AD55B

Underground Articulated Truck

Engine		
Engine Model	Cat® C27 ACERT™	
Gross Power – SAE J1995	579/600 kW	776/805 hp
Operating Specifications		
Nominal Payload Capacity	55 000 kg	121,254 lb
Gross Machine Operating Weight	105 000 kg	231,485 lb
Body Capacities		
Dump Body – Standard	26.9 m^3	35.2 yd^3
• Heaped SAE 2:1		

AD55B Underground Articulated Truck

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

Power Train – Engine

The Cat® C27 engine with ACERT™ Technology delivers the power and reliability necessary to perform in the most demanding underground mining applications. Designed for efficient operation, excellent fuel efficiency, lower emissions, reduced engine noise and lower operating costs. **pg. 4**

Power Train – Transmission

The Cat seven-speed planetary power shift transmission and mechanical power train is matched with the electronic unit injection C27 engine with ACERT™ technology to provide consistent power and efficiency for peak power train performance. **pg. 5**

Engine/Power Train Integration

The Cat Data Link electronically combines engine, transmission, brake and operational information to optimize overall truck performance. Stored diagnostic data can be accessed via the Electronic Technician (Cat ET) to improve troubleshooting and reduce downtime. **pg. 6**

Structures

Cat® truck frames are built to optimize torsional load displacement in high impact applications. High strength steels provide flexibility, durability and resistance to impact loads, even in cold climates. **pg. 10**

Serviceability

The AD55B is designed for quick and easy servicing. Simplified service and maintenance features reduce downtime, allowing the machine to spend less time being serviced and more time in the mine. **pg. 11**

Top Performance.
The AD55B underground articulated truck is designed for high production, low cost-per-ton hauling in underground mining applications.

Reliable, Durable Operation.
Rugged construction and easy maintenance guarantee long life with low operating costs.

Caterpillar® Brake System

Cat oil-cooled, multiple disc brakes offer exceptional, fade-resistant braking and retarding for maximum performance and productivity in all conditions. Automatic Retarder Control (ARC) optimizes braking efficiency. **pg. 7**

Operator's Station

The ergonomic cab is designed for operator comfort and ease of operation allowing the operator to focus on productivity. Controls and gauges are positioned within easy reach for optimum efficiency and superior control. **pg. 8**

Truck Body Systems

Caterpillar truck bodies are designed as a system to achieve rated payload and provide the lowest cost-per-ton hauling system when matched with Cat Underground Mining Loaders. A variety of Caterpillar designed and built truck bodies ensure optimal performance and reliability. **pg. 9**

Customer Support

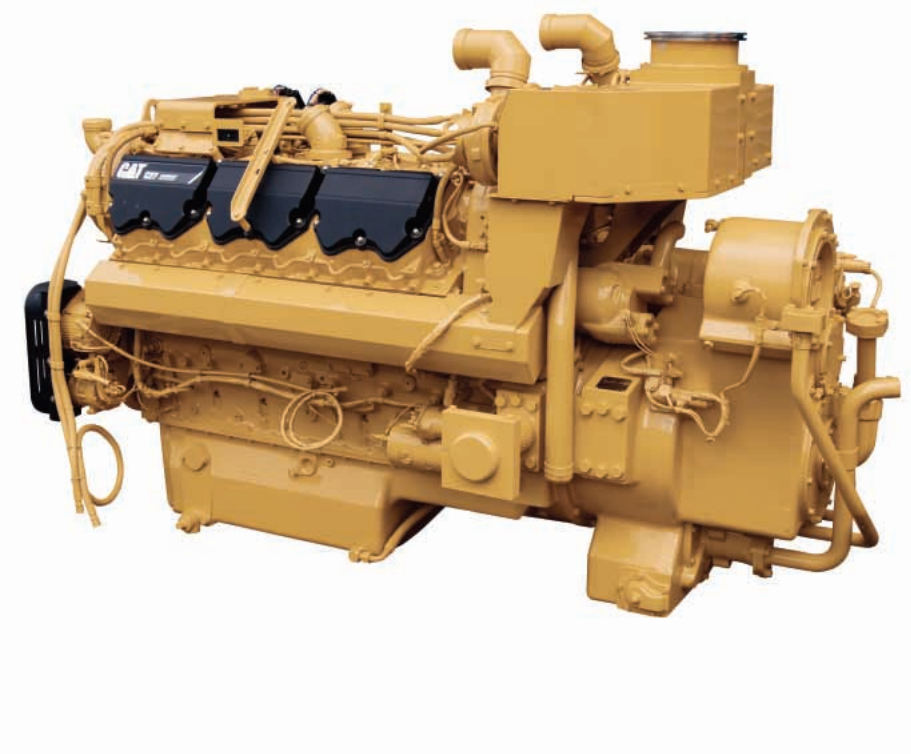
Caterpillar dealers provide unmatched product support, anywhere in the world. With industry-best parts availability and a wide range of maintenance and service options, Cat dealers have what it takes to keep your mining machines productive. **pg. 12**

Safety

Caterpillar sets the standard when it comes to safety in the design and manufacturing of heavy equipment for the mining industry. Safety is not an afterthought at Caterpillar, but an integral part of all machine and systems designs. **pg. 13**

Power Train – Engine

The Cat® C27 engine with ACERT™ Technology delivers the power and reliability necessary to perform in the most demanding underground mining applications.



Engine. The Cat C27 engine with ACERT™ technology delivers higher power and greater durability for maximum hauling performance in the most demanding mining applications. Complete system integration of the engine and transmission optimizes performance and efficiency.

Power Increase. The 21.8% power increase over previous models provides unequalled lugging force during acceleration and less down-shifting on grade. Improved software and updates in engine technology further improve transmission shifting and decrease fuel consumption.

Watercooled Turbocharged and ATAAC. Air-to-air aftercooling provides improved fuel economy by packing cooler, denser air into cylinders for more complete combustion of fuel and lower emissions.

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.

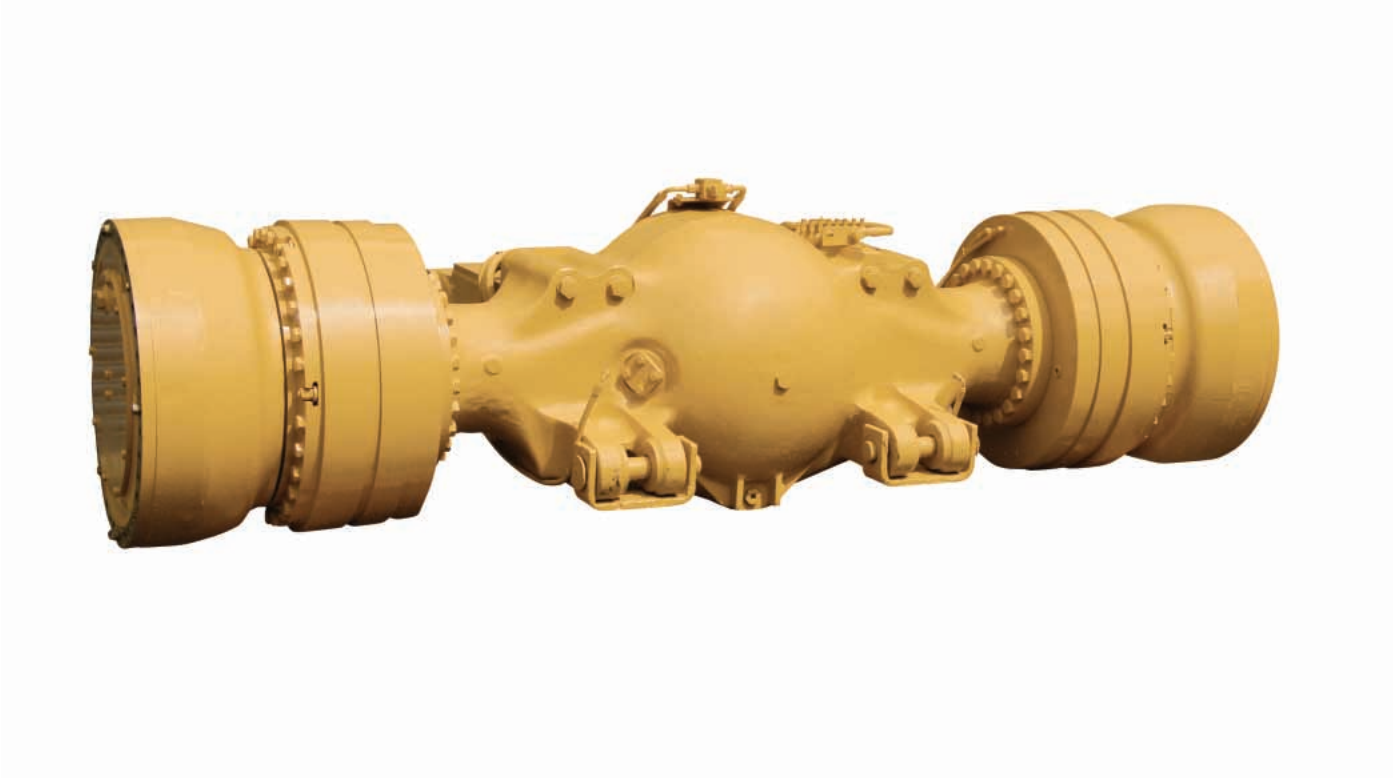
Electronic Control Module (ECM). ECM utilizes advanced engine management software to monitor, control and protect the engine utilizing self-diagnosing electronic sensors. The computerized system senses operating conditions and power requirements and adjusts engine for peak performance and most efficient 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.

EPA Compliant. The Cat C27 Engine with ACERT™ technology is compliant with U.S. Environmental Protection Agency Tier 2 Emission Standards.

Power Train – Transmission

Cat power train delivers more power to the ground for greater productivity and lower operating costs.



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.

1) Transmission. The Cat seven-speed planetary power shift transmission is matched with the direct-injection C27 engine with ACERT™ technology 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.

2) Lock Up Torque Convertor. 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.

Lock-Up Clutch. Quickly releases and re-engages to reduce power train torque loads for smoother shifting, long life and a more comfortable ride.

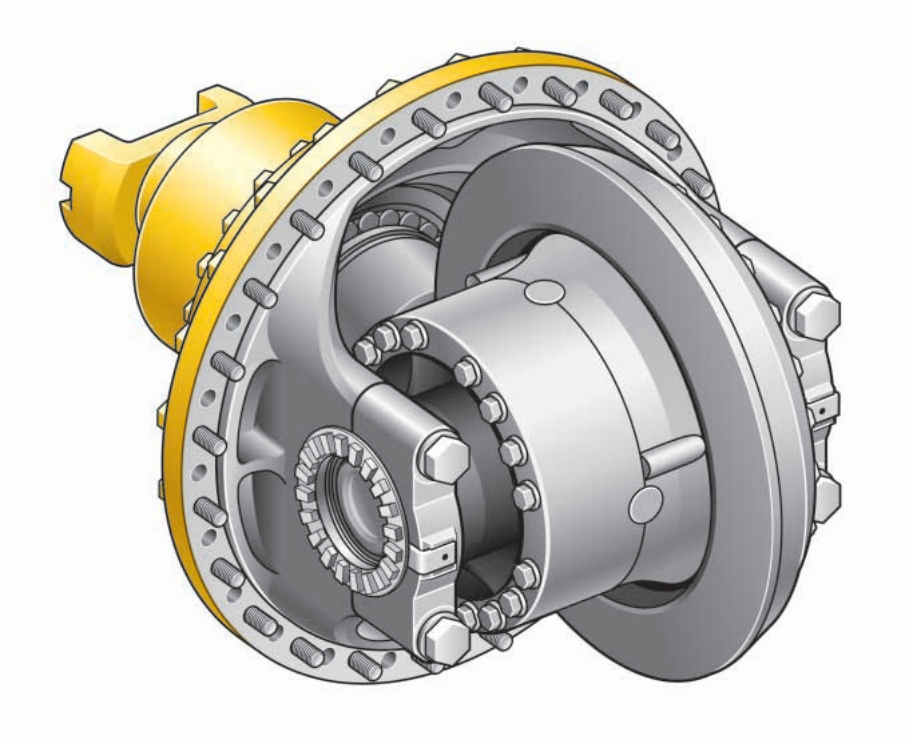
Smooth Shifting. Electronic clutch pressure control provides smoother shifts, improved serviceability and optimizes performance.

3) 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

Electronically combines critical power train components to work more intelligently and optimize overall truck performance.



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

• **Controlled Throttle Shifting.** Regulates engine RPM during shifting to reduce power train stress and clutch wear by controlling engine speed, torque converter lock-up and transmission clutch engagement for smoother shifts and longer component life.

• **Economy Shift Mode.** Reduces engine speeds, resulting in decreased fuel consumption, lower noise levels and potentially longer engine life.

• **Directional Shift Management.** Regulates engine speed during directional shifts 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.

Diagnostic Capability. Critical data from the electronic engine and transmission controls, including transmission shifting, engine speed and fuel consumption, provides service technicians with enhanced diagnostic capability to reduce downtime and operating costs.

Overspeed Protection. The transmission control electronically senses engine conditions and automatically up-shifts one gear to prevent overspeeding. If overspeeding occurs in top gear, the lock-up clutch is disengaged.

Caterpillar Brake System

Reliable braking with superior control gives the operator the confidence to focus on productivity.

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. Caterpillar four-wheel, forced oil-cooled, multiple disc service brakes are continuously cooled by a water-to-oil heat exchanger for exceptional, non-fade braking and retarding performance.

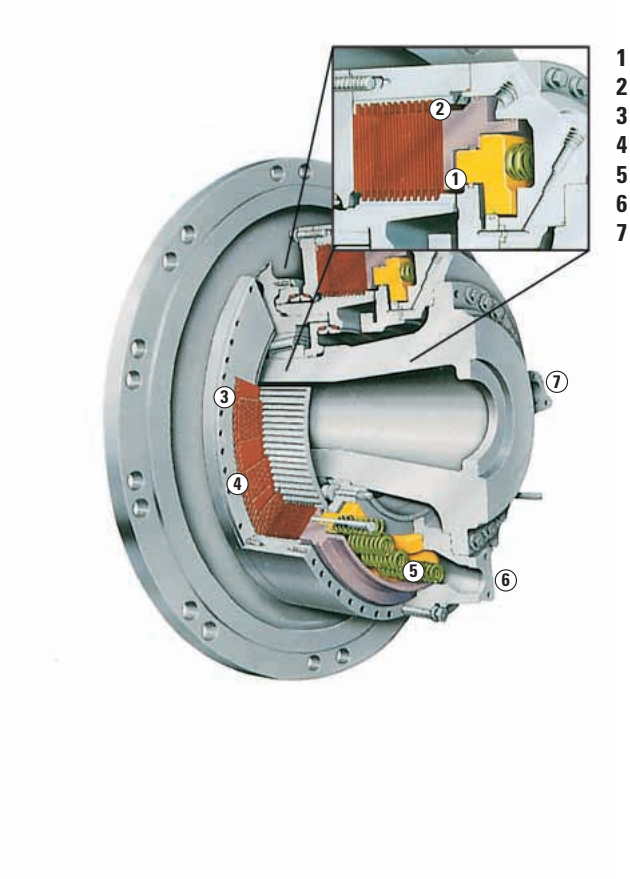
Brake Design. Cat oil-cooled disc brakes are designed with large discs and plates for reliable, adjustment-free operation and performance. Brakes are completely enclosed and sealed to prevent contamination and reduce maintenance.

Long Life. An oil film prevents direct contact between the discs. This design absorbs the braking forces by shearing the oil molecules and carrying heat away to extend brake life.

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.

Faster Speeds. ARC allows the operator to maintain optimum engine speeds for faster downhill hauls and greater productivity.

Superior Control. Automatic brake modulation offers a smoother ride and better control in slippery conditions, allowing the operator to concentrate on driving.



1 Parking/Secondary Piston
2 Service/Retarding Piston
3 Friction Discs
4 Steel Plates
5 Actuating Springs
6 Cooling Oil In
7 Cooling Oil Out

Ease of Operation. ARC increases operating ease, resulting in greater operator confidence with less fatigue.

Engine Overspeed Protection. Automatically activates ARC when engine speed exceeds factory preset levels, regardless of operator inputs, to avoid potentially damaging engine overspeeds.

Fuel Efficiency. The engine provides additional retarding by running against compression on downhill hauls. During retarding applications the engine ECM reduces fuel injection to minimum value or exceptional fuel economy.

Operator's Station

Ergonomically designed for operator comfort, superior control and high productivity.

Ergonomic Layout. The AD55B 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.

Optional Enclosed Cab. Optional sound-suppressed ROPS cab provides a quiet, secure working environment. Enclosed design provides fresh, pressurized, temperature-controlled air circulation with air-conditioned comfort and a more comfortable working environment.

Suspension Seat. Ergonomically designed, fully adjustable suspension seat with adjustable armrests provide optimal operator comfort. Thick cushions reduce pressure on lower back and thighs. Wide, retractable seat belts provide a secure, comfortable restraint.

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

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

- Gauge Cluster. Maintains a constant display of vital machine functions, including: engine coolant temperature, brake oil temperature, engine oil pressure, and fuel level.
- Speedometer/Tachometer Module. Monitors three systems: engine speed, ground speed and gear indicator.
- Message Center. The Caterpillar Electronic Monitoring System (CEMS) includes 4 warning categories and provides visual and audible warning system outputs to alert operators of abnormal machine health conditions.

Interlock. If the operator fails to apply the park brake prior to exiting the cab, the interlock system will detect the absence of operator input and apply the park brake, neutralize the steering, implements and transmission and command the engine ECM to shut down the engine.

Truck Body Systems

Cat designed and built for 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. 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 system for your site specific application.

Body Design. Cat truck bodies are designed for optimal strength, capacity and durability. With improved design and the use of Hardox steel, longer service life and lower cost per ton figures are now evident.

Body/Chassis Integration. Caterpillar truck bodies are designed and matched with the integrated chassis system for optimum structural reliability, durability and long life.

Fast Hoist Cycle Times. Single-stage hoist cylinders provide fast dump cycle times of 12 seconds for raise and 24 seconds for lower.

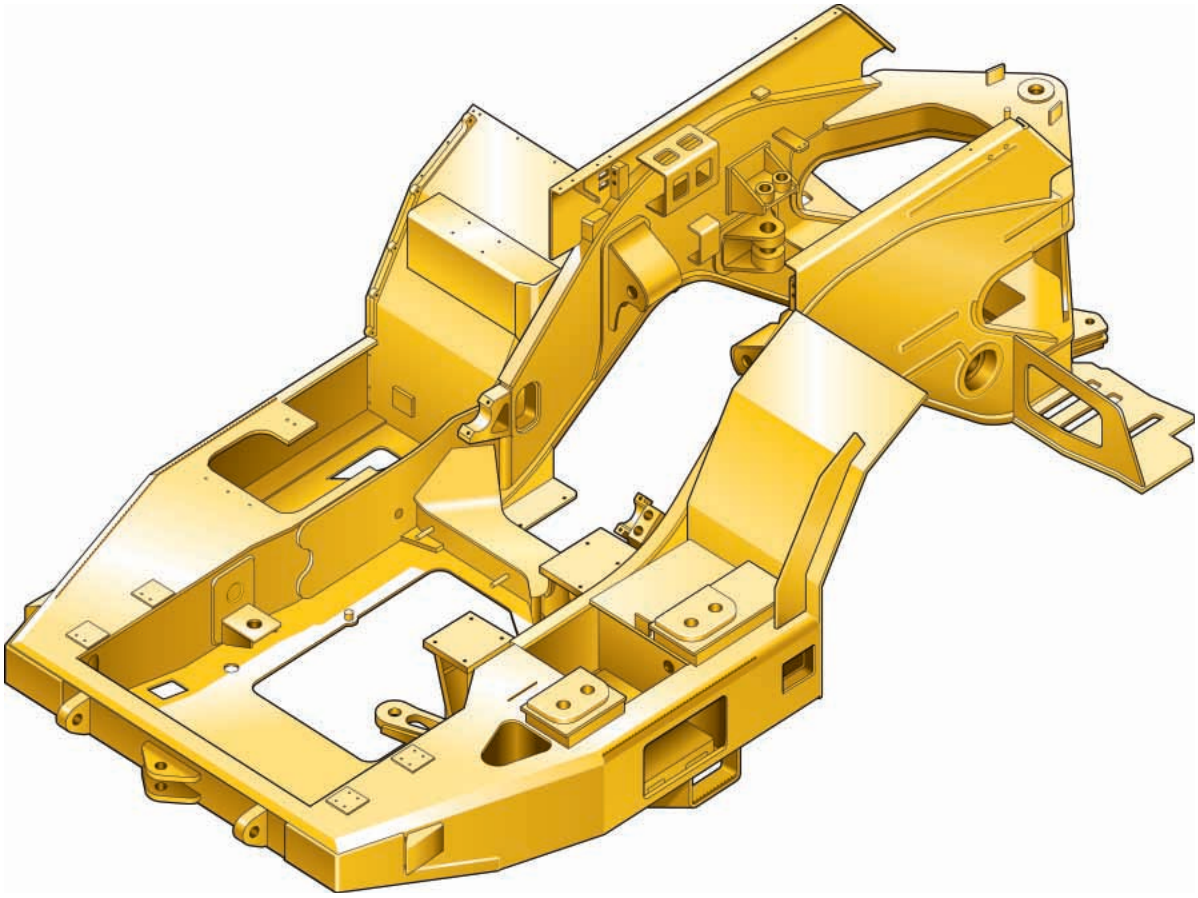
Load Carrying Capacity. Large target area provides high load carrying capacity. Its diverging flow design gives clean load ejection, which maximizes production and avoids material carryback.

Truck Payload Management System (TPMS). The optional TPMS system calculates the payload the truck is carrying and determines truck cycle times.

Ejector Body. The ejector body offers clean load ejection and the capability to work in areas with restricted overhead clearance and soft underfoot conditions.

Structures

Rugged Cat structures are the backbone of the AD55B underground mining truck's durability.



Frame Design. The frame incorporates a box-section design with wide and stiff frame beams to handle torque loads. The frame design decreases stress in the hitch area and optimizes suspension geometry. Materials and weld joints are matched to optimize the life of the structure.

Articulating/Oscillating Hitch. The articulating hitch provides the truck with steering articulation and the oscillation ensures the truck maintains all wheel ground contact in rough terrain. Hardened steel pins, taper roller bearings and oscillating stops allows the rear frame to move independently from the front frame.

Suspension System. The suspension system is designed to dissipate haul road and loading impacts for longer frame life.

Suspension Cylinders. Two variable rebound suspension cylinders connected to an accumulator absorb shocks before forces get to the mainframe for longer frame life and a more comfortable ride.

Serviceability

Less time spent on maintenance means more time on the haul roads.

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

Ground-Level Access. Allows convenient servicing to tanks, filters, lubrication points and compartment drains.

Diagnostics. Electronic control system enables quick diagnosis of engine conditions and effective maintenance and repairs utilizing the Cat Electronic Technician (Cat ET) Service Tool.

Air Filters. Radial seal air filters are easy to change, reducing time required for air filter maintenance.

Sight Gauges. Makes fluid level checks quick and easy. These include the hydraulic, transmission and coolant reservoirs.

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•S℠ sampling valves speed sampling and analysis reliability.

Customer Support

Caterpillar dealers have what it takes to keep Underground Mining Equipment productive.

Commitment Makes the Difference. Cat dealers offer a wide range of solutions, services and products that help you lower costs, enhance productivity and manage your operation more efficiently. Support goes far beyond parts and service. From the time you select a piece of Cat equipment until the day you rebuild, trade or sell it, the support you get from your Cat dealer makes the difference that counts.

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 necessary to handle your repair and maintenance needs, when and where you need them.

Product Support. Cat dealers believe superior products deserve superior support. When Cat products reach the field, they are supported by a worldwide network of parts distribution facilities, dealer service centers, and technical training facilities to keep your equipment up and running. Cat customers rely on prompt, dependable parts availability and expertise through our global dealer network, ready to meet your needs 24/7.

Service Support. Every piece of Cat equipment is designed and built to provide maximum productivity and operating economy throughout its working life. Cat dealers offer a wide range of service plans that will maximize uptime and return on your investment, including:

- Preventive Maintenance Programs
- Diagnostic Programs, such as Scheduled Oil Sampling and Technical Analysis
- Rebuild and Reman Options
- Customer Support Agreements

Technology Products. Cat dealers offer a range of advanced technology products designed to improve fleet efficiency, increase productivity, and lower costs.

www.cat.com. For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

Operation. With today's complex products, equipment operators must have a thorough understanding of machine systems and operating techniques to maximize efficiency and profitability. Your Cat dealer can arrange training programs to help operator's improve productivity, decrease downtime, reduce operating costs, enhance safety, and improve return on the investment you make in Cat products.

Application Awareness. Operating and maintenance costs are influenced by many application and site-specific factors, such as: material density, loading position, payload, grades, speeds, haul road design, and maintenance. To optimize total cost of ownership and productivity, your Cat dealer can provide you with a fundamental understanding of the effects application characteristics and operating techniques have on maintenance and operating costs.

Safety

Caterpillar mining machines and systems are designed with safety as their first priority. SAFETY.CAT.COM™

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 Cab. Integral to the cab and frame, the ROPS is 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.

Interlock. If the operator fails to apply the park brake prior to exiting the cab, the interlock system will detect the absence of operator input and apply the park brake, neutralize the steering, implements and transmission and command the engine ECM to shut down.

Standard Safety Features.

- Anti-Skid upper deck surfaces
- Upper deck handrails
- 3-point cabin and machine access
- Push out safety glass for alternative exit
- Excellent visibility
- Suspension seat

- Passenger/training seat
- Inertia reel retractable belts
- Steering frame lock
- Rear window guard
- Body retaining pins
- Automatic retarder control
- Exhaust heat shielding and firewall fitted standard
- Hitch hydraulic hoses – burst protection sleeves fitted
- Tailgate retaining pins (ejector body)
- Ground level compartment sight glasses
- Lock-up supports on access covers

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Engine

Engine Model	Cat C27 ACERT™	
Rated Power	2000 RPM	
Gross Power – SAE J1995	579/600 kW	776/805 hp
Net Power – SAE J1349	540/560 kW	725/751 hp
Net Power – ISO 9249	540/560 kW	725/751 hp
Net Power – 80/1269/EEC	540/560 kW	725/751 hp
Bore	137.2 mm	5.4 in
Stroke	152.4 mm	6 in
Displacement	27 L	1,648 in^3

- Power ratings apply at a rated speed of 2000 rpm when tested under the reference conditions for the specified standard.
- Ratings based on SAE J1995 standard air conditions of 25° C (77° F) and 100 kPa (29.61 Hg) barometer. Power based on fuel having API gravity of 35 at 16° C (60° F) and an LHV of 42,780 kJ/kg (18,390 BTU/lb) when engine used at 30° C (86° F).
- Engine derate will commence at an altitude of 557 m (1,827 ft).
- Complaint with U.S. Environmental Protection Agency Tier 2 emissions standards.

Operating Specifications

Nominal Payload Capacity	55 000 kg	121,254 lb
Gross Machine Operating Weight	105 000 kg	231,485 lb

Weights

Empty	50 000 kg	110,231 lb
Front Axle	34 200 kg	75,398 lb
Rear Axle	15 800 kg	34,833 lb
Loaded	105 000 kg	231,485 lb
Front Axle	52 920 kg	116,668 lb
Rear Axle	52 080 kg	114,817 lb

Weight Distribution

Empty	
Front Axle	68.4%
Rear Axle	31.6%
Loaded	
Front Axle	50.4%
Rear Axle	49.6%

Transmission

Forward 1	6.6 km/h	4.1 mph
Forward 2	9.3 km/h	5.8 mph
Forward 3	12.5 km/h	7.5 mph
Forward 4	16.8 km/h	10.4 mph
Forward 5	22.7 km/h	14.1 mph
Forward 6	30.7 km/h	19.1 mph
Forward 7	41.5 km/h	25.8 mph
Reverse 1	8.7 km/h	5.4 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	12 Seconds
Lower	24 Seconds
Total Cycle Time	36 Seconds

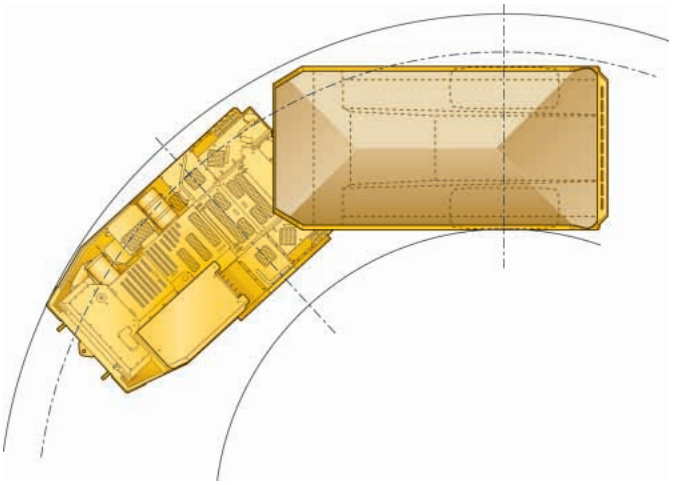
Body Capacities

Dump Body – Standard	26.9 m^3	35.2 yd^3
Dump Body – Optional	32.6 m^3	42.6 yd^3
Dump Body – Optional	33.8 m^3	44.2 yd^3
Dump Body – Optional	36.6 m^3	47.9 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	99 L	26.2 gal
Transmission	53 L	14 gal
Hydraulic Tank	258 L	68.2 gal
Cooling System	138 L	36.5 gal
Front Differentials and Final Drives	138 L	36.5 gal
Rear Differentials and Final Drives	138 L	36.5 gal
Fuel Tank	960 L	253.6 gal

Tires

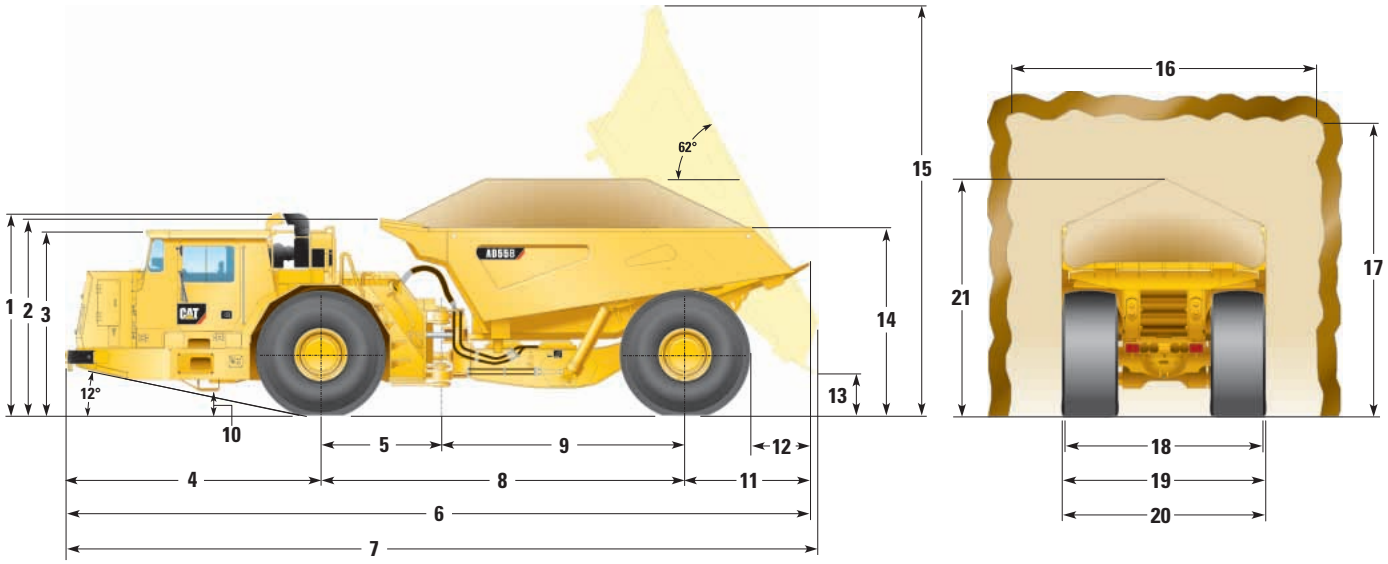
Tire Size	35 × 65 R33

Standards

Brakes	ISO3450, AS2958.1, CAN-CSA424.30-M90
Cab/FOPS	ISO3449, SAEJ231, AS2294.3, EN13627
Cab/ROPS	ISO3471, SAEJ1040, AS2294.2, EN13510

Dimensions

All dimensions are approximate.



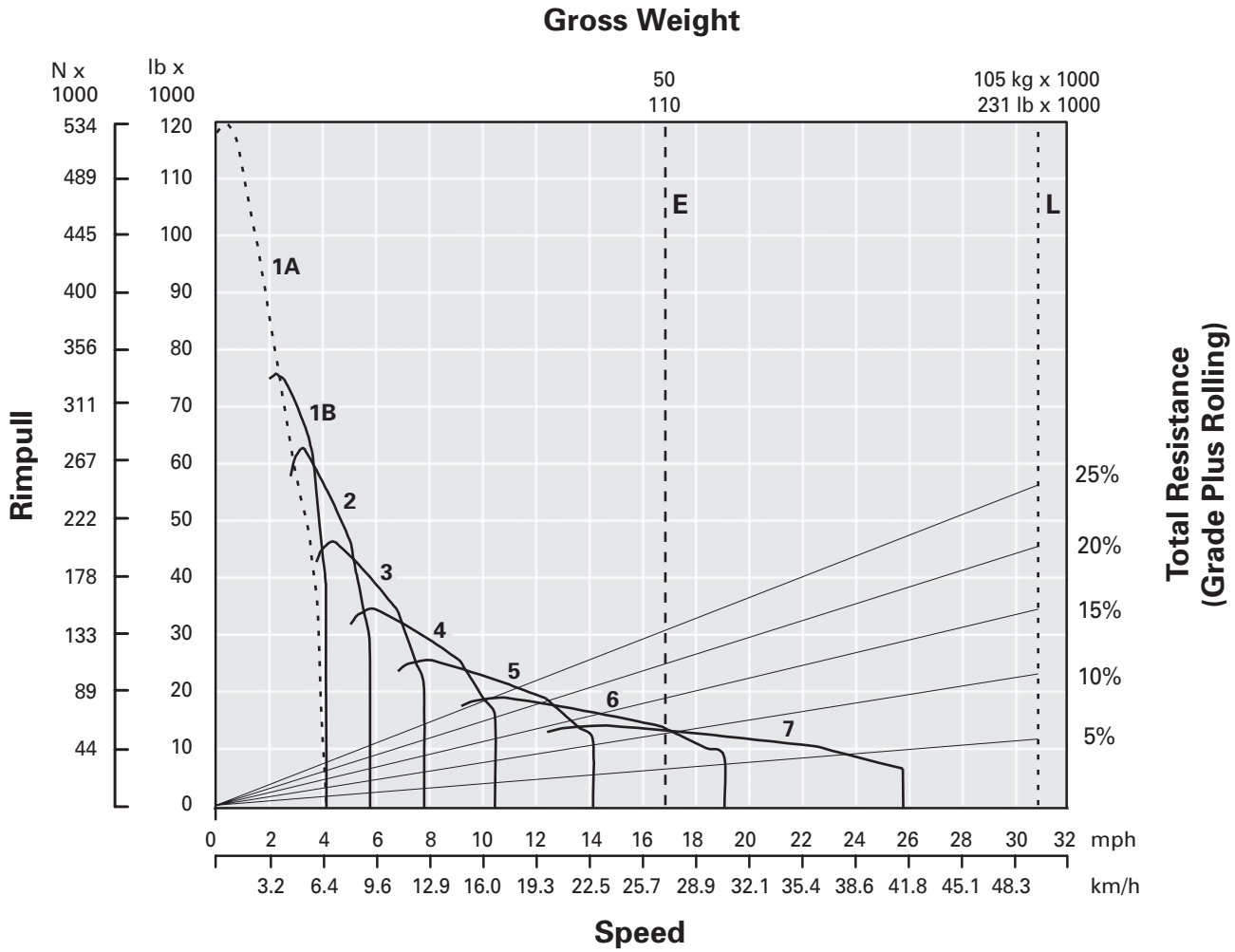
	313-4730 (Standard Body)	312-1395	307-6655	311-4721
Dump Body	26.9 m³ (35.2 yd³)	32.6 m³ (42.6 yd³)	33.8 m³ (44.2 yd³)	36.6 m³ (47.9 yd³)
1 Overall Height – Body Empty	3278 mm (10'9")	3418 mm (11'3")	3557 mm (11'8")	3560 mm (11'8")
2 Height to Top of Body	3202 mm (10'6")	3418 mm (11'3")	3556 mm (11'8")	3560 mm (11'8")
3 Height to Top of ROPS	3000 mm (9'10")	3000 mm (9'10")	3000 mm (9'10")	3000 mm (9'10")
4 Front Bumper to Centerline of Front Axle	4164 mm (13'8")	4164 mm (13'8")	4164 mm (13'8")	4164 mm (13'8")
5 Centerline of Front Axle to Centerline of Hitch	1920 mm (6'4")	1920 mm (6'4")	1920 mm (6'4")	1920 mm (6'4")
6 Overall Length	12 040 mm (39'6")	12 040 mm (39'6")	12 040 mm (39'6")	12 040 mm (39'6")
7 Max Overall Length	12 064 mm (39'7")	12 180 mm (39'11")	12 222 mm (40'1")	12 241 mm (40'2")
8 Wheelbase	5900 mm (19'4")	5900 mm (19'4")	5900 mm (19'4")	5900 mm (19'4")
9 Centerline of Hitch to Centerline of Rear Axle	3980 mm (13'1")	3980 mm (13'1")	3980 mm (13'1")	3980 mm (13'1")
10 Ground Clearance	393 mm (1'3")	393 mm (1'3")	393 mm (1'3")	393 mm (1'3")
11 Centerline of Rear Axle to Tail	1976 mm (6'6")	1976 mm (6'6")	1976 mm (6'6")	1976 mm (6'6")
12 Rear Wheel to Body Raised	857 mm (2'10")	857 mm (2'10")	857 mm (2'10")	857 mm (2'10")
13 Dump Clearance	514 mm (1'8")	514 mm (1'8")	514 mm (1'8")	514 mm (1'8")
14 Loading Height	3045 mm (10'0")	3326 mm (10'11")	3426 mm (11'3")	3473 mm (11'5")
15 Overall Height – Body Raised	6969 mm (22'10")	7202 mm (23'8")	7322 mm (24'0")	7334 mm (24'1")
16 Tunnel Clearance Width*	5000 mm (16'4")	5000 mm (16'4")	5000 mm (16'4")	5000 mm (16'4")
17 Tunnel Clearance Height*	5000 mm (16'4")	5000 mm (16'4")	5000 mm (16'4")	5000 mm (16'4")
18 Overall Tire Width	3250 mm (10'8")	3250 mm (10'8")	3250 mm (10'8")	3250 mm (10'8")
19 Overall Width (Including Body)	3346 mm (11'0")	3480 mm (11'5")	3480 mm (11'5")	3480 mm (11'5")
20 Overall Width (Excluding Body)	3346 mm (11'0")	3346 mm (11'0")	3346 mm (11'0")	3346 mm (11'0")
21 Height to Top of Load (SAE 2:1)	3848 mm (12'7")	4178 mm (13'8")	4183 mm (13'9")	4333 mm (14'3")

* Clearance Dimensions are for Reference Only.

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 2% for rolling resistance in underground application or refer to the Cat 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.

- - - - - - **Typical Field Empty Weight**
- - - - - - - - **Loaded Weight**



1A – 1st Gear Torque Convertor Drive
1B – 1st Gear Direct Drive
2 – 2nd Gear Direct Drive
3 – 3rd Gear Direct Drive
4 – 4th Gear Direct Drive
5 – 5th Gear Direct Drive
6 – 6th Gear Direct Drive
7 – 7th Gear Direct Drive

E – Empty 50 000 kg (110,000 lb)
L – Loaded 105 000 kg (231,000 lb)

Standard Equipment

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

ELECTRICAL
- Alarm, Back-up
- Alternator, 95-amp
- Batteries, Maintenance Free
- Battery Disconnect Switch-Ground Level
- Brake and Tail Lights
- Caterpillar Electronic Monitoring System (CEMS)
- Corrosive Protection Spray
- Diagnostic Connector
- Engine Shutdown Switch
- Headlights With Dimmer Switch
- Jump Start Receptacle
- Rear Work Light (Cab Mounted)
- Reversing Lights
- Starting And Charging System (24-Volt)
- Turn Signal Indicators

POWER TRAIN
- All Wheel Disc Brakes
- Automatic Retarder Control
- Auto Shift Transmission 7 Speed Forward / 1 Speed Reverse
- Control Throttle Shifting
- 12 Cylinder C27 ACERT™ ATAAC Diesel Engine
- Long Life Coolant
- Parking Brakes (Four Wheels)
- Programmable Gear Blockout With Tray Up
- Programmable Ground Speed Limiting
- Torque Converter With Automatic Lockup

OPERATOR ENVIRONMENT
- Cab Pressurizer
- Rear View Mirrors
- Radio Ready
- ROPS/FOPS Cab With Air Conditioning
- Storage Compartment
- Suspension Seat With Retractable Seat Belt
- Tilt/Telescopic Steering Wheel
- Trainer/Passenger Seat And Seat Belt
- Windshield Wiper And Washer

OTHER STANDARD EQUIPMENT
- Articulated And Oscillated Hitch
- Belly Guards
- Centralized Lubrication Points
- Dump Body (26.9 m^3, 35.2 yd^3)
- Exhaust Catalytic Converter/Muffler
- Exhaust Covers
- Firewall
- Frame Lifting Lugs
- Front And Rear Tow Pin
- Front Axle Suspension
- Oil Sample Adapters
- Residual Brake Pressure Switch
- Tires – 35/65 R33 VSNT Radial Tires
- Tray-Up Alarm

Optional Equipment

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

Black & White Camera & Monitoring System
Bodies
- Body, (32.6 m^3, 42.6 yd^3)
- Body, (33.8 m^3, 44.1 yd^3)
- Body, (36.6 m^3, 47.9 yd^3)
- Body Liners, Heavy Duty

Color Camera & Monitoring System
Dual Speed Control
EAM (Electronic Access Module)
Engine Shutdown on Fire System Activation
Fast Fill System
- Coolant
- Engine
- Fuel
- Hydraulic
- Transmission

Fire Extinguisher, Hand Held
Front Rubber Bumpers
ID Numbers For Rims
Idle Timer
Isolation Switches
Onboard Fire System, 65L
Retractable Visor Group
Seat Covers
Secondary Steering System
Spare Rim
TPMS (Truck Payload Measurement System)
TPMS Remote Display Payload Indicator

AD55B Underground Articulated Truck

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

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Featured machines in photos may include additional equipment.
See your Caterpillar dealer for available options.

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