

795F AC

Mining Truck



Engine

| | | |
|-------------------------|--------------|----------|
| Engine Model | Cat® C175-16 | |
| Gross Power – SAE J1995 | 2536 kW | 3,400 hp |

Operating Specifications

| | | |
|--------------------------------------|------------|--------------|
| Nominal Payload Capacity | 313 tonnes | 345 tons |
| Gross Machine Operating Weight (GMW) | 570 678 kg | 1,257,000 lb |

795F AC Features

High Performance Engine

The Cat® C175-16 engine offers the perfect balance between power, robust design and economy.

Focus on Safety

Wide access stairways, standard object detection, industry leading dynamic retarding, four corner wet disc brakes and traction control with automatic front brake assist inspire operator confidence.

Enhanced Serviceability

Modular components, grouped service locations and more ground accessible maintenance points translate into less downtime.

Reliable AC Electric Drive System

The Cat AC electric drive power train is 100% Caterpillar designed, integrated and supported.

Comfortable Cab

Spacious and quiet the cab also offers excellent visibility with intuitive, easy to learn controls.

Mechanical Drive Legacy

Using many components from the 797F – the 795F AC emphasis is on durability.

Truck Body Options

A large number of Caterpillar designed and built body choices ensures the body will fit the application and enhance the performance of the truck.

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The Cat® 795F AC is a completely new truck model for Caterpillar, filling the gap between the 793F and 797F and providing a Cat truck for every customer preference. The truck has a Cat integrated AC drive system, developed and supported by Caterpillar.

Power Train – Engine

The Cat® C175-16 engine is built for power, reliability and efficiency.

Engine

The Cat® C175-16 quad turbocharged and air-to-air aftercooled diesel engine has enhanced power management capability for maximum hauling performance in the most demanding mining applications.

Design

The C175-16 is a 16-cylinder, four-stroke design that uses long, effective power strokes for optimum efficiency.

EPA Compliant

The Cat C175-16 engine is compliant with U.S. Environmental Protection Agency Tier 2 emissions requirements.

Variable Cooling

Variable fan speed directs maximum power to the power train, saving fuel when operating conditions allow.

Long Life

High displacement with a low rpm rating means more time on the haul roads and less time in the shop.

Cat Common Rail Fuel System

Electronically controlled, this high pressure fuel system senses operating conditions and controls fuel delivery for good fuel efficiency while allowing the engine to meet emissions regulations without sacrificing performance, reliability or durability.

Cooling System

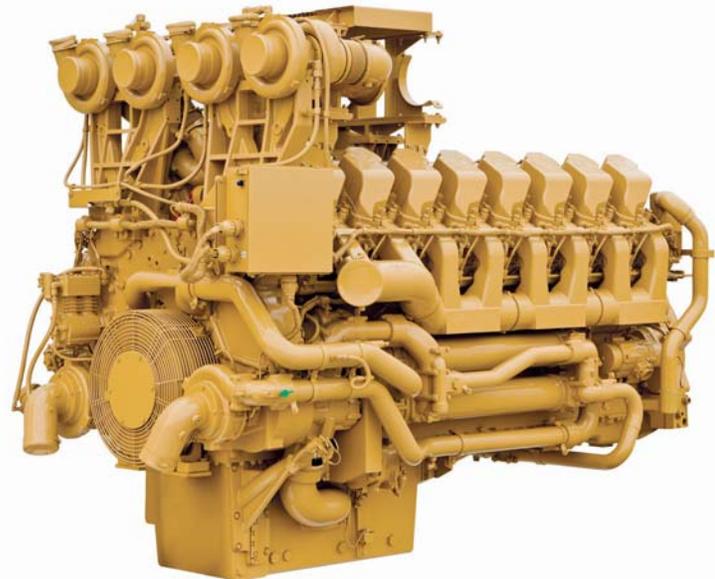
The flexible core design offers long life, high durability, and ease of service.

Starter Options

Air start systems are available as well as an electric start option which eliminates the air system from the truck.

Innovative Layout

Service Technicians will appreciate the engine layout with good top end access and turbo's grouped up front. Internal oil and fuel passages make for a clean layout that is easier to service and reduces engine exchange time at planned replacement. A sight level gauge replaces the dip stick.



Power Train – Cat AC Electric Drive

More power to the ground for greater productivity.



Why Electric Drive?

Cat mechanical drive trucks are the standard of the industry and are favored in most applications. Some customers, however, prefer electric drive for specific applications and situations.

100% Caterpillar

Designed and manufactured by Caterpillar, the 795 is the first AC electric drive truck that is single sourced from one manufacturer and supported by the best dealer network in the industry. The 795 power train works seamlessly with the C-175 engine and offers unsurpassed Safety, Serviceability and Performance.

Modular Design for Excellent Serviceability

The modular design allows ease of component removal and installation. The engine, generator, motors, inverter, grid, and final drives can be removed independently. The rear mounted generator results in better chassis weight balance and is connected to the engine with an isolated drive shaft making generator alignment simple.

Superior Control Yields Excellent Operator Confidence

The Cat AC drive system has the best retarding, braking, and control in the industry. Class leading dynamic retarding coupled with full time traction control with automatic front brake blending at all speeds results in superior operator control and confidence.

High Voltage – Lower Heat

The Cat AC drive is a high voltage system (2,400 volts) that operates at relatively low current. The result is lower heat generation and longer component life.

The Cat AC Electric Drive in Propel

The C175-16 diesel engine drives the rear mounted Generator through an isolation coupler. The AC power is rectified to a nominal 2,400 volts to form the DC link.

The DC link supplies power to the Inverter where IGBT's convert the DC signal to 3-phase AC to drive the traction motors. Motor output drives the wheels through a double reduction final drive.

Cat AC Electric Drive in Retard

During retarding the wheel motors become generators. Motor power is fed back through the DC link. The power is fed to the contactor and chopper circuits and then exhausted through the radial grid. An AC fan blows air across the grid to dissipate the power and control retarding speed.

Generator/Alternator

The chassis mounted 795F AC traction generator is a three-phase, two bearing design. The excitation system is brushless which has longer maintenance intervals than brush type systems.

Inverter

The Inverter uses Mitsubishi Electric IGBT Phase Modules to control the rimpull, direction and speed of the truck. Mitsubishi Electric is the leader in IGBT technology.

Traction Motors

Each traction motor is a 3-phase AC induction type. The high voltage, low current motor is mounted to the rear axle and is trolley capable.

Radial Grid

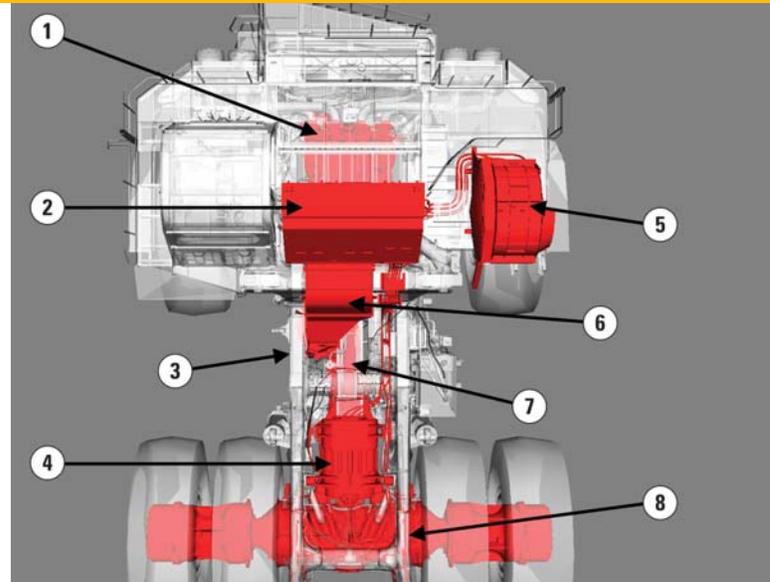
The radial design grid features the highest retarding power in the industry. The grid sits well back on the deck for excellent visibility to the right side.

Variable Blower Cooling

Cooling air is provided by a variable flow system that adjusts cooling flow to the needs of the system. This allows maximum power to the motors for excellent propel performance.

Additional Features

The grid dry function dries the grid quickly in inclement weather. Automatic roll back prevention prevents the machine from moving in a direction opposite the operator's intent. Grid power monitoring with front brake blending to prevent grid overheating.



- 1) C175-16 Engine
- 2) Control Power Inverter Cabinet
- 3) Variable Speed Blower
- 4) Alternator/Generator
- 5) Radial Grid
- 6) Cooling Air Duct
- 7) Drive Shaft
- 8) Wheel Motors



795F

Engine/Power Train Integration

Electronically combined power train components optimize performance.

Control Software and Integration

Caterpillar links the power train components with a complete system of proprietary software. The 100% Caterpillar design allows the software developers full access to all subsystems. The result is a control and integration package that works seamlessly. The 795 is simple to learn and simple to operate. In addition, the truck has excellent operating traits.

- Excellent slow speed control for safety within the service areas.
- Excellent throttle response on acceleration to move out of the loading or dump areas.
- Dynamic retarding with automatic front brake assist.
- Automatic traction control in forward and reverse.

Cat Data Link

All computer systems are linked to:

- Optimize power train performance.
- Increase reliability and component life.
- Reduce operating costs.

Cat Braking Systems

Superior braking control lets operators focus on productivity.

Industry Leading Dynamic Retarding

The radial grid is rated at 4.75 MW (6,365 hp) – allowing excellent control of the truck speed in long retarding applications. The radial design is light, efficient and quiet.

Four Corner Oil Cooled Brakes for Additional Retarding

In addition to class leading dynamic retarding – Cat four corner, oil cooled service brakes give additional retarding capability. These are the same sized brakes used on the 797. The 795 offers exceptional non-fade braking and supplemental retarding at all speeds.

Traction Control with Automatic Front Brake Blending

If the truck senses any slip – the front brakes will automatically engage. The addition of front braking keeps the truck moving in the intended direction and the operator in control. This blended braking capability is an industry first and has been enthusiastically received by operators. In addition, the operator can select full time front brake blending.

Automatic Retarding Control

Operator controlled – ARC engages automatically and maintains speed consistently. A simple toggle switch is used to adjust retarding speed.

Control to Prevent Exceeding Retarding Capability

Built into the software is a Grid Thermal Calculator that constantly monitors power to the grid. When dynamic retarding capability is exceeded the mechanical brakes are blended in automatically. This will continue as long as necessary. Often this is a transient condition. The operator is alerted to take corrective action if this continues. The brake blending is smooth and seamless.

Brake Design

Cat oil cooled brakes are designed with large discs and plates for reliable and adjustment free operation. They are enclosed and sealed to prevent contamination and provide long life.



Parking Brake

The oil cooled, spring applied, hydraulically released parking brake on all wheels provide superior parking capability on grades up to 15%.

Anti-Rollback

Automatically applies service brakes to prevent the truck from rolling from a stop opposite the intended direction of travel.

Reverse Shift Inhibit

Ensures reverse propulsion is not applied when the machine is moving forward.

Structures

Building on the legacy of superior, long life structures.



Box Section Design

The 795F AC uses a box-section design, incorporating forgings and castings in high stress areas with deep penetration, continuous wrap-around welds to resist fatigue from racking loads.

- **Steel Structures** – Mild steel used throughout the frame provides flexibility, durability and resistance to impact and allows for field repairs with common weld practices.
- **Castings** – Large radii castings dissipate stress in areas of high stress concentration. Castings allow welds to be placed in lower stress areas for longer frame life.

Integral Four-Post ROPS Cab

Resiliently mounted to the main frame to reduce vibration and sound, the integral ROPS cab is designed as an extension of the truck frame.

Suspension System

Designed to dissipate haul road and loading impacts for longer frame life and a more comfortable ride.

- **Durable Design** – Large diameter cylinders with nitrogen over oil design for long life and minimal maintenance.
- **Front Cylinders** – Have preset caster and camber and are mounted to the frame. They also serve as steering king pins for a tight turning radius.
- **Rear Cylinders** – Allows axle oscillation and absorb bending and twisting loads from the haul road isolating them from the main frame.

Four-Bar Link Rear Suspension

Directs a more even load distribution into the main frame – operators report a more secure feeling of the truck being well connected and under control.

Steering System

Single tie rod steering system is simpler and requires less maintenance.



Truck Body Systems

Caterpillar designed and built for rugged performance and reliability.

Cat Bodies for Cat Trucks

Integral to the truck the body is designed to fit with the chassis and work as part of the truck system. Each body is sized to meet the payload requirements without compromise to vehicle balance, braking or control.

Cat Body Choices

Body options include the popular MSD II (Mine Specific Design) and Gateless Coal Bodies. Liner options fit the body to the application.

- **MSD II Body** – Based on a mine site evaluation the body is sized and configured to meet the specific needs dictated by fragmentation, abrasion, cohesion, and the loading tool. This body achieves an excellent balance of payload and durability.
- **Gateless Coal Body** – Eliminating problematic tail gates – the Gateless Coal Body is intended for dedicated coal haulage.

Monitoring System

Vital machine health and payload data for the operator.



VIMS™ 3G Monitoring System

Provides critical health and payload information in real-time to keep the 795 performing at optimum levels. VIMS is able to monitor information from all vehicle systems. 10 different machine parameters can be viewed at once. Data can be downloaded easily by Service Technicians for troubleshooting, planning and lowering costs.

Advisor Display

The Advisor display provides real-time performance, maintenance and diagnostic data to the operator or service technician. A large number of machine parameters can be viewed including temperature, pressure, speed, and payload.

Payload Management

Information is available to manage payloads to improve fleet effectiveness and loading tool match and to prevent overloading to help extend component life and lower operating and maintenance costs.

External Payload Indicators

Standard external lights or optional digital display to help loading tool operator reach payload target and minimize overloading.

Road Analysis Control

Optional system measures frame rack, bias and pitch to help identify haul road problems so they can be repaired. This leads to improved cycle time, component lives and fuel efficiency.

VIMSpC

Is off-board software reporting program that allows service personnel to view machine health and productivity data. The reports can then be used to plan more effective machine management to reduce downtime and lower operating costs.

VIMS Supervisor

Optional software allows mine personnel to monitor and manage VIMS data for early problem detection and better fleet management.



Operator's Station

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

Enhanced Operator Awareness

The standard Cat Detect system uses Radar and Cameras to give the operator audible alarms and visual awareness of detected objects at start up and low speeds. This shows a strong commitment to operator and operational safety.

Ergonomic Cab Layout

Controls are intuitive and within easy reach making the operator more comfortable, productive and safe. Operator feedback for the 795 is easy to learn and easy to control.

Viewing Area

The large viewing area offers exceptional visibility, allowing the operator to drive with confidence for high productivity. The right hand platform is free of obstructions for a clear view.

- 1) Air suspension seat with three-point operator restraint 2) Hoist lever 3) Secondary brake pedal 4) Advisor display
 5) Adjustable steering column 6) Vehicle directional control 7) Gauges 8) Storage compartment 9) Full size trainer seat
 10) Electric powered operator window 11) Turn signal and wiper controls 12) Ventilation controls 13) Four post ROPS
 14) Cat Detect monitor 15) MineStar Monitor (optional) 16) Cup holder 17) Dome lights

Customer Support

Best dealer network with best service and parts support.



Commitment to Meet Your Needs

Cat dealer 24/7 support offers solutions, services and products to help lower costs, enhance productivity and manage your fleet anywhere in the world. Expert technicians have the knowledge, experience, training, parts and tooling to keep your 795 running at high availability.

Product Support

Caterpillar supports the 795 with a worldwide network of parts distribution, dealer service centers and technical training facilities. Our global dealer network is ready to meet your support needs around the clock and around the world.

Service Support

Cat dealers offer a wide range of service plans to maximize uptime and return on your investment, including:

- Preventive Maintenance Programs
- Diagnostic Services such as Scheduled Oil Sampling and Technical Analysis
- Rebuild and Remanufactured Product Options
- Customer Support Agreements

Application Awareness

Application and site-specific factors such as material density, loading practices, payload, speed, grade and haul road design and maintenance influence the cost to operate and maintain your haulage fleet. Your Cat dealer can provide help in understanding the effects application factors and operating practices have on maintenance and operating costs. They also offer training to help operators improve productivity, decrease downtime, reduce operating costs and enhance safety.



Serviceability

Reduced maintenance time results in more productivity.

Modular Design

Major components can be serviced individually with minimal removal and installation time. Work platforms and step/stairs are located in key service areas. Rear mounted generator is separate from the engine and can be removed without removing the body – wheel motors are separate from final drives. Engine turbos (4) are grouped in the front of the engine.

Ground Level Access

Grouped service points allow convenient access to tank levels, filters, drains and S·O·SSM oil sampling ports. The battery box, Auto Lube system and VIMS data port are also ground level accessible.

Servicing Ease

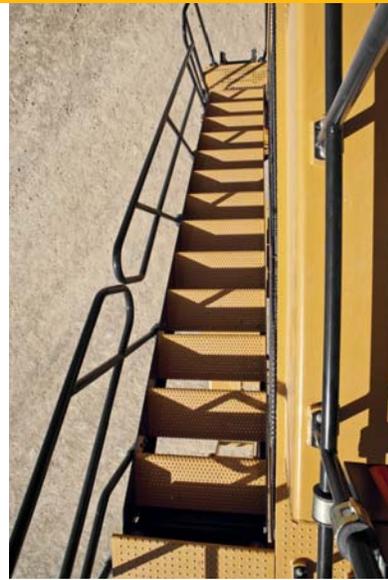
Bumper Service Center features lock out tag out, battery box and disconnects for battery and power train. Chassis filters for steering, braking and hoist systems are designed for 1,000 hour life.

Sealer Electrical Connectors

Electrical connectors are sealed to lock out dust and moisture. Harnesses are braided for protection. Wires are color coded for ease of diagnosis and repair.

Safety

Cat mining machines/systems are designed with safety as the first priority.



Product Safety is a Commitment

Caterpillar continues to be the industry leader in proactive development of machines and features that exceed safety standards.

Cat Detect Object Detection

Standard on the 795 Cat Detect is a fully integrated radar and camera system that provides audible and visual indications of detected objects around the truck while the truck is stopped and at low speeds. Cameras supplement the radar system and are selectable by a touch screen interface.

Integrated Blended Braking with Traction Control

Front brakes are automatically blended when slip is sensed to give excellent control in slippery conditions. The operator can also choose full time front brake blending. Front brakes are also automatically blended when dynamic retarding approaches 90% of its capacity. Front brake blending yields superior control and high operator confidence.

Access/Egress

Standard 60 mm (24") stairways with an optional Powered Access Stairway allow easy and safe access and egress.

GVW within Tire Manufacturers Guidelines

At rated GVW the 795F AC is within tire loading guidelines for approved 56/80R63 and 59/80R63 tires. Manufacturer's Guidelines.



Sustainability

A variety of features improve sustainability in areas of decreasing waste, extending component life and lowering emissions levels.

Sustainability Features

The 795F AC Mining Truck offers continuous rear axle filtration, extended life filters and extended maintenance intervals which aid in decreasing the amount of waste contributed to our environment.

Remanufacturing Options

Cat trucks are designed to be rebuilt and have logged over 100,000 frame hours in many applications. Components are designed to be remanufactured for multiple service lives.

Engines with Advanced Technology

Engines with advanced technology contribute less emissions to the environment while maintaining fuel efficiency.

Advanced Surface Technology (AST)

Advanced Surface Technology (AST) is a replacement for hard chrome coatings on some steel parts, including suspension and hoist cylinder rods. This technology improves wear resistance and reduces repair time. Chrome has been eliminated to reduce environmental impact.

795F AC Mining Truck Specifications

Engine

| | | |
|-------------------------|--------------|-----------------------|
| Engine Model | Cat® C175-16 | |
| Gross Power – SAE J1995 | 2536 kW | 3,400 hp |
| Bore | 175 mm | 6.9 in |
| Stroke | 220 mm | 8.7 in |
| Displacement | 85 L | 5,187 in ³ |

- Power ratings apply at 1,800 rpm when tested under the specified condition for the specified standard.
- Ratings based on SAE J1995 standard air conditions of 25° C (77° F) and 99 kPa (29.61 Hg) dry 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).
- No engine derating required up to 3203 m (10,500 ft) altitude.
- Compliant with U.S. Environmental Protection Agency Tier 2 emissions standards.

Weights – Approximate

| | | |
|--------------------------------------|------------------|---------------------|
| Gross Machine Operating Weight (GMW) | 570 678 kg | 1,257,000 lb |
| Chassis Weight | 202 270 kg | 445,524 lb |
| Body Weight Range | 38 500-54 500 kg | (84,900-120,000 lb) |

- GMW depends on tire selection. Consult your tire manufacturer for maximum loaded top speed.
- Chassis weight with 100% fuel, hoist, body mounting group, rims and tires.
- Body weight varies depending on how body is equipped.

Operating Specifications

| | | |
|-----------------------------------|------------|----------|
| Nominal Payload Capacity | 313 tonnes | 345 tons |
| Top Speed – Loaded | 64 km/h | 40 mph |
| Steer Angle | 34 degrees | |
| Turning Diameter – Front | 34 m | 112 ft |
| Turning Circle Clearance Diameter | 38.7 m | 127 ft |

- Refer to the Cat® Mining Truck 10/10/20 Overload Policy (AEXQ0250) for maximum gross machine weight limitations.

Final Drives

| | |
|-----------------------|------|
| Total Reduction Ratio | 35:1 |
|-----------------------|------|

AC Drive System

| | | |
|----------------------|---|--|
| Generator/Alternator | Brushless, remote mounted, dual bearing | |
| Controls | IGBT Inverter Technology, air cooled, pressurized cabinet with filtration | |
| Wheel Motor | Rear axle mounted Cat AC induction | |
| Cooling System | Variable speed, hydraulic cooling system | |

Suspension

| | | |
|-----------------------------------|--------|---------|
| Effective Cylinder Stroke – Front | 293 mm | 11.5 in |
| Effective Cylinder Stroke – Rear | 141 mm | 5.6 in |
| Rear Axle Oscillation | ±4.8° | |

Body Hoists

| | | |
|------------------------------|------------|-------------|
| Pump Flow – High Idle | 935 L/min | 247 gal/min |
| Relief Valve Setting – Raise | 24 500 kPa | 3,553 psi |
| Body Raise Time – High Idle | 26 Seconds | |
| Body Lower Time – Float | 20 Seconds | |
| Body Power Down – High Idle | 20 Seconds | |

- Twin, two-stage hydraulic cylinders mounted inside main frame; double-acting cylinders in second stage.
- Power raise in both stages; power down in second stage.
- Automatic body-lower modulation reduces impact on frame.

Braking System

| | | |
|---|---------------------------------|---------------------------|
| Oil Cooled Brakes – Retarding Capable at All Speeds | | |
| Outside Diameter | 1067 mm | 42 in |
| Brake Surface – Front | 132 258.4 cm ² | 20,500.09 in ² |
| Brake Surface – Rear | 198 388 cm ² | 30,750.2 in ² |
| Standards | J-ISO 3450 JAN88, ISO 3450:1996 | |
| Electric Retarding | | |
| Radial Grid Design | 4750 kW (6,370 hp) rated power | |
| Brushless AC Motor | 2400 kW (3,218 hp) output power | |
| Dynamic Retarding Power | 4750 kW | 6,370 hp |
| Blended Four Corner Retarding | | |

Weight Distributions – Approximate

| | |
|---------------------|-----|
| Front Axle – Empty | 48% |
| Rear Axle – Empty | 52% |
| Front Axle – Loaded | 33% |
| Rear Axle – Loaded | 67% |

Capacity – MSD II – 100% fill factor

| | | |
|------------------|------------------------------|-----------------------------|
| Struck | 121.5- 211 m ³ | 159- 276 yd ³ |
| Heaped (SAE 2:1) | 181- 252 m ³ | 237- 330 yd ³ |

- Contact your local Cat dealer for body recommendations.

Service Refill Capacities

| | | |
|---------------------------------------|--------|-----------|
| Fuel Tank | 3596 L | 950 gal |
| Fuel Tank (optional) | 7192 L | 1,900 gal |
| Cooling System | 1100 L | 291 gal |
| Crankcase | 310 L | 82 gal |
| Final Drives, Each | 341 L | 90 gal |
| Steering Tank | 210 L | 55.5 gal |
| Steering System (Includes Tank) | 300 L | 79 gal |
| Brake/Hoist Hydraulic Tank | 508 L | 134.2 gal |
| Brake/Hoist System (Includes Tank) | 1500 L | 396.3 gal |

Tires

- 56/80R63
- 59/80R63 (Bridgestone only)
- Productive capabilities of the 795F AC truck are such that, under certain job conditions, TKPH (TMPH) capabilities could be exceeded and, therefore, limit production.
- Caterpillar recommends the customer evaluate all job conditions and consult the tire manufacturer for proper tire selection.

ROPS

ROPS Standards

- ROPS (Rollover Protective Structure) for cab offered by Caterpillar meets ISO 3471:2008 ROPS criteria.
- FOPS (Falling Objects Protective Structure) meets ISO 3449:2005 Level II FOPS criteria.

Sound

Sound Standards

- The operator sound pressure level measured according to work cycle procedures specified in ISO 6394 and 6396 is 76 dB(A) for cab offered by Caterpillar when properly installed and maintained and tested with doors and windows closed.
- 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 a noisy environment.

Steering

Steering Standards SAE J1511 OCT90
ISO 5010:1992

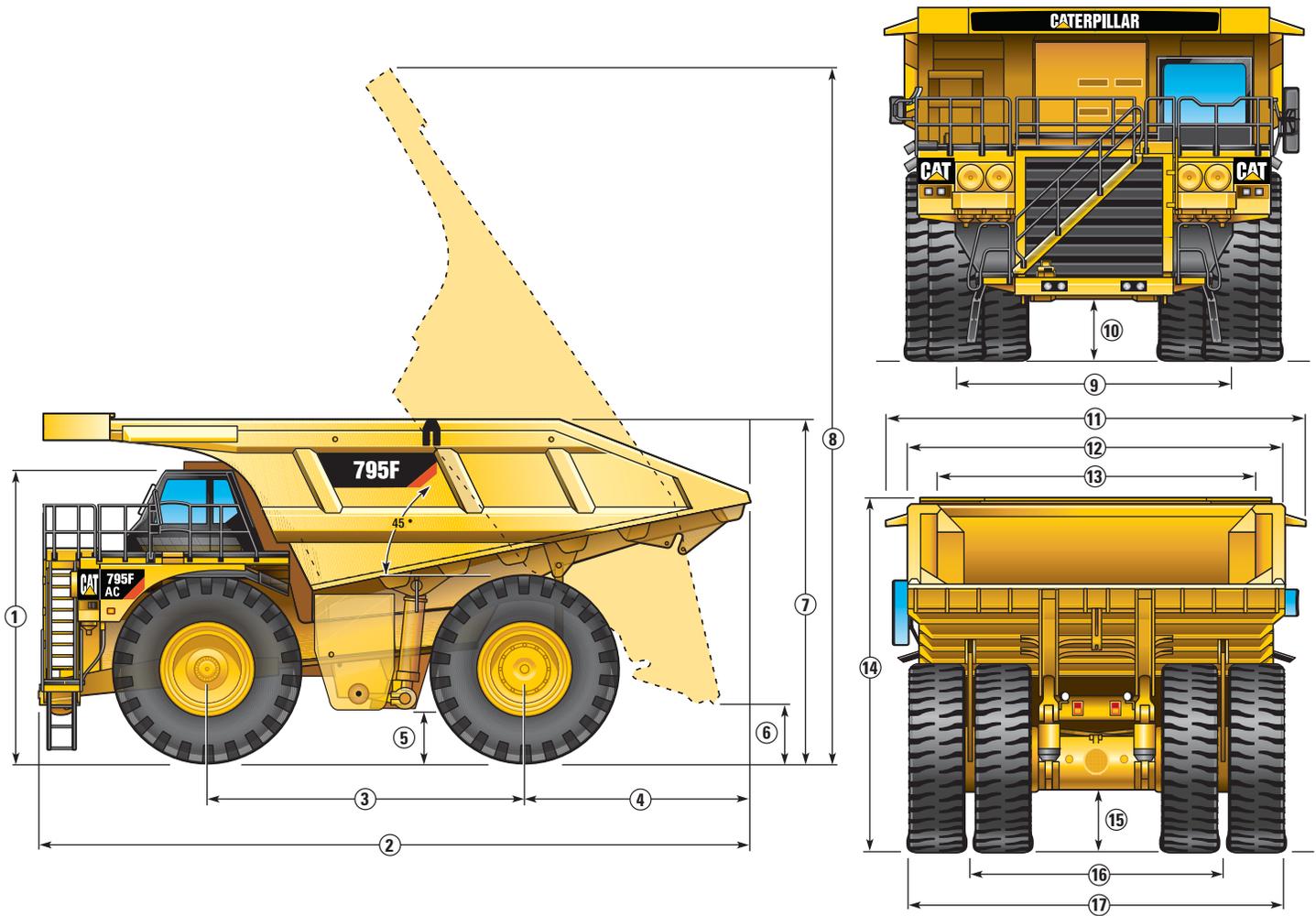
- Gross Machine Operating Weight is 570 166 kg (1,257,000 lb).

795F AC Mining Truck Specifications

Dimensions

All dimensions are approximate.

Shown with 220 m³ (288 yd³) MSD II Body.

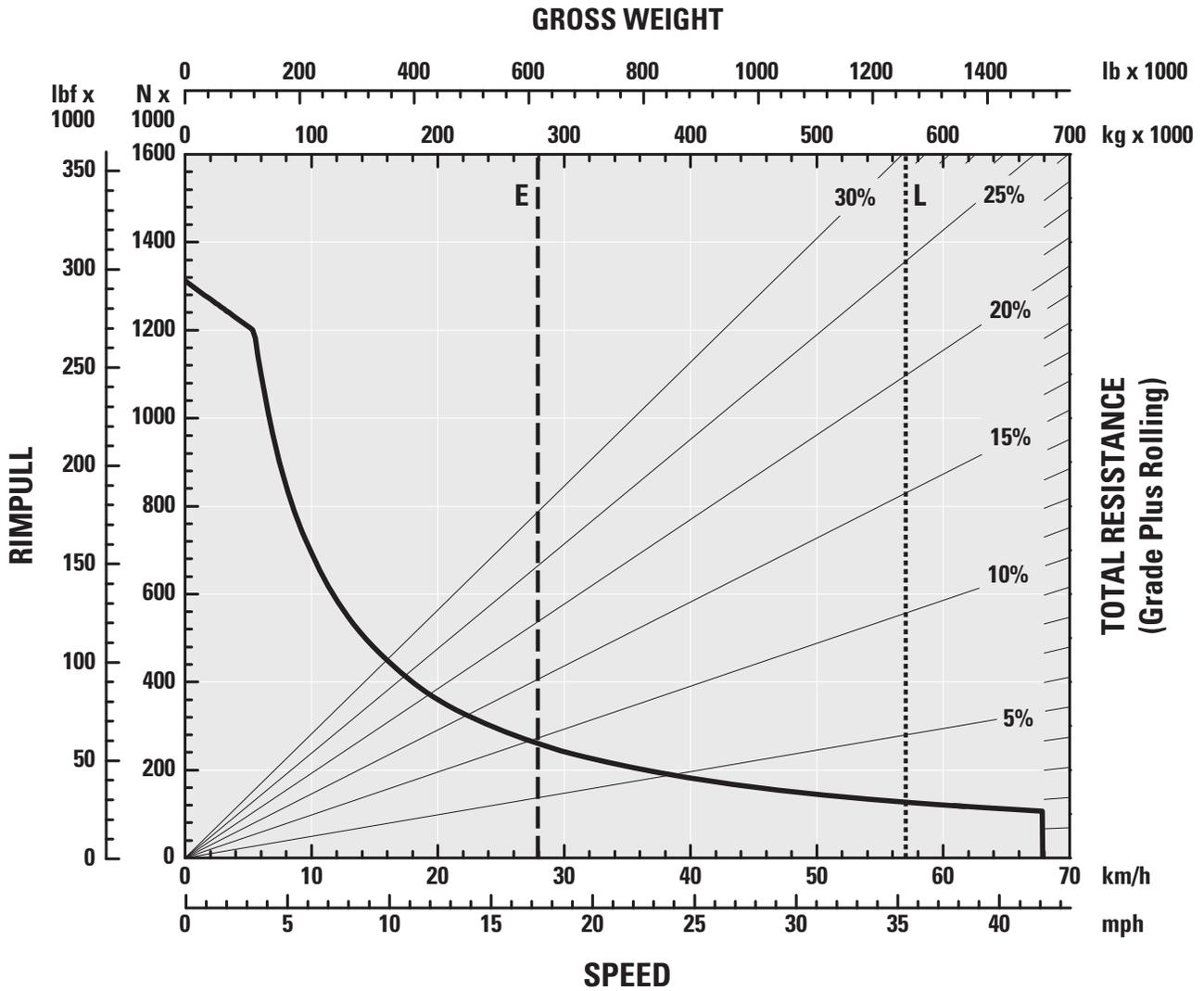


| | | |
|------------------------------------|-----------|------------|
| 1 Height to Top of ROPS | 6327 mm | 20 ft 9 in |
| 2 Overall Length | 15 146 mm | 49 ft 9 in |
| 3 Wheelbase | 6725 mm | 22 ft 1 in |
| 4 Rear Axle to Tail | 4411 mm | 14 ft 6 in |
| 5 Ground Clearance | 750 mm | 2 ft 6 in |
| 6 Dump Clearance | 1664 mm | 5 ft 6 in |
| 7 Loading Height – Empty | 7040 mm | 23 ft 2 in |
| 8 Overall Height – Body Raised | 15 445 mm | 50 ft 8 in |
| 9 Centerline Front Tire Width | 6235 mm | 20 ft 6 in |
| 10 Engine Guard Clearance | 1208 mm | 4 ft 0 in |
| 11 Overall Canopy Width | 9449 mm | 31 ft 0 in |
| 12 Outside Body Width | 8970 mm | 29 ft 5 in |
| 13 Inside Body Width | 7856 mm | 25 ft 9 in |
| 14 Front Canopy Height | 7800 mm | 25 ft 8 in |
| 15 Rear Axle Clearance | 1016 mm | 3 ft 4 in |
| 16 Centerline Rear Dual Tire Width | 5675 mm | 18 ft 8 in |
| 17 Overall Tire Width | 8966 mm | 29 ft 6 in |

795F AC 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 1% for each 10 kg/t (20 lb/ton) of rolling resistance. Usable rimpull will depend upon traction available and weight on drive wheels.

- Typical Field Empty Weight
- Gross Machine Operating Weight
570 166 kg (1,257,000 lb)



- E – Empty
- L – Loaded

*At sea level, 30° C (86° F).

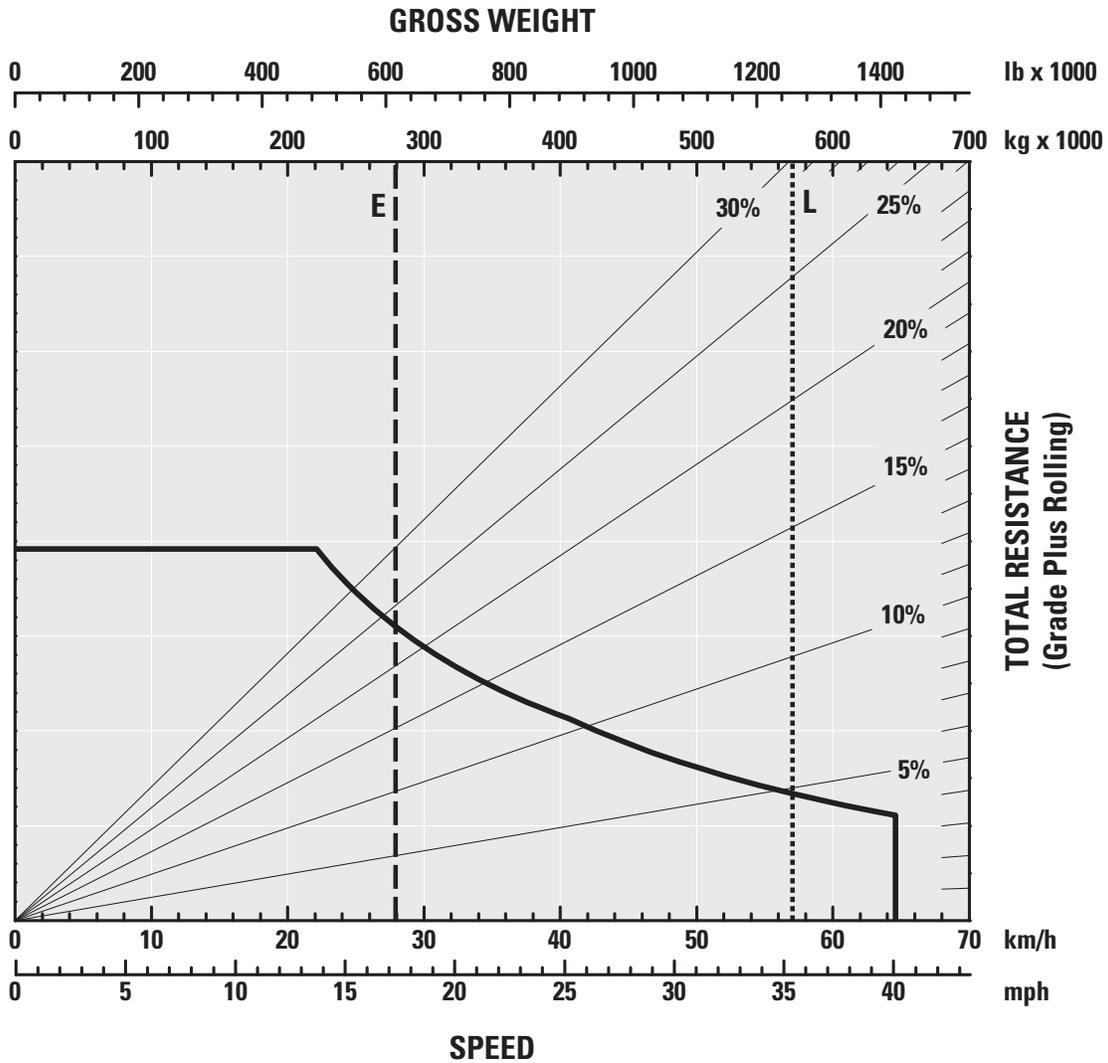
Contact factory for performance estimates based upon site specific temperatures and altitudes.

795F AC Mining Truck Specifications

795F AC Standard Retarding – Continuous*

To determine retarding performance: Read from gross weight down to the percent effective grade. Effective grade equals actual % grade minus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. The following charts are based on these conditions: 32° C (90° F) ambient temperature, at sea level, with 56/80R63 tires.

- Typical Field Empty Weight
- Gross Machine Operating Weight
570 166 kg (1,257,000 lb)



E – Empty
L – Loaded

*At sea level, 30° C (86° F).

Contact factory for performance estimates based upon site specific temperatures and altitudes.

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

ELECTRICAL

Alarm, Back-up
 Brushless Alternator, 150 ampere
 Batteries, 210-amp hour, low maintenance, 12-volt (2)
 Converter, 12-volt electrical
 Electrical System, 24-volt, 10, 15 and 20 amp
 Battery Charge Receptacle
 Lighting System
 Back-up and Hazard Lights
 Directional Signals (front and rear LED)
 Front Stair Access/Service Deck
 Stop/Tail Lights (LED)
 Engine Compartment
 VIMS, Blue Light (LED)
 Headlights, with Lo-Hi Beam Selector

OPERATOR ENVIRONMENT

Air Conditioner with Automatic Climate Control
 12-volt DC Power Supply (3)
 Coat Hook
 Cup Holder
 Diagnostic Connection Port
 Dome Courtesy Light
 Map Lights (2)
 Entertainment Radio Ready
 20 amp Switched/10 amp Memory
 Converter, Speakers and Wiring Harnesses
 Gauge/Indicators
 Gauge Panel:
 Drive Train (system temperature)
 Brake Oil Temperature
 Engine Coolant Temperature
 Fuel Level
 Torque Converter Oil Temperature
 Electric Engine Control Fault Indicator
 Electric Hour Meter
 Speedometer
 Tachometer
 Heater/Defroster, 10 310 kCal (40,912 BTU)
 Hoist, Body Control (electric)
 Horn (2)
 Cat Detect (Radar and Camera) System
 Mirrors, Right and Left
 ROPS Cab, Insulated/Sound Suppressed

Seat, Operator, Air Suspension
 Seatbelt, Operator, Three Points, Retractable
 Seatbelt, Trainer, Two Points, Retractable
 Stairway and Walkway Access, 600 mm (23.6 in)
 Steering Wheel, Tilt, Padded, Telescopic
 Storage Compartments
 Tinted Glass
 Transmission Gear Indicator
 VIMS Message Center with Advisor
 Window, Operator, Electric Powered
 Windshield, Wiper Intermittent Control and Washer

POWER TRAIN

Cat® C175-16 Tier 2 Emissions Compliant Engine
 Air Cleaner with Precleaner (4)
 Air-to-Air Aftercooler (ATAAC)
 Automatic Starter Protection
 Ether Starting Aid (automatic)
 Multi-Point Oil Pressure Sensing
 Turbocharging (4)/Aftercooled
 Braking System
 Automatic Retarder Control, Adjustable
 Brake Release Motor (towing)
 Engine Overspeed Protection
 Extended Life Brake Disc Material
 Oil-cooled, Multi-disc (front and rear)
 Service, Retarding, Parking, Secondary
 Park Brake Integrated with Gear Selector
 Secondary, Emergency
 Cat AC Drivetrain
 IGBT controlled AC induction motors
 AC generator
 AC cooled radial grid
 Body-up Reverse Neutralizer
 Body-up Shift Inhibitor
 Directional Shift Management
 Neutral Coast Inhibitor
 Neutral Start Switch
 Programmable Top Speed
 Reverse Shift Inhibitor
 Pre-lubrication/Engine
 Rear Axle Continuous Lubrication/Filtration

OTHER STANDARD EQUIPMENT

Air Starter, Turbine
 Air System Dryer
 Automatic Lubrication System
 Aux “Buddy” Dumping Quick Connect
 Aux Steering Quick Connect (towing)
 Blended Retarding System
 Driveline Guards
 Exhaust
 Fuel Tank, 3596 L (950 gal)
 Fast Fill Fuel System
 Fuel Filter with Water Separator
 Ground Level Battery Lockout
 Ground Level Engine Shut-down
 Ground Level Engine Start Lockout
 Ground Level Machine Lockout
 Ground Level Transmission Lockout
 Ground Level VIMS Data Port
 Hi-speed Crankcase Oil Change
 Hydraulic Filters, 1,000 hour
 Payload Indicator Lights
 Reservoirs (2 separate)
 Brake/Hoist, Steering/Fan
 Rock Ejectors
 Service Points, Ground Level
 Sight Level Gauges for Hydraulic/Engine Oil
 S•O•SSM Sample Ports
 Supplemental Steering (automatic)
 Tie Down Eyes
 Tow Hooks and Pin (front)
 Tow Pin (rear) (Empty truck only)
 Traction Control System
 Vandalism Protection Locks
 Vital Information Management System (VIMS)
 Includes VIMS Payload Monitor with MAX Payload and Speed Manager
 VIMS 3G requires download cable 305-5528 VIMS 3G Connect PC software (reference media number EERP2001) and VIMS PC software JERD2175. Supplemental software “VIMS Supervisor” YERA1403.
 Order separately. Computer not provided.

ANTIFREEZE

Extended Life Coolant to -35° C (-30° F)

795F AC Optional Equipment

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

Access Platform, Rear Part of Chassis
Additional Lighting
Additional Retarding for Downhill Hauls
Air Start, Turbine, TDI
Antifreeze/Coolant Protects to
-50° C (-58° F)

Body

MSD II Body:

- Body, MSD II, 181 m³ (237 yd³)
- Body, MSD II, 220 m³ (288 yd³)

MSD II Body Attachments:

- Extensions, 400 mm (~15 in) 206 m³ (270 yd³); Fits 181 m³ (237 yd³) body
- Extensions, 395 mm (~15 in) 237 m³ (310 yd³); Fits 220 m³ (288 yd³) body
- Extensions, 550 mm (~21 in) 248 m³ (324 yd³); Fits 220 m³ (288 yd³) body
- Extensions, 675 mm (~26 in) 252 m³ (330 yd³); Fits 220 m³ (288 yd³) body

Films, Body

Gateless Coal Body:

- Body, Gateless Coal, 352 m³ (460 yd³)

Gateless Coal Body Attachments:

- Extensions, 440 mm (~17 in) 382 m³ (500 yd³)
- Extensions, 875 mm (~34 in) 413 m³ (540 yd³)
- Extensions, 1060 mm (~41 in) 428 m³ (560 yd³)

Body Heat
Body Mounting Groups
- MSD II Body
- Gateless Coal Body
Brake Wear Indicator Gauge
Cabin Air Precleaner
Camera Only Vision System
Cat Comfort Air Suspension Trainer Seat
Cat Comfort Heated Operator Seat
Electric Powered Window, Right Side
Electric Starting System
Engine (High Altitude)*
Engine Coolant and Oil Heater for Cold Weather Starts
Engine Delay Shutdown Timer
Filtration, Final Drive Oil Cooler
External Digital Payload Display
Fuel Tank (7192 L/1,900 gal)
Gauge, Brake Wear Indicator
Ground Access, Powered
Ground Access, Fixed, Reversed
Ground Access, Powered, Reversed
Heated Mirrors, RH
Heated Mirrors, LH
High Intensity Discharge (HID) Lighting (front and rear)
Horn, Air or Electric, LH or RH
Instructions (ANSI or ISO)

Language Monitors – English, Spanish, French, German, Italian, Portuguese, Dutch, Norwegian, Swedish, Estonian, Latin, Lithuanian, Slovakian, Slovenian, Greek, Roman, Russian, Polish, Czech, Hungarian, Icelandic, Finnish, Danish, Thai, Indonesian, Vietnam, Malaysian, Chinese, Japan, Korean, Croat, Serbian, Mongolian, Hebrew, Turkish, Arabic
Machine Access, Reversed
Portable Fire Extinguisher
Retractable Front Sun Visor
Road Analysis Control (RAC)
Seat, Full Size, Trainer
Service Center, Pressurized System
Service Center, Non-Pressurized System
SL-V Grease Injectors
Wheel Chocks
Wheels, Wedge, 1041 mm (41 in)

*For certain markets only.

795F AC Mining 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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