kg	262,218 lb

Weights

Empty	52 425 kg	115,577 lb
Front Axle	37 066 kg	81,716 lb
Rear Axle	15 359 kg	33,861 lb
Loaded	115 425 kg	254,468 lb
Front Axle	57 456 kg	126,669 lb
Rear Axle	57 969 kg	127,800 lb

Weight Distribution

Empty	
Front Axle	70.7%
Rear Axle	29.3%
Loaded	
Front Axle	49.8%
Rear Axle	50.2%

Transmission

Forward 1	6.5 km/h	4.1 mph
Forward 2	9.2 km/h	5.7 mph
Forward 3	12.4 km/h	7.7 mph
Forward 4	16.6 km/h	10.3 mph
Forward 5	22.5 km/h	14.0 mph
Forward 6	30.3 km/h	18.9 mph
Forward 7	41.0 km/h	25.5 mph
Reverse 1	8.6 km/h	5.3 mph

- Maximum travel speeds with standard 35 × 65 R33 tires.

Final Drives

Differential Ratio	3.46:1
Final Drive Ratio	5.5:1
Total Reduction Ratio	19.04:1

Body Hoist

Raise	13 Seconds
Lower	24 Seconds
Total Cycle Time	37 Seconds

AD63 Underground Articulated Truck Specifications

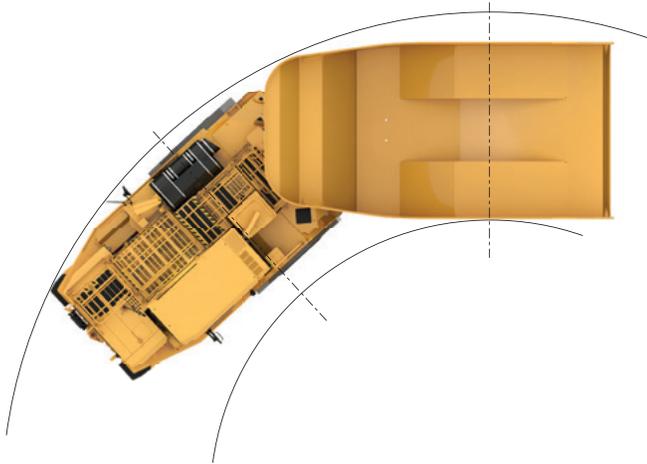
Body Capacities

Dump Body – 1 (Standard)	26.9 m ³	35.2 yd ³
Dump Body – 2	32.6 m ³	42.6 yd ³
Dump Body – 3	33.8 m ³	44.2 yd ³
Dump Body – 4	36.6 m ³	47.9 yd ³
Dump Body – 5 (Light Material)	38.3 m ³	50.1 yd ³
Ejector Body – 1	26.9 m ³	35.2 yd ³
Ejector Body – 2	29.1 m ³	38.0 yd ³

- Heaped SAE 2:1.

Turning Dimensions

Outside Clearance Radius	10 005 mm	393.9 in
Inside Turning Radius	5540 mm	218.1 in
Frame Oscillation	10°	
Articulation Angle	42.5°	



Service Refill Capacities

Engine Crankcase with Filter	95 L	25.0 gal
Transmission	53 L	14.0 gal
Hydraulic Tank	381 L	100.6 gal
Cooling System	150 L	39.6 gal
Front Differentials and Final Drives	138 L	36.5 gal
Rear Differentials and Final Drives	138 L	36.5 gal
Fuel Tank	900 L	237.7 gal

Tires

Tire Size	35 × 65 R33
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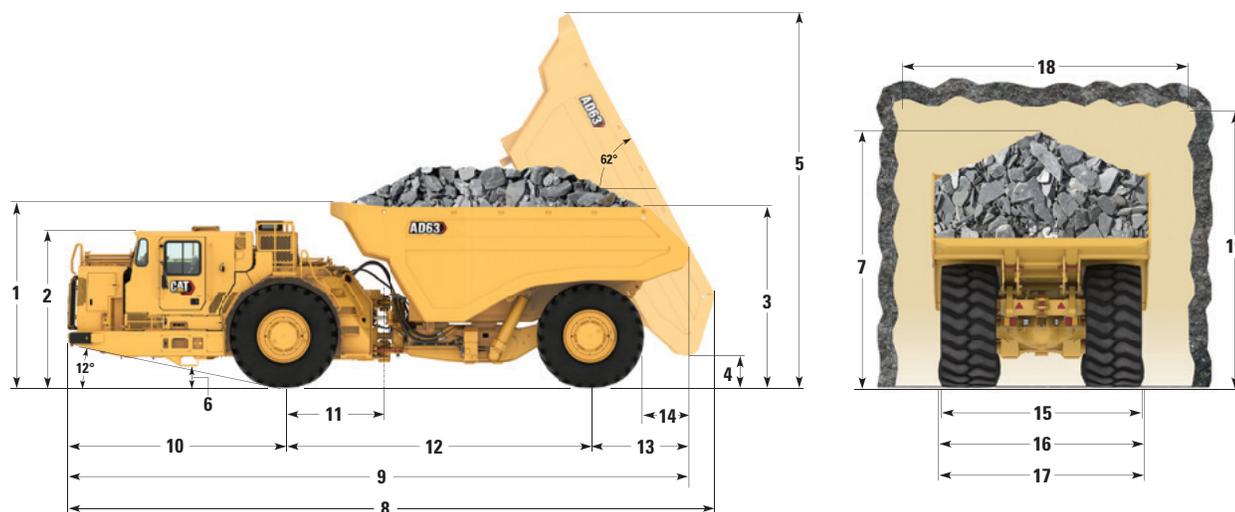
Standards

ROPS/FOPS Certified Cab

AD63 Underground Articulated Truck Specifications

Dimensions

All dimensions are approximate.



Body Capacity	311-4730 Dump Body		312-1395 Dump Body		307-6655 Dump Body		311-4721 Dump Body	
	mm	in	mm	in	mm	in	mm	in
1 Height – Top of Empty Body	3202	126	3418	135	3556	140.0	3552	140
2 Height – Top of ROPS	3000	118	3000	118	3000	118	3000	118
3 Height – Body Loading	3045	120	3326	131	3426	135	3473	137
4 Height – Dump Clearance**	514	20	514	20	514	20	514	20
5 Height – Top of Raised Body	6969	274	7202	284	7322	288	7176	283
6 Height – Ground Clearance	393	15	393	15	393	15	393	15
7 Height – Top of Load (SAE 2:1)	3830	151	4160	164	4160	164	4300	169
8 Length – Maximum Body Raised	12 064	475	12 180	480	12 222	481	12 241	482
9 Length – Overall Body Down	12 040	474	12 040	474	12 040	474	12 040	474
10 Length – Front Axle to Front Bumper	4164	164	4164	164	4164	164	4164	164
11 Length – Front Axle to Hitch	1920	76	1920	76	1920	76	1920	76
12 Length – Wheel Base	5900	232	5900	232	5900	232	5900	232
13 Length – Rear Axle to Tail	1976	78	1976	78	1976	78	1976	78
14 Length – Rear Wheel to Raised Body	857	34	857	34	857	34	857	34
15 Width – Overall Tire	3250	128	3250	128	3250	128	3250	128
16 Width – Machine with Body	3346	132	3480	137	3480	137	3480	137
17 Width – Machine without Body	3323	131	3323	131	3323	131	3323	131
18 Recommended Clearance Width*	5000	197	5000	197	5000	197	5000	197
19 Recommended Clearance Height*	5000	197	5000	197	5000	197	5000	197

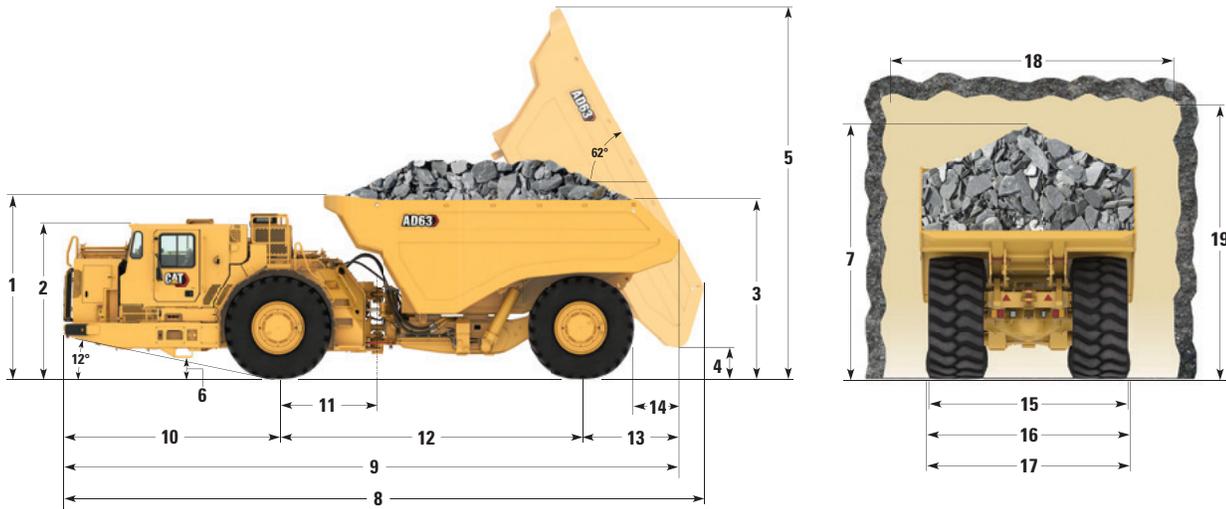
* Clearance dimensions are for reference only.

** Measurement taken with tailgate down for ejector body.

AD63 Underground Articulated Truck Specifications

Dimensions

All dimensions are approximate.



Body Capacity	529-7938 Dump Body Light Material		366-3791 Ejector Body		361-8733 Ejector Body	
	mm	in	mm	in	mm	in
1 Height – Top of Empty Body	3560	140	3436	135.3	3643	143.4
2 Height – Top of ROPS	3000	118	3000	118.1	3000	118.1
3 Height – Body Loading	3473	137	3250	128.1	3450	136.1
4 Height – Dump Clearance**	598	24	954	37.6	954	37.6
5 Height – Top of Raised Body	7200	283	—	—	—	—
6 Height – Ground Clearance	393	15	393	15.5	393	15.5
7 Height – Top of Load (SAE 2:1)	4330	170	4109	161.8	4284	168.7
8 Length – Maximum Body Raised	12 430	489	—	—	—	—
9 Length – Overall Body Down	11 960	471	12 125	477.4	12 125	477.4
10 Length – Front Axle to Front Bumper	4164	164	4164	163.9	4164	163.9
11 Length – Front Axle to Hitch	1920	76	1920	75.6	1920	75.6
12 Length – Wheel Base	5900	232	5900	232.3	5900	232.3
13 Length – Rear Axle to Tail	1896	75	2061	81.1	2061	81.1
14 Length – Rear Wheel to Raised Body	77	31	—	—	—	—
15 Width – Overall Tire	3250	128	3250	128.0	3250	128.0
16 Width – Machine with Body	3500	138	3560	140.2	3560	140.2
17 Width – Machine without Body	3323	131	3346	131.7	3346	131.7
18 Recommended Clearance Width*	5000	197	5000	196.9	5000	196.9
19 Recommended Clearance Height*	5000	197	5000	196.9	5000	196.9

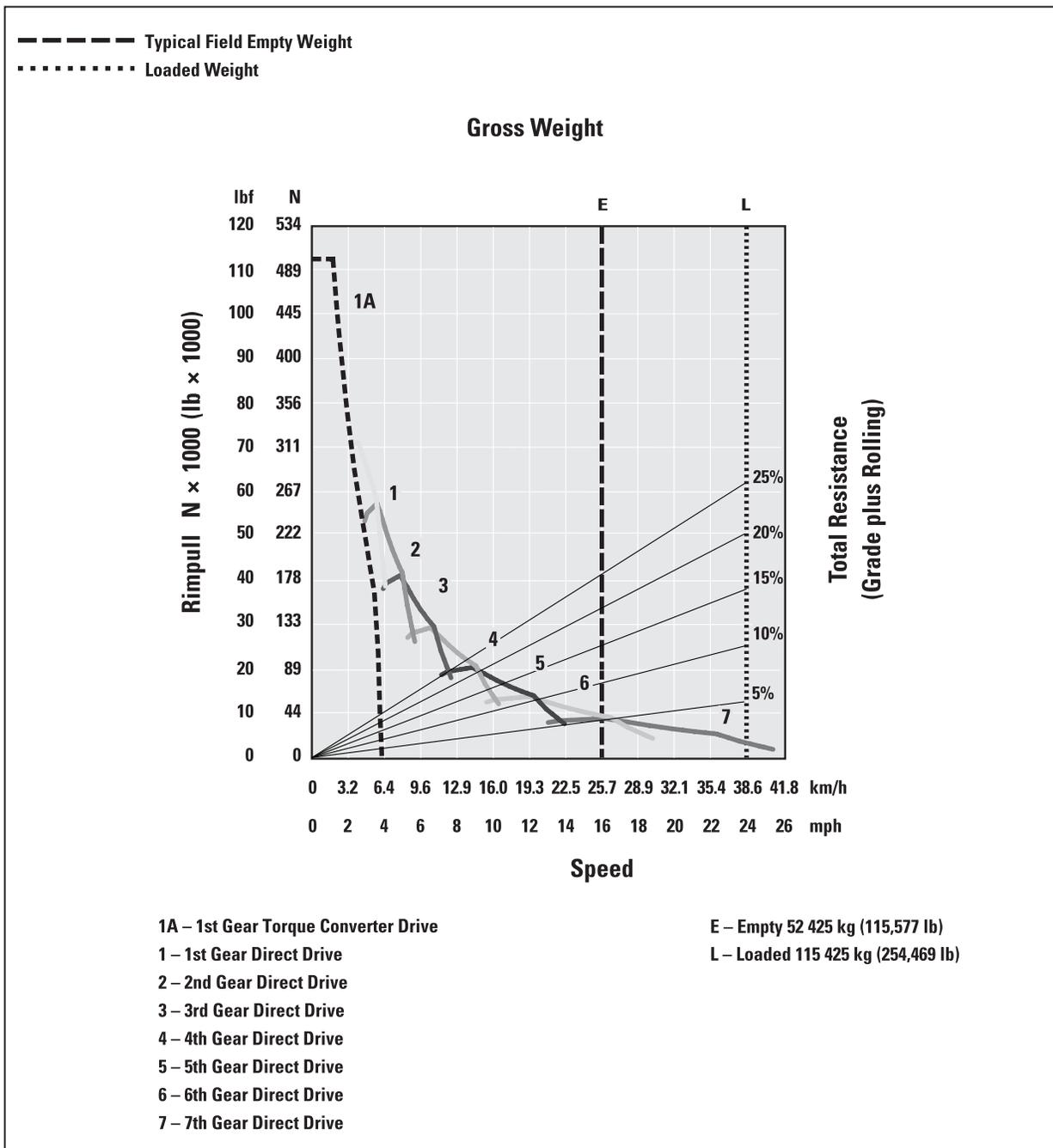
* Clearance dimensions are for reference only.

** Measurement taken with tailgate down for ejector body.

AD63 Underground Articulated Truck Specifications

Gradeability/Speed/Rimpull

To determine gradeability performance: Read from gross weight down to the percent of total resistance. Total resistance equals actual percent grade plus rolling resistance as a general guide use two percent for rolling resistance in underground application or refer to the Caterpillar Performance Handbook. From the total resistance point, read horizontally to the curve with the highest obtainable gear, then down to maximum speed. Usable rimpull will depend upon traction available and weight on drive wheels.



AD63 Standard Equipment

Standard Equipment

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

POWERTRAIN

- Brake retarder control, automatic
- Brakes:
 - All wheel disc
 - Oil cooled
 - Parking brakes, four wheels
- Control throttle shifting
- Engine:
 - Cat C27 12 cylinder diesel engine
 - EU Stage V
 - Air-to-air aftercooler (ATAAC)
 - Fuel priming aid
- Transmission, automatic planetary power shift (7F/1R)
 - Gear blockout with tray up, programmable
 - Ground speed limiting, programmable
 - Torque converter with automatic lockup
- Four wheel drive
- Remote transmission cooler

ELECTRICAL

- Alarm, reversing
- Alternator, 215 amp
- Disconnect switch, 2 post, ground level
 - Electric starting, 24V
- Lights, LED:
 - Headlights with dimmer switch
 - Light, brake and tail
 - Lights, reversing, automatic when reverse gear selected
- Work light, rear, cab mounted
 - Receptacle GP, auxiliary start
 - Shutdown switch, ground level
 - Product Link Elite
 - Machine health information

OPERATOR ENVIRONMENT

- Cab, enclosed:
 - ROPS/FOPS certified
 - Tilt (cab is able to tilt 43° for maintenance access)
 - HVAC, electric
- Caterpillar Electronic Monitoring System (CEMS), (dash instrument panels)
- Operator Presence System
- Automatic Brake Application (ABA)
- Brake Gauges, Front and Rear
- Idle timer (programmable)
- Light, residual brake pressure
- Low hydraulic oil level alarm
- Low park brake pressure indicator
- Mirrors, rear view
- Radio ready
- Seat, trainer/passenger with seat belt
- Steering wheel, tilt/telescopic
- Turn signal indicators
- Windshield wiper and washer
- TLV2 Cat Comfort Air Seat

TIRES, RIMS, AND WHEELS

- Tires must be selected from the mandatory attachments section
- Rims (set of 4):
 - Five piece
 - Tubeless

OTHER STANDARD EQUIPMENT

- Adapters, oil sample
- Alarm, tray up
- Axle suspension, front
- Belly guards
- Bumpers, front, rubber
- Cap, radiator, manual release
- Catalytic exhaust purifier/muffler
- Covers, exhaust
- Handholds
- Handrails, fold down
- Dump body
- Firewall
- Hitch, articulated and oscillated
- Hydraulic Burst Protection
- Lifting lugs, frame
- Secondary steering
- Tow pin, front and rear
- Tire Arrangement:
 - Tire, 35/65 R33 VSNT Bridgestone
- Ventilated covers

Optional Equipment

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

- Battery Shutdown
 - Ground Level Isolation, In Cab Isolation Switch
 - Ground Level Isolation, Engine Shutdown Switch
 - Ground Level Isolation, In Cab Isolation, Engine Shutdown Switch
- Body Dump
 - Body, (32.6 m³/42.6 yd³)
 - Body, (33.8 m³/44.2 yd³)
 - Body, (36.6 m³/47.9 yd³)
 - Body, (38.3 m³/50.1 yd³)
- Body Ejector
 - Ejector, (26.9 m³/35.2 yd³)
 - Ejector, (29.1 m³/38.0 yd³)
- Body Liners, Impact and/or Wear
 - 10 mm, Body, Dump (26.9 m³/35.2 yd³)
 - 10 mm, Body, Dump (32.6 m³/42.6 yd³)
 - 10 mm, Body, Dump (33.8 m³/44.2 yd³)
 - 10 mm, Body, Dump (36.6 m³/47.9 yd³)
 - 10 mm, Body, Dump (38.3 m³/50.1 yd³)
- Body Wear Plate, External
 - 8 mm, Body, Dump (26.9 m³/35.2 yd³)
 - 8 mm, Body, Dump (32.6 m³/42.6 yd³)
 - 8 mm, Body, Dump (33.8 m³/44.2 yd³)
 - 8 mm, Body, Dump (36.6 m³/47.9 yd³)
- Body Wear Protection Option: wear strip to cover edge of the pusher plate or full length of the ejector body tub side walls must be selected if the ejector body was chosen
- External Wear Plates for Ejector Bodies
- Brake Pressure Gauges
- Camera, Color Rear Facing
- Cover, Anti Vandalism for Shipping
- Aftertreatment Options
 - DPF (Flow Through)
 - DPF (Wall Flow)
- Fast Fill System
 - Coolant
 - Engine Oil
 - Fuel (Dual Tanks)
 - Hydraulic Oil
 - Transmission Oil
- Ansil Fire Suppression, Wet 76L (AS5062)
- Fluids
 - Arctic Fuel
 - Arctic Coolant
- Lighting
 - Headlights with Dimmer Switch, LED
 - Rear Work Light (Cab Mounted), LED
 - Reversing Lights, LED
- Lubrication System
 - Automatic, Dump or Ejector Body
- Operator Station
 - Sun Visor
- Park Brake Switch Engagement
 - Push to Apply
 - Pull to Apply
- Payload
 - Truck Payload Measurement System (TPMS), Dump Body Only
- Reflective Tape
- Rims
 - Rim Identification Numbering
 - Spare, Tubeless
- Seat Cover
 - Cat Comfort TLV2
 - Seat Cover, Companion
- Service Tools
 - Body Pin Removal Tool
 - Collet Jacking Bolts, Dump or Ejector
 - Hoist Cylinder Supports (for Body Removal)
- Window Dual Panel
- NOTE: Not all features are available in all regions.
- See your Cat dealer for more information

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AEHQ8331-01 (12-2020)
Replaces AEHQ8331
(Global)

