Features:
- **Emissions** – Meets U.S. EPA Tier 4 Final emission standards, and features the Caterpillar Selective Catalytic Reduction (SCR) system that provides the least Total Fluid Consumption cost with greater reliability.
- **High Performance Engine** – The Cat® C175-16 engine offers you the perfect balance between power, robust design and economy.
- **Enhanced Serviceability** – Improved serviceability points and grouped service locations mean your truck spends more time on the haul road than in the shop.
- **Robust Braking** – Cat oil-cooled, multiple disc brakes on all four corners offer you exceptional, fade-resistant braking.
- **Power Shift Transmission** – A smooth shifting six speed transmission using ECPC gives operators a comfortable ride, constant power and improved fuel efficiency.
- **Reliable Mechanical Drive System** – The 793F’s power train gives you the fastest truck on steep grades, poor underfoot conditions and on haul roads with high rolling resistance.
- **Comfortable Cab** – Operators find the large, spacious cab offers unmatched visibility and exceptional comfort.
- **Truck Body** – A variety of Caterpillar designed and built bodies provide you optimal performance and reliability.

Specifications

### Engine

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>Cat C175-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torque Rise</td>
<td>20%</td>
</tr>
<tr>
<td>Bore</td>
<td>175 mm 6.9 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>220 mm 8.7 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>85 L 5,187 in³</td>
</tr>
</tbody>
</table>

- Power ratings apply at 1,750 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 3200 m (10,500 ft) altitude.
- Meets Tier 4 Final emission standards.

### Operating Specifications

| Nominal Payload Capacity | 226.8 tonnes 250 tons |
| Top Speed – Loaded | 60 km/h 37.3 mph |
| Steer Angle | 36 Degrees |
| Turning Diameter – Front | 28 m 93 ft |
| Turning Circle Clearance Diameter | 33 m 107 ft |
| Gross Machine Operating Weight | 390 089 kg 860,000 lb |

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

### Final Drives

| Differential Ratio | 1.8:1 |
| Planetary Ratio | 16:1 |
| Total Reduction Ratio | 28.8:1 |

### Transmission

| Forward 1 0.95:1 | 12.9 km/h 8 mph |
| Forward 2 1.09:1 | 17.4 km/h 10.8 mph |
| Forward 3 1.27:1 | 23.8 km/h 14.8 mph |
| Forward 4 1.51:1 | 32.1 km/h 19.9 mph |
| Forward 5 1.93:1 | 43.6 km/h 27.1 mph |
| Forward 6 2.57:1 | 60 km/h 37.3 mph |
| Reverse | 11.8 km/h 7.3 mph |

### Weights – Approximate

| Chassis Weight | 124 586 kg 274,587 lb |
| Body Weight Range | 26 862- 59,220- 47 627 kg 105,000 lb |

- Chassis weight with 100 percent fuel, hoist, body mounting group, rims and 40.00R57 tires.
- Body weight varies depending on how body is equipped.
793F Mining Truck

**Suspension**

- Effective Cylinder Stroke – Front: 130.5 mm (5.1 in)
- Effective Cylinder Stroke – Rear: 105.5 mm (4.2 in)
- Rear Axle Oscillation: ±4.9 degrees

**Body Hoists**

- Pump Flow – High Idle: 846 L/min (224 gal/min)
- Relief Valve Setting – Raise: 20 370 kPa (2,955 psi)
- Body Raise Time – High Idle: 19 Seconds
- Body Lower Time – Float: 20 Seconds
- Body Power Down – High Idle: 17.5 Seconds

- Twin, two-stage hydraulic cylinders mounted outside 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.

**Brakes**

- Outside Diameter: 874.5 mm (34.5 in)
- Brake Surface – Front: 89,817 cm² (13,921 in²)
- Brake Surface – Rear: 34,500 cm² (20,847 in²)

**Weight Distributions – Approximate**

- Front Axle – Empty: 49%
- Rear Axle – Empty: 51%
- Front Axle – Loaded: 33%
- Rear Axle – Loaded: 67%

**Capacity – HP – 100% Fill Factor**

- Struck: 112.6–151 m³ (162–191 yd³)
- Heaped (SAE 2:1)*: 147–197.5 m³ (212–250 yd³)

- Contact your local Cat dealer for body recommendation.

*ISO 6483:1980

**Service Refill Capacities**

- Fuel Tank: 2839 L (750 gal)
- Cooling System: 1074 L (284 gal)
- Crankcase: 312 L (82 gal)
- Rear Axle Housing: 984 L (260 gal)
- Steering System (Includes Tank): 290 L (77 gal)
- Brake/Hoist System (Includes Tank): 1315 L (347 gal)
- Torque Converter/Transmission Sump: 102 L (27 gal)
- Torque Converter/Transmission System (Includes Sump): 209 L (55 gal)
- Diesel Exhaust Fluid Tank: 234.7 L (62 gal)

**ROPS**

- ROPS Standards

**Sound**

- Sound Standards
  - The operator sound pressure level measured according to work cycle procedures specified in ISO 6394 and 6396 is 74 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**


**Dimensions** (All dimensions are approximate.)

Shown with 162 m³ (212 yd³) HP Body.

- Height to Top of ROPS: 5712 mm (18 ft 9 in)
- Overall Length: 13 360 mm (44 ft 10 in)
- Wheelbase: 5905 mm (19 ft 5 in)
- Rear Axle to Tail: 3997 mm (13 ft 2 in)
- Ground Clearance: 1041 mm (3 ft 5 in)
- Dump Clearance: 1301 mm (4 ft 11 in)
- Loading Height – Empty: 6181 mm (20 ft 4 in)
- Overall Height – Body Raised: 13 710 mm (45 ft)
- Centerline Front Tire Width: 5609 mm (18 ft 5 in)
- Engine Guard Clearance: 1325 mm (4 ft 4 in)
- Overall Canopy Width: 8563 mm (28 ft 1 in)
- Outside Body Width: 7942 mm (26 ft 1 in)
- Inside Body Width: 7334 mm (24 ft 1 in)
- Front Canopy Height: 7074 mm (23 ft 3 in)
- Rear Axle Clearance: 1130 mm (3 ft 9 in)
- Centerline Rear Dual Tire Width: 4963 mm (16 ft 3 in)
- Overall Tire Width: 7605 mm (24 ft 11 in)
STANDARD EQUIPMENT

ELECTRICAL

- Alarm, Back-up
- Brushless Alternator, 225 amperes
- Batteries, 210-amp hour, low maintenance, 12-volt (2)
- Converter, 12-volt electrical
- Electrical System, 24-volt, 10, 15 and 20 amp
- Jump Start 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
- Brake and Retarder Light Status Ready

OPERATOR ENVIRONMENT

- Air Conditioner with Automatic Climate Control
- 12-volt DC Power Supply (3)
- Coat Hook
- Cup Holder
- Diagnostic Connection Port
- Dome Courtesy Light
- Entertainment Radio Ready
- Gauge/Indicators
  - 5 amp Converter, Speakers and Wiring Harness
- Gauge/Indicators
  - Gauge Panel:
    - Transmission Fluid Temperature
    - Brake Oil Temperature
    - Engine Coolant Temperature
    - Fuel Level
    - Torque Converter Oil Temperature
  - Electric Control Fault Indicator
  - Electric Hour Meter
  - Speedometer
  - Tachometer
- Diesel Exhaust Fluid Level Indicator
- Heater/Defroster, 11 070 kCal (45,930 Btu)
- Hoist, Body Control (electric)
- Horn
- Integrated Object Detection System
- Heated 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 Compartment
- Tinted Glass
- Transmission Gear Indicator
- VIMS Message Center with Advisor
- Window, Operator, Electric Powered
- Windshield Wiper, Intermittent Control and A/C Condenser Filled Washer Bottle
- Plug and Play Radio 12V Unswitched Power Supply Outlets
- Fire Suppression Ready Cab

POWER TRAIN

- Cat C175-16 meets Tier 4 Final emission standards
  - 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
- Engine Aftertreatment System
- Pump Electronic Tank Unit (PETU)
- Clean Emissions Module (CEM)
- 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
- Advanced Productivity Electronic Controls Strategy (APECS)
- Transmission
  - 6-speed, Automatic Powershift with Electronic Control (ECPC)
  - Body-up Reverse Neutralizer
  - Body-up Shift Inhibitor
  - Controlled Throttle Shifting
  - Directional Shift Management
  - Downshift/Reverse Shift Inhibitor
  - Individual Clutch Modulation
  - Lock-up Torque Converter
  - Neutral Coast Inhibitor
  - Neutral Start Switch
  - Programmable Top Speed
  - Pre-lubrication/Engine
  - Rear Axle Continuous Lubrication/Filtration

OTHER STANDARD EQUIPMENT

- Auto Lubrication System with 41 kg (90 lb) barrel, auto shut-off, and grease filter
- Aux “Buddy” Dumping Quick Connect
- Aux Steering Quick Connect (towing)
- Driveline Guard
- Fast Fill Diesel Exhaust Fluid System
- Fast Fill Diesel Fuel System
- Fuel Filter with Water Separator
- Ground Level Battery Lockout
- Ground Level Engine Shut-down
- Ground Level Engine Start Lockout
- Ground Level Transmission Lockout
- Ground Level VIMS Data Port
- Hi-speed Crankcase Oil Change
- Hydraulic Filters, 1,000 hour
- Reservoirs (3 separate)
- 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 (front)/Tow Pin (rear)
- Traction Control System
- Vandalism Protection Locks
- Vital Information Management System (VIMS)
  - Includes VIMS Payload Monitor with MAX Payload and Speed Manager
  - (Recommend using download cable JERD2175. Supplemental software “VIMS Supervisor” YERA1403. Order separately. Computer not provided.)
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  - (Recommend using download cable JERD2175. Supplemental software “VIMS Supervisor” YERA1403. Order separately. Computer not provided.)
  - Rock Ejectors
- Service Points
- Rubber-lined Battery Box Lid
- Portable Fire Extinguisher Mounting
- SL-V Grease Injectors
- Fuel Tank Mud Guards

ANTIFREEZE

- Extended Life Coolant to –35° C (~–30° F)
OPTIONAL EQUIPMENT

- Additional Retarding for Downhill Hauls
- Body Heat
- Cat Comfort Air Suspension Trainer Seat
- Antifreeze/Coolant Protects to –50° C (–58° F)
- Brake Wear Indicator Gauge
- Cabin Air Pre-cleaner
- Center Tow Bumper Attachment
- Electric Powered Window, Right Side
- Electric Starting System
- Engine Coolant and Oil Heater for Cold Weather Starts
- Additional Lighting
- High Visibility Reflector Group
- Workshop Horn
- Working at Heights
- Emergency Stop
- Four Mirror Package
- Hydraulic Tank Mud Guards
- Engine Delay Shutdown Timer
- Extended Life Wheel Stations
- External Digital Payload Display
- Fast Fill Service Center with Live S•O•S and Keypad
- Cat Comfort Heated Operator Seat
- High Intensity Discharge (HID) Lighting (front and rear)
- Hub Odometer (km and miles)
- Portable Fire Extinguisher
- Rear Axle Lubrication Cooler
- Retractable Front Sun Visor
- Rim Guard
- Rims (813 mm/32 in)
- Road Analysis Control (RAC)
- Throttle Lock
- Walkway and Handrail for Rear Cab Access
- Wheel Chocks
- Work Area Vision System (WAVS)