

# 772G

## Off-Highway Truck



### Engine

Engine Model	Cat® C18 ACERT™	
Gross Power – SAE J1995	446 kW	598 hp
Net Power – SAE J1349	415 kW	557 hp

### Weights – Approximate

Target Gross Machine Operating Weight	82 100 kg	181,000 lb
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### Operating Specifications

Target Payload (100%)	47.2 tonnes	52.0 tons
Maximum Working Payload (110%)	51.9 tonnes	57.2 tons
Maximum Allowable Payload (120%)*	56.6 tonnes	62.3 tons

• Target payload and capacity based on Dual Slope body with no liner. Attachment selection will affect payload and maximum gross machine operating weight.

\* Refer to Caterpillar 10/10/20 Payload Policy for maximum gross machine weight limitations.

## 772G Features

### Safety

*Cat Off-Highway Trucks are designed to keep your employees safe with integrated Rollover/Falling Object Protection and excellent visibility to the jobsite. Speed limiting helps to manage haul road speeds and industry-leading brake designs that conform to ISO 3450:2011.*

### Productivity

*With its Cat diesel engine, drive train, and features like Traction Control and Automatic Retarding Control, the 772G is built for long-life productivity and quick haul cycles.*

### Quality

*Caterpillar applies the latest in technology to its designs, metallurgy, welding, and manufacturing processes. We also build prototype iron, test for extreme environments, and place our trucks in the hands of customers for extensive field testing prior to production.*

### Sustainability

*Your G Series truck is designed to be fuel efficient and control emissions. It can help keep your jobsite clean and shorten service time with grouped service locations. Your Cat dealer can support your sustainability efforts with remanufactured parts and recommended service practices.*

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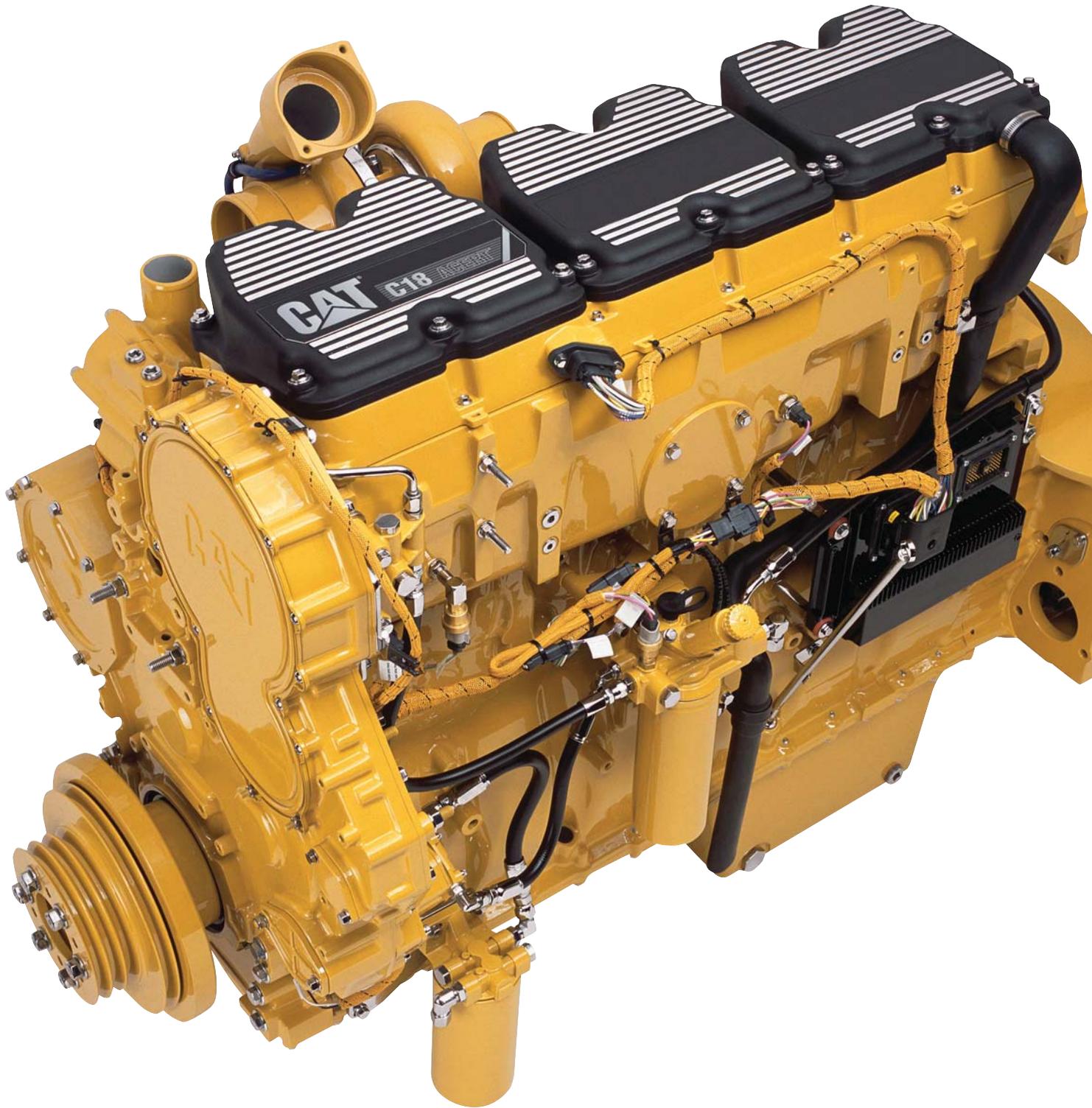


**The Cat 772 Off-Highway Truck has been in production since 1971 and has been handling the work of mines and quarries for over 40 years. Like all Cat trucks, it is specifically designed for off-road applications with reliable and durable designs.**

**Cat G Series trucks will help you manage your costs with fuel economy options, tire monitoring, and convenient service center options. It can also be equipped to provide you with production, machine health, and operation information using Cat VIMS™. With three body options designed to last the life of the truck, the 772G can meet your individual hauling needs productively, safely, and reliably.**

# Performance

Hauling quickly, efficiently, reliably



## Engine

Cat diesel engines are built to the highest quality standards with tight tolerances and proven piston, camshaft, engine block, and fuel system designs for excellent performance and life.

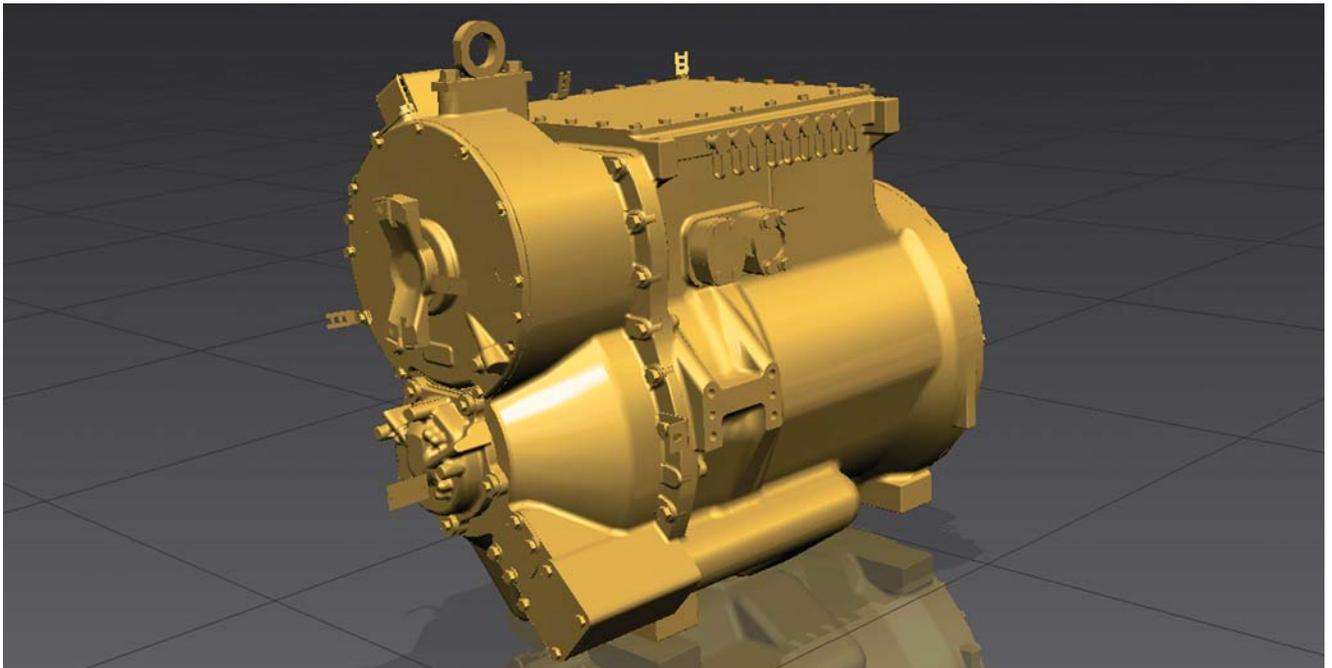
The Cat C18 ACERT is an in-line 6-cylinder diesel engine used in both Cat equipment and in heavy-duty on-highway trucks. Designed, manufactured, and built by Caterpillar, this engine offers the following customer advantages:

- Gross power (SAE J1995) 446 kW (598 hp)
- Net Power (SAE J1349) 415 kW (557 hp)
- Rated engine speed of 1,800 rpm
- Altitude capability to 3048 m (10,000 ft)
- Precise tolerances support greater combustion pressures and more work per unit of fuel
- A water-cooled, waste-gated turbocharger with titanium wheel offers long-life and excellent performance
- Electronically controlled fuel maps and torque curves are integrated specifically for the 772G
- Precise fuel injection using Mechanically Actuated Fuel Injection (MEUI™)
- Low pressure fuel lines up to the injectors
- 500 hour engine oil filter life under normal operating conditions
- Noise and vibration reduction for smooth operation and component life
- Available as either U.S. EPA Tier 2/EU Stage II equivalent OR Tier 3/Stage IIIA equivalent

## Transmission

The Cat planetary power shift transmission is an automatic, 7-speed transmission built for heavy-duty, off-road applications including those with long, uphill grades. This transmission is managed with APECS, a strategy that provides an exceptionally smooth ride and allows power to carry through the shift points for excellent performance and speed on grades. In addition to delivering a quick and responsive truck, APECS is managing clutch pressures for long-life reliability.

With its Cat power train components running in 7th gear, the 772G has a top speed of 79.7 km/h (49.5 mph).



# Fuel Saving Strategies

Adjustable to meet your specific needs

## Standard Economy Mode

Standard fuel economy is switch activated from within the cab. This economy mode works by reducing engine power. Customers can adjust the savings by reducing the power output of the truck by 0.5 to 15 percent.

## Adaptive Economy Mode

This economy mode uses on-board sensors and electronics to find opportunities to reduce power based on steady state speed. Customers will set a productivity threshold that the truck should stay above. The truck will regulate the power level based on the haul profile and may change the power of the truck several times in one haul.

## Auto Neutral Idle

Auto Neutral Idle can have a measurable impact on fuel savings. It works by placing the truck in a neutral state if the operator has been idle in a forward gear with the brake or retarder applied. The truck will automatically resume the forward gear when the brake is released or the throttle is applied.

## Engine Idle Shutdown

This feature must be activated by the customer. If engaged, the truck will warn the operator that it is about to shutdown after a prolonged period of idling in "Park." Customers can set the idle time limit. When the time limit is reached, the truck will shut off the engine.

## Speed Limiting

Speed limiting is a new feature for G Series trucks and is offered as an alternative to gear limiting. It offers customers both fuel saving and component wear benefits. Speed limiting allows the truck to find the most fuel efficient gear and engine speed while traveling at a set limit. Speed limiting will also work with Automatic Retarding Control (ARC).



## Transmission Control Strategies

With its APECS transmission strategy, G Series trucks are carrying more torque and throttle through the shifts. The fuel benefit comes from recovering quickly during shifts and carrying more momentum up grades.



## Brake Performance

Confidence and control on grades

An important differentiator for Cat trucks is their outstanding brake performance. The design principle is one of long-life and excellent performance in quarry, mine, and earthmoving applications.

### Hydraulically Actuated Brakes

Cat trucks are equipped with hydraulically actuated, rear brakes and caliper-disc front brakes. Each truck offers primary service brakes, hydraulic retarding, and a parking brake.

Two hydraulic accumulators provide the pressure required for the service brakes. The second accumulator acts as a back up. On the rear axle, the oil-cooled, multiple disc brakes have large discs that provide fade resistant performance. The parking brake is applied on the rear brakes and can hold the machine, with rated load, on a 15 percent slope. In turn, the service brakes are designed to hold the truck on slopes of 20 percent.

### Automatic Retarding Control (ARC)

Automatic Retarding Control is standard on the 772G. This feature controls truck speed by automatically applying brake force when the engine exceeds a set rpm. Operators can adjust the engine speed between 1950 and 2200 rpm. This feature is important because it does the work of controlling truck speed on long, downhill hauls without constant input from the operator; it's smooth for greater control and has a tendency to provide faster cycle times over manual retarding. As a precautionary feature, ARC will automatically engage to prevent engine overspeeding at any time during truck operation.

### Cat Engine Brake

Caterpillar offers an optional engine brake. This engine brake works with ARC to control speed on grade. By incorporating engine braking with Automatic Retarding, customers can reduce brake component wear and achieve faster cycle times.

# Traction Control System

Saving tire life, component wear, and cycle times



## Traction Control System (TCS)

If your ground conditions are wet or slippery, the 772G is equipped with Traction Control that engages quickly and effectively to control tires that are slipping.

The system is steering sensitive to differentiate between turning or slipping, allowing the system to engage at slow speeds and much sooner in the slip.

Once the system is engaged, it responds quickly by using the hydraulically-applied service brakes, not the spring-applied secondary brake. TCS regains traction faster by instantly modulating braking and power between the two rear wheel groups keeping your haul trucks moving and productive.

By reacting quickly and at slow speeds, tire life and cycle times both benefit.

**Note:** TCS is optional on this machine.

# Truck Bodies

## Bodies for your applications and material types



Caterpillar has body options to meet your material type and application needs. Cat truck bodies will last the life of the truck if properly configured, guarded, and maintained.

### Flat Floor and Dual Slope Bodies

Flat Floor and Dual Slope bodies are lined with 16 mm (0.62 in) of 400 Brinell Hardness Number (BNH) high-impact steel.

Two floor types are available, Flat and Dual Slope.

- Flat Floor bodies are ideal for delivering product to a crusher; material unloads in a controlled manner.
- Dual Slope bodies center the load and keep it stable and retained on steeper grades.

### Steel Liner

Caterpillar offers a single, 16 mm (0.62 in) steel liner that can be added to the Flat Floor and Dual Slope bodies to protect against high impact and highly abrasive materials.

### Quarry Body

Caterpillar offers a purpose-built Quarry body for soft limestone quarries. This body has a 25 mm (0.98 in), 400 BNH steel floor and does not require additional liners if kept in limestone.

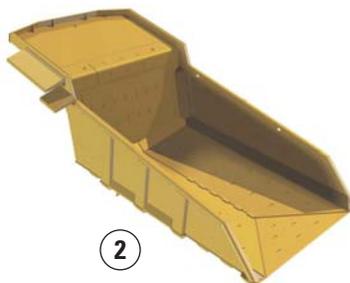
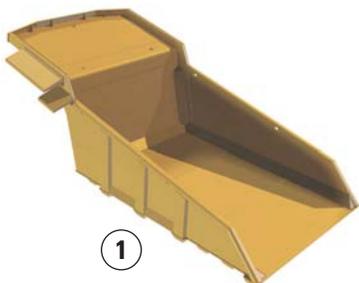
### Rubber Liner

Customers who are loading extremely hard material that has high impact characteristics should consider a factory-installed rubber liner system. This system is intended for hard rock and should not be considered for machines that could be loaded with clay, cohesive material or hot material.

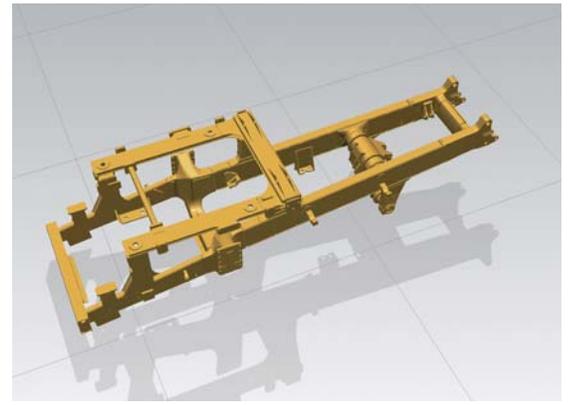
### 10/10/20 Payload Policy

Cat bodies are equipped to retain high-capacity loads for long hauls and to travel up steep grades; however, overloading a truck can negatively impact productivity, reduce tire life, and increase haul road maintenance costs.

Caterpillar's 10/10/20 Payload Policy is in place to help you maximize productivity with optimum component life and availability of your truck. Your Cat dealer can further explain the 10/10/20 policy. For optimum body life, Caterpillar recommends that 110% payloads occur no more than 10% of the time and that the average of all loads equal the target payload. Payload should never exceed 120% of target.



1) Flat Floor 2) Dual Slope 3) Quarry



# Structures

## Long-life and value

### Frames

Cat trucks are known throughout the industry for reliable, long-life frames. Built for off-road maneuvering and haul road conditions, Caterpillar uses castings in high stress areas and box section construction to manage torsion-loading.

Mild steel is used for its tensile strength and ease of welding, an important feature in being able to make field repairs. The frames are built on a platform that rotates 360 degrees, allowing consistent, deeply-penetrating welds. Each frame is subject to quality and conformance testing prior to assembly.

### Suspension and Steering

The Cat suspension and steering design offers you the following benefits:

- Excellent ride quality – empty or loaded
- The front struts act as a king pin for long-life in off-road applications
- Nitrogen over oil strut design
- Simple yet rugged steering system that maintains proper tire alignment
- Inverted rear cylinders stay cleaner longer; reduce shock loading to the frame

# Operator Experience

## Comfort, confidence, and control



Both optional and standard features like those described here can increase the productivity of your operators:

### Comfort

- Optional automatic temperature control
- Optional left side power window
- Optional heat and air conditioning
- Low-effort access system
- Optional Cat Comfort Series III seat
- Sound suppression

### Confidence

- Standard Rollover/Falling Object Protection in compliance with ISO 3471:2008 ROPS criteria and ISO 3449:2005 Level II FOPS criteria
- Optional camera system for visibility behind the machine
- Automatic Retarding Control (ARC)
- Trainer seat
- Emergency egress through right side window
- Optional fluid level monitoring
- An optional Advisor display delivers machine information to the operator

### Control

- Standard Automatic Retarding Control (ARC)
- Standard Traction Control System (TCS)
- Speed limiting on the haul
- Excellent visibility to the loading tool
- Primary service brakes, secondary braking
- Slope holding capability on grades up to 20%
- Body up speed limiting while unloading



# Information and Monitoring

Proactively manage your truck fleet



## Cat Gauges and Advisor Screen

The Cat gauge cluster is a standard display found in the cab. It displays real-time machine performance and operating data. An optional Advisor display allows a greater degree of communication with the truck and from the truck.

## VIMS

VIMS is the Cat Vital Information Management System. This information management system is integrated into the engine, chassis, and all other electronic controllers to deliver valuable information on machine health and productivity. This system uses the Advisor Display to communicate data. VIMS reports provide histograms on truck operation, payloads, and cycle times. These reports can help you manage your fleet, site, and provide production levels.

## Product Link™

Cat Product Link™ allows remote monitoring of equipment to improve overall fleet management effectiveness. Events and diagnostic codes as well as hours, fuel, idle time, and other detailed information are transmitted to a secure web-based application – VisionLink®. VisionLink includes powerful tools to convey information to our customers and their dealers, including mapping, working and idle time, fuel level and more. Product Link is not available in all areas, please check with your local Cat dealer.





### **Truck Production Management System**

The Cat Truck Production Management System is an optional tool to help you manage your operations. Indicator lights on the truck tell the loader operator they have additional loads to put on the truck (solid green light) as well as one last pass (blinking red light) and then when the truck is loaded (solid red light). Truck Production Management System will track loads, cycle times, and payload data – up to 2,400 cycles – and reports out through the on-board display or VIMS. The system takes two payload measurements; the first after loading and a second as the truck pulls away in 2nd gear. This is done for greater accuracy.

### **TKPH/TMPH**

TKPH/TMPH stands for Ton Kilometer per Hour/Ton Mile per Hour. This optional feature is an on-board tool that takes the manufacturer's tire rating and in real time, compares it with ambient temperature, payload, and truck speed. If the tires are calculated to be approaching their temperature limits, the operator will receive a warning. If the tire temperature condition becomes critical, your truck can be set up to automatically reduce (or limit) speed to allow cooling.



## Simple Service

Saving you time and money

Your Cat G Series truck is designed to provide operators and technicians with easy access to common service points like engine lockout, machine system lockout, fluid level sight gauges, grease fittings, and access to the engine for regularly scheduled maintenance.

- Engine oil and filter change interval is 500 hours under normal operating conditions
- Hydraulic filters have a 1,000 hour life under normal operating conditions
- VIMS trend analysis can track machine health and operation
- A brake wear indicator is standard
- Automatic lubrication is available as optional equipment
- Fuses and breakers are easy to access and organized for simple service
- The radiator and cooling cores are aluminum and modular offering easy cleaning or replacement
- Oil sampling ports are provided for quick and clean collection for analysis
- Fuel system features electric priming
- Fast fill fuel is optional





# Customer Support

Cat dealers have what it takes  
to keep trucks 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, your Cat dealer will stand behind your business with solutions that range from operator training to jobsite solutions. For more information on how Caterpillar and its dealers can support you, please visit the following web sites:

[www.cat.com/safety](http://www.cat.com/safety)

[www.Mining.cat.com](http://www.Mining.cat.com)

[www.Caterpillar.com](http://www.Caterpillar.com)

[www.Cat.com](http://www.Cat.com)

# Safety and Sustainability

Priorities that support our people and communities



## Safety

At Caterpillar, safety is embedded in our culture. As we design a truck, we take the safety of the operator and personnel working on the ground very seriously.

- We incorporate a rollover protected and falling object protected cab structure that supports the weight of the machine and its load.
- We design our trucks for easy access with handrails for three-points of contact and non-skid step surfaces with a tread plate that sheds material and provides excellent traction.
- Optional fluid level monitoring from the cab.
- Our cab offers excellent visibility around the machine with mirror choices and an optional camera system for 115 degrees of visibility behind the truck.
- Our truck brakes are designed for long-life without fading and include a brake wear indicator.

- Speed limiting to regulate haul speeds.
- Optional Traction Control works to return traction on slippery ground.
- Customers can lock out machine steering and secure the body in the up position during service.

At Caterpillar, we can further support you and your business with best practices and safety talking points with your employees.

## Sustainability

We bring about progress for our communities by producing aggregate and minerals for new roads, bridges, and energy. Cat trucks are being designed to do this work with less of an impact on the environment, by being quiet, using less fuel, emitting fewer emissions, and incorporating solid, long-life designs and components.

# 772G Off-Highway Truck Specifications

## Engine

Engine Model	Cat C18 ACERT	
Rated Engine Speed	1,800 rpm	
Gross Power – SAE J1995	446 kW	598 hp
Net Power – SAE J1349	415 kW	557 hp
Net Power – ISO 9249	421 kW	565 hp
Net Power – 80/1269/EEC	421 kW	565 hp
Engine Power – ISO 14396	435 kW	583 hp
Net Torque – SAE J1349	2551 N·m	1,881 lbf-ft
Number of Cylinders	6	
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1,105 in <sup>3</sup>

- Power rating applies 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 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).
- No engine derating required up to 3000 m (9,843 ft) altitude.
- Available as Tier 3/Stage IIIA equivalent, OR Tier 2/Stage II equivalent emission standards.
- Meets China Nonroad Stage III emission standards equivalent to U.S. EPA Tier 3 or U.S. EPA Tier 2.

## Weights – Approximate

Target Gross Machine Weight	82 100 kg	181,000 lb
Chassis Weight	26 863 kg	59,223 lb
Body Weight	8030 kg	17,703 lb

- Chassis weight with 100% fuel, hoist, body mounting group, rims and tires.
- Body weight is the standard Dual Slope body with no liner and will vary depending on configuration.

## Operating Specifications

Target Payload (100%)	47.2 tonnes	52.0 tons
Maximum Working Payload (110%)	51.9 tonnes	57.2 tons
Maximum Allowable Payload (120%)*	56.6 tonnes	62.3 tons
Body Capacity (SAE 2:1)**	31.2 m <sup>3</sup>	40.8 yd <sup>3</sup>
Top Speed – Loaded	71.7 km/h	44.6 mph

\*Refer to the Caterpillar 10/10/20 Payload Policy for maximum gross machine weight limitations.

\*\*ISO 6483:1980.

- Capacity with Dual Slope body with no liner.

## Transmission

Forward 1	12.9 km/h	8.0 mph
Forward 2	17.7 km/h	11.0 mph
Forward 3	24.0 km/h	14.9 mph
Forward 4	32.2 km/h	20.0 mph
Forward 5	43.6 km/h	27.1 mph
Forward 6	58.7 km/h	36.5 mph
Forward 7	79.7 km/h	49.5 mph
Reverse	16.9 km/h	10.5 mph

- Maximum travel speeds with standard 21.00R33 (E4) tires.

## Final Drives

Differential Ratio	2.74:1
Planetary Ratio	4.80:1
Total Reduction Ratio	13.14:1

## Brakes

Brake Surface – Front	1395 cm <sup>2</sup>	216 in <sup>2</sup>
Brake Surface – Rear	50 281 cm <sup>2</sup>	7,794 in <sup>2</sup>
Brake Standards	ISO 3450:2011	

## Body Hoists

Pump Flow – High Idle	413 L/min	109 gal/min
Relief Valve Setting – Raise	18 950 kPa	2,750 psi
Relief Valve Setting – Lower	3450 kPa	500 psi
Body Raise Time – High Idle	8 seconds	
Body Lower Time – Float	10 seconds	
Body Power Down – High Idle	10 seconds	

# 772G Off-Highway Truck Specifications

## Capacity – Dual Slope – 100% Fill Factor

Struck	23.9 m <sup>3</sup>	31.2 yd <sup>3</sup>
Heaped (SAE 2:1)*	31.2 m <sup>3</sup>	40.8 yd <sup>3</sup>

- Contact your local Cat dealer for body recommendation.
- \* ISO 6483:1980.

## Capacity – Flat Floor – 100% Fill Factor

Struck	23.9 m <sup>3</sup>	31.2 yd <sup>3</sup>
Heaped (SAE 2:1)*	31.3 m <sup>3</sup>	40.9 yd <sup>3</sup>

- Contact your local Cat dealer for body recommendation.
- \* ISO 6483:1980.

## Weight Distributions – Approximate

Front Axle – Empty	51.4%
Front Axle – Loaded	34.2%
Rear Axle – Empty	48.6%
Rear Axle – Loaded	65.8%

## Suspension

Empty Loaded Cylinder Stroke Front	234 mm	9.2 in
Empty Loaded Cylinder Stroke Rear	149 mm	5.8 in
Rear Axle Oscillation	8.9°	

## Service Refill Capacities

Fuel Tank	530 L	140 gal
Cooling System	125 L	33 gal
Crankcase	64 L	17 gal
Differentials and Final Drives	151 L	39 gal
Steering Tank	55 L	14.5 gal
Steering System (includes tank)	74 L	20 gal
Brake/Hoist Hydraulic Tank	176 L	38 gal
Brake Hoist System	227 L	60 gal
Torque Converter/Transmission System	72 L	19 gal

## Steering

Steering Standards	SAE J1511 FEB94 ISO 5010:2007	
Steer Angle	40.5°	
Turning Diameter – Front	17.6 m	57.7 ft
Turning Circle Clearance Diameter	20.3 m	66.6 ft

## Tires

Standard Tire	21.00R33 (E4)	
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- Productive capabilities of the 772G truck are such that, under certain job conditions, TKPH (TMPH) capabilities of standard or optional tires could be exceeded and, therefore, limit production.
- Caterpillar recommends the customer evaluates all job conditions and consults the tire manufacturer for proper tire selection.

## ROPS

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

# 772G Off-Highway Truck Specifications

## Weight/Payload Calculation

FLAT FLOOR					
		363-1500	444-8463	444-8464 363-1520	363-1550
<i>Machine Weights Based on Configuration</i>		Without Liner	With Liner	Rubber Liner with 155 mm (6 in) Sideboards	Quarry Body
Base: Floor/Sidewall/Frontwall	mm (in)	16/10/14 (0.62/0.39/0.55)	16/10/14 (0.62/0.39/0.47)	16/10/14 (0.62/0.39/0.47)	25/14/16 (0.98/0.55/0.62)
Liner: Floor/Sidewall/Frontwall	mm (in)		16/8/8 (0.62/0.31/0.31)	102/0/0 (4.0/0/0)	
Body Volume	m <sup>3</sup> (yd <sup>3</sup> )	31.3 (41)	31.3 (41)	32.2 (42.1)	31.1 (40.6)
Target Gross Machine Weight	kg (lb)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)
Empty Chassis Weight	kg (lb)	26 852 (59,199)	26 852 (59,199)	26 852 (59,199)	26 852 (59,199)
Body System Weight	kg (lb)	8215 (18,111)	11 450 (25,243)	12 420 (27,382)	10 555 (23,270)
Empty Machine Weight	kg (lb)	35 067 (77,310)	38 302 (84,442)	39 272 (86,580)	37 407 (82,469)
Fuel Tank Size	L (gal)	530 (140)	530 (140)	530 (140)	530 (140)
Fuel Tank – 100% Fill	kg (lb)	445 (981)	445 (981)	445 (981)	445 (981)
Empty Operating Weight	kg (lb)	35 512 (78,291)	38 747 (85,423)	39 717 (97,561)	37 852 (83,450)
<b>Target Payload (100%)*</b>	kg (lb)	46 588 (102,709)	43 353 (95,577)	42 383 (93,439)	44 248 (97,551)
	tonnes (tons)	46.6 (51.4)	43.4 (47.8)	42.4 (46.7)	44.2 (48.8)
<b>Target Payload Material Density</b>	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1654 (2,783)	1539 (2,590)	1462 (2,466)	1581 (2,670)
<b>Maximum Working Payload (110%)*</b>	kg (lb)	51 247 (112,980)	47 688 (105,135)	46 621 (102,783)	48 673 (107,306)
	tonnes (tons)	51.2 (56.5)	47.7 (52.6)	46.6 (51.4)	48.7 (53.7)
<b>Maximum (110%) Payload Material Density</b>	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1819 (3,062)	1693 (2,849)	1609 (2,713)	1739 (2,937)
<b>Maximum Allowable Payload (120%)*</b>	kg (lb)	55 906 (123,251)	52 024 (114,693)	50 860 (112,127)	53 098 (117,061)
	tonnes (tons)	55.9 (61.6)	52.0 (57.3)	50.9 (56.1)	53.1 (58.5)
<b>Maximum (120%) Payload Material Density</b>	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1985 (3,340)	1847 (3,108)	1755 (2,959)	1897 (3,204)

## Sideboards (Optional)

363-1520							
Height		Volume Add		Weight		Maximum (110%) Material Density**	
155 mm	6 in	2.5 m <sup>3</sup>	3.4 yd <sup>3</sup>	366 kg	806 lb	1610 kg	2,710 lb

\*Refer to Caterpillar 10/10/20 Payload Policy.

\*\*Based on Quarry Body at 90% Body Volume Fill.

**Note:** Empty Chassis Weight is figured without fuel.

### Payload Calculation: Definitions

Empty Machine Weight = Empty Chassis Weight + Body System Weight

Target Payload = Target Gross Machine Weight less Empty Machine Weight

Maximum Payload = Target Payload × 1.10 (110%)

# 772G Off-Highway Truck Specifications

## Weight/Payload Calculation

DUAL SLOPE			
		363-1510	444-8465
<i>Machine Weights Based on Configuration</i>		Without Liner	Liner
Base: Floor/Sidewall/Frontwall	mm (in)	16/10/14 (0.62/0.39/0.55)	16/10/14 (0.62/0.39/0.55)
Liner: Floor/Sidewall/Frontwall	mm (in)		16/8/8 (0.62/0.31/0.31)
Body Volume	m <sup>3</sup> (yd <sup>3</sup> )	31.2 (40.8)	30.9 (40.4)
Target Gross Machine Weight	kg (lb)	82 100 (181,000)	82 100 (181,000)
Empty Chassis Weight	kg (lb)	26 852 (59,199)	26 852 (59,199)
Body System Weight	kg (lb)	8030 (17,703)	11 025 (24,306)
Empty Machine Weight	kg (lb)	34 882 (76,902)	37 877 (83,505)
Fuel Tank Size	L (gal)	530 (140)	530 (140)
Fuel Tank – 100% Fill	kg (lb)	445 (981)	445 (981)
Empty Operating Weight	kg (lb)	35 327 (77,883)	38 322 (84,486)
<b>Target Payload (100%)*</b>	kg (lb)	46 773 (103,117)	43 778 (96,514)
	tonnes (tons)	46.8 (51.6)	43.8 (48.3)
<b>Target Payload Material Density</b>	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1666 (2,808)	1574 (2,654)
<b>Maximum Working Payload (110%)*</b>	kg (lb)	51 450 (113,429)	48 156 (106,166)
	tonnes (tons)	51.5 (56.7)	48.2 (53.1)
<b>Maximum (110%) Payload Material Density</b>	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1832 (3,089)	1732 (2,920)
<b>Maximum Allowable Payload (120%)*</b>	kg (lb)	56 128 (123,741)	52 534 (115,817)
	tonnes (tons)	56.1 (61.9)	52.5 (57.9)
<b>Maximum (120%) Payload Material Density</b>	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1999 (3,370)	1889 (3,185)

## Sideboards (Optional)

363-1520							
Height		Volume Add		Weight		Maximum (110%) Material Density**	
155 mm	6 in	2.5 m <sup>3</sup>	3.4 yd <sup>3</sup>	366 kg	806 lb	1610 kg	2,710 lb

\*Refer to Caterpillar 10/10/20 Payload Policy.

\*\*Based on Quarry Body at 90% Body Volume Fill.

**Note:** Empty Chassis Weight is figured without fuel.

### Payload Calculation: Definitions

Empty Machine Weight = Empty Chassis Weight + Body System Weight

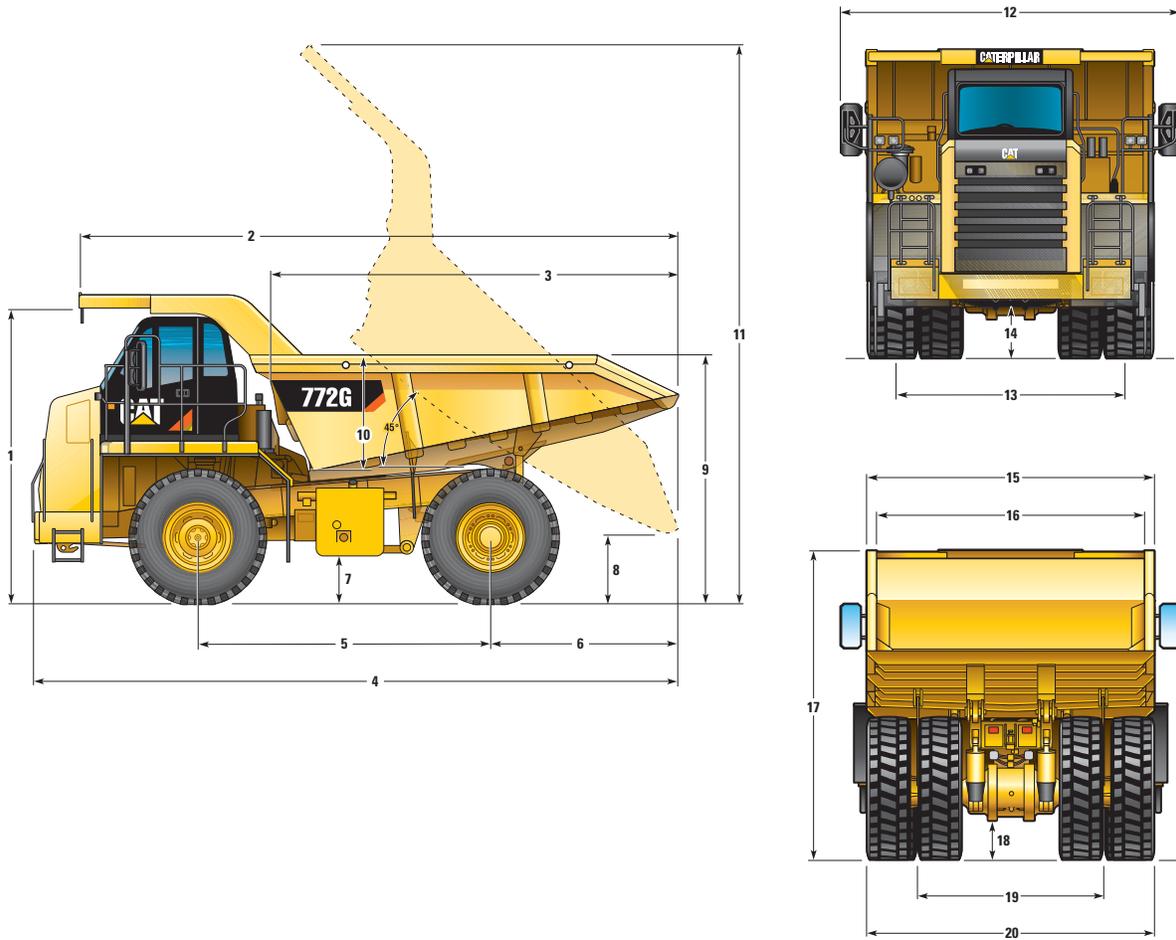
Target Payload = Target Gross Machine Weight less Empty Machine Weight

Maximum Payload = Target Payload × 1.10 (110%)

# 772G Off-Highway Truck Specifications

## Dimensions

All dimensions are approximate with Dual Slope body.



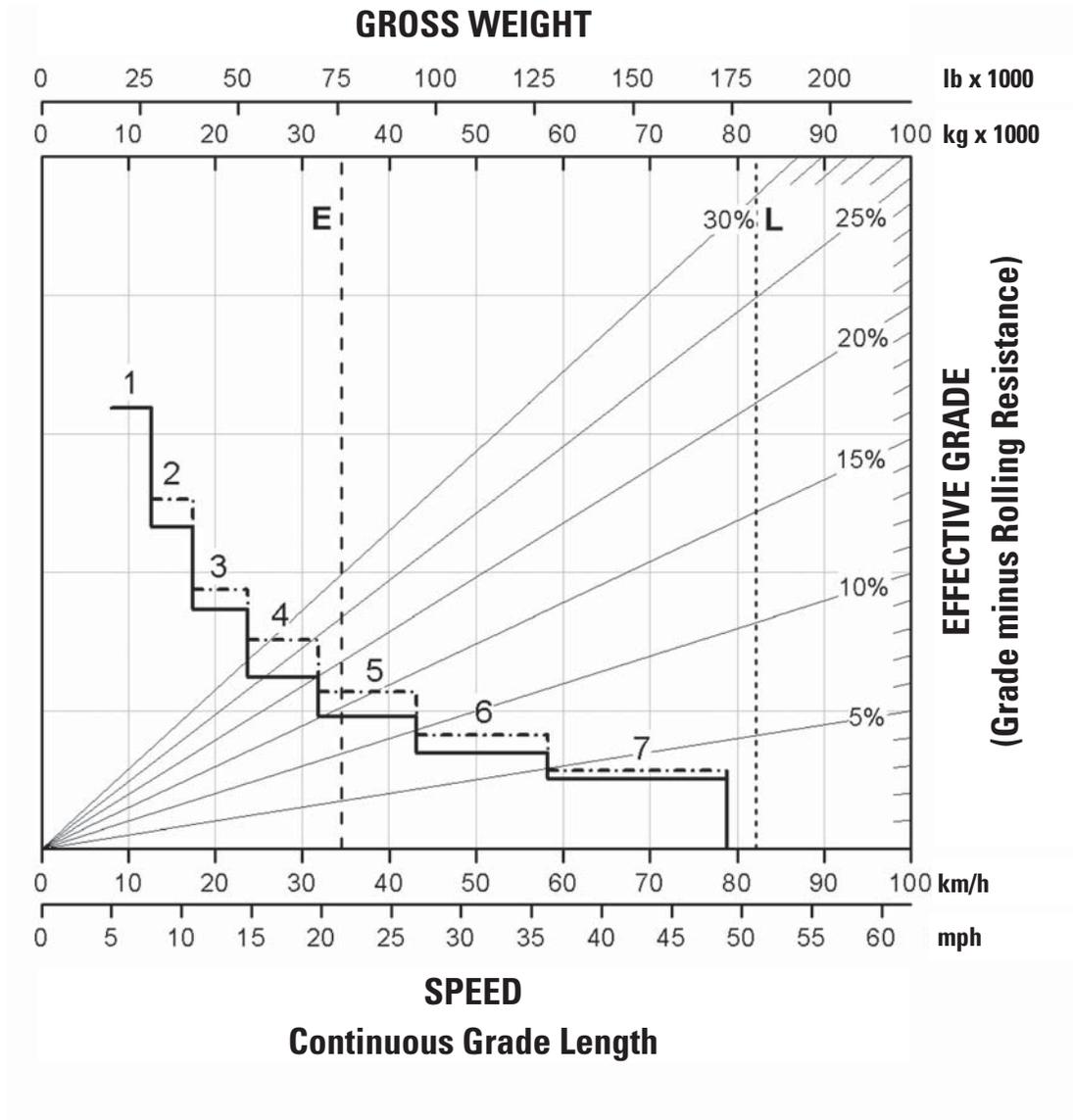
<b>1</b>	Height to Top of ROPS	4012 mm	13.2 ft
<b>2</b>	Overall Body Length	8172 mm	26.8 ft
<b>3</b>	Inside Body Length	5781 mm	19.0 ft
<b>4</b>	Overall Length	8808 mm	28.9 ft
<b>5</b>	Wheelbase	3960 mm	13.0 ft
<b>6</b>	Rear Axle to Tail	2598 mm	8.5 ft
<b>7</b>	Ground Clearance	695 mm	2.3 ft
<b>8</b>	Dump Clearance	551 mm	1.8 ft
<b>9</b>	Loading Height – Empty	3639 mm	11.9 ft
<b>10</b>	Inside Body Depth – Maximum	1747 mm	5.7 ft
<b>11</b>	Overall Height – Body Raised	8357 mm	27.4 ft
<b>12</b>	Operating Width	4780 mm	15.7 ft
<b>13</b>	Centerline Front Tire Width	3165 mm	10.4 ft
<b>14</b>	Engine Guard Clearance	711 mm	2.3 ft
<b>15</b>	Outside Body Width	3931 mm	12.9 ft
<b>16</b>	Inside Body Width	3642 mm	12.0 ft
<b>17</b>	Front Canopy Height	4265 mm	13.9 ft
<b>18</b>	Rear Axle Clearance	591 mm	1.9 ft
<b>19</b>	Centerline Rear Dual Tire Width	2652 mm	8.7 ft
<b>20</b>	Overall Tire Width	3927 mm	12.9 ft

# 772G Off-Highway Truck Specifications

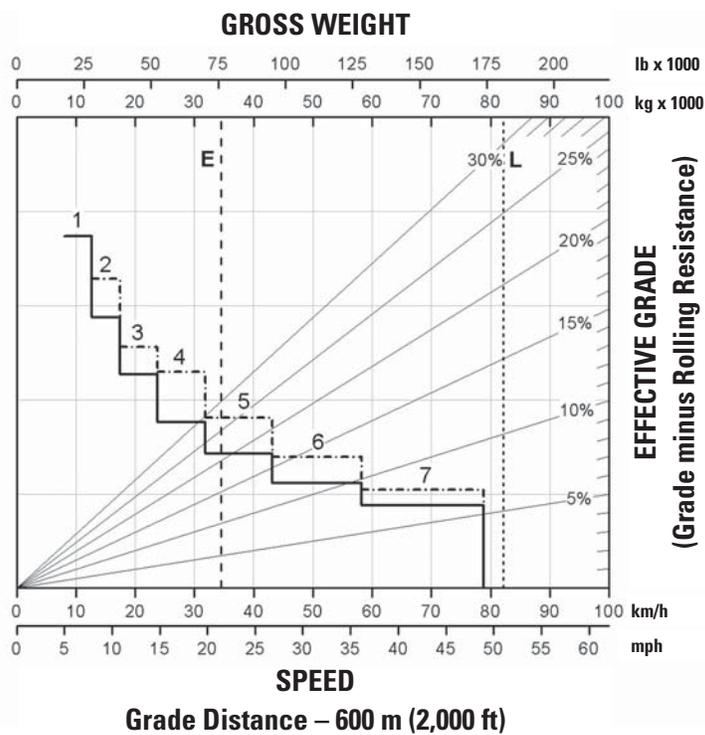
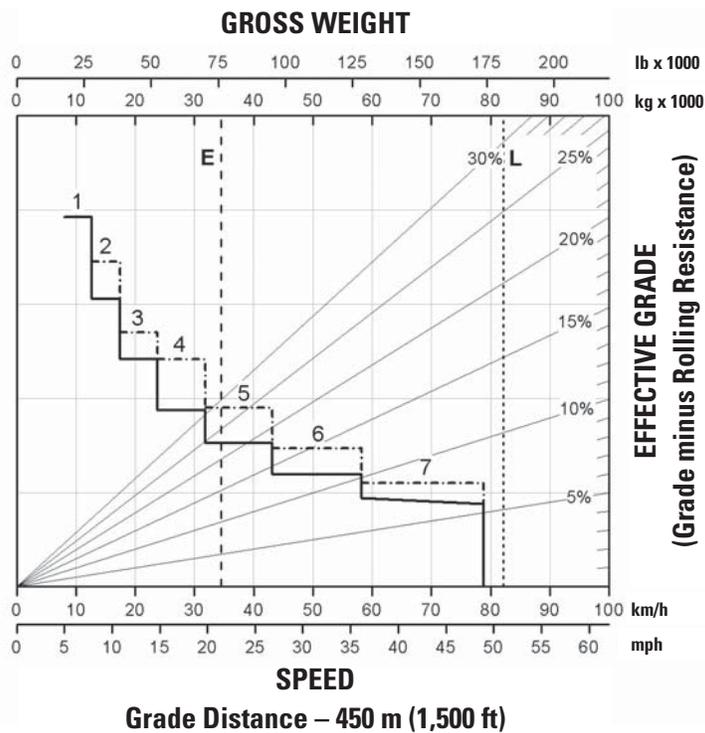
## Retarding Performance

To determine retarding performance: Add lengths of all downhill segments and, using this total, refer to proper retarding chart. 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. From this weight-effective grade point, read horizontally to the curve with the highest obtainable gear, then down to maximum descent speed brakes can properly handle without exceeding cooling capacity. The following charts are based on these conditions: 32° C (90° F) ambient temperature, at sea level, with 21.00R33 (E4) tires.

**NOTE:** Select the proper gear to maintain engine rpm at the highest possible level, without overspeeding the engine. If cooling oil overheats, reduce ground speed to allow transmission to shift to the next lower speed range.

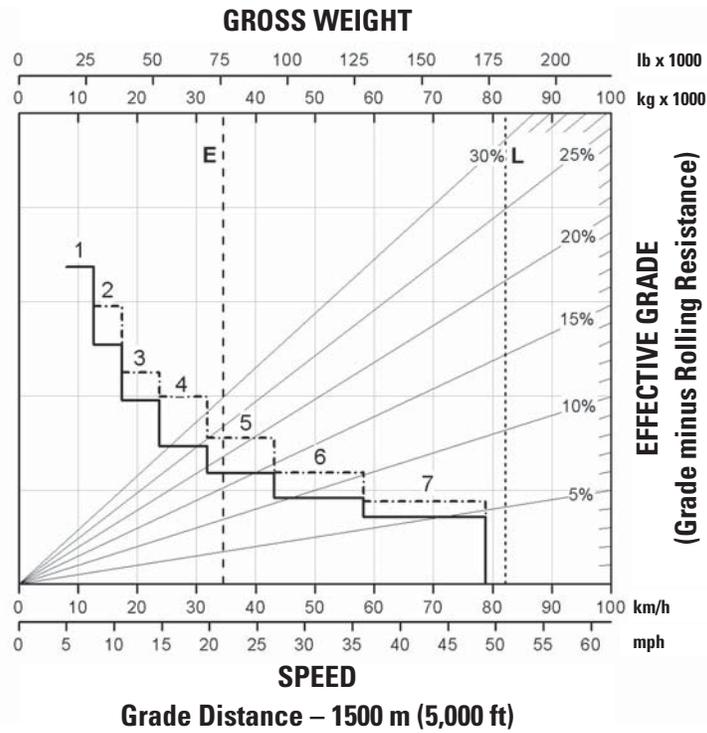
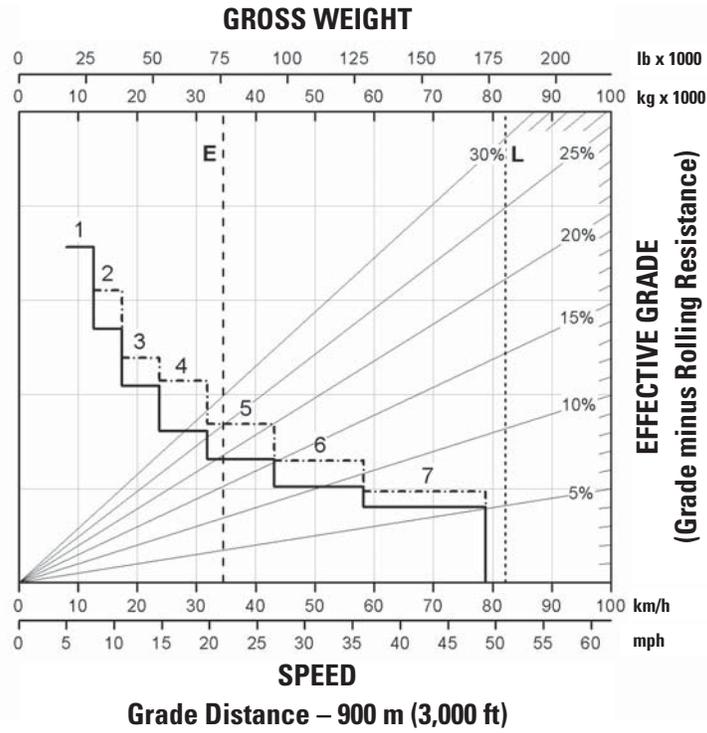


## Retarding Performance



# 772G Off-Highway Truck Specifications

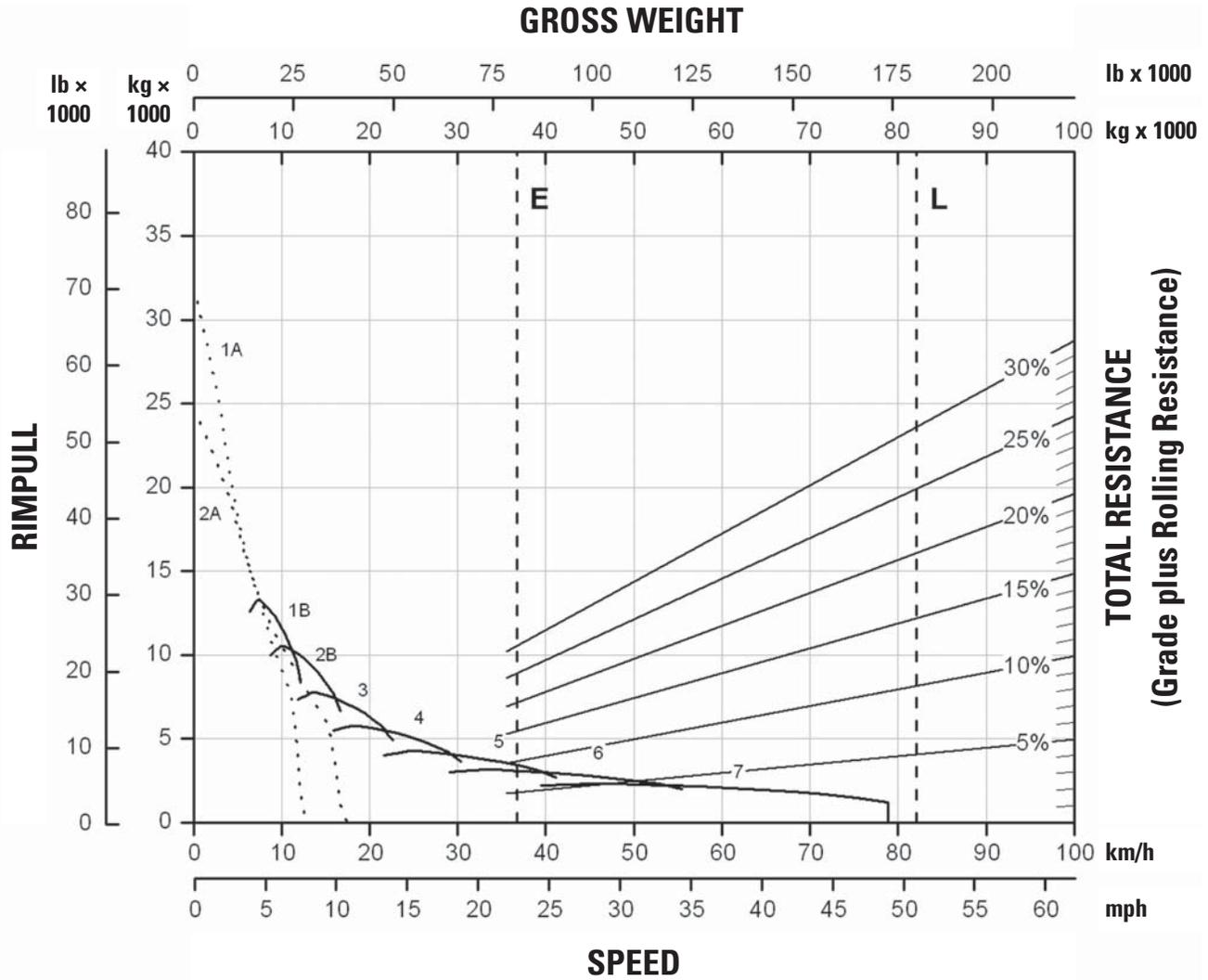
## Retarding Performance



# 772G Off-Highway 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 1% for each 10 kg/t (20 lb/ton) of rolling resistance. From this weight-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.



## Standard Equipment

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

### ELECTRICAL

- Alarm, backup
- Alternator, 115 ampere
- Auxiliary jump start receptacle
- Batteries, maintenance-free, 12V (2), 190 amp-hour
- Electrical system, 24V
- Lighting system:
  - Backup light (halogen)
  - Directional signals/hazard warning (front and rear LED)
  - Headlights (halogen), with dimmer
  - Operator access courtesy lights (Developing Market Only)

### PRODUCT LINK COMMUNICATIONS

- Product Link Ready

### GUARDS

- Driveline
- Engine crankcase

### OPERATOR ENVIRONMENT

- Air conditioning (Developing Market Only)
- Ashtray and cigarette lighter
- Coat hook
- Cup holders (4)
- Diagnostic connection port, 24V
- Entertainment Radio Ready
  - 5 amp converter
  - Speakers
  - Antenna
  - Wiring harness
- Gauges/indicators:
  - Air cleaner service indicator – electronic
  - Brake oil temperature gauge
  - Coolant temperature gauge
  - Hour meter
  - Tachometer
  - Engine overspeed indicator
  - Fuel level
  - Speedometer with odometer
  - Transmission gear indicator
- Heater/defroster (11 070 kCal/43,930 BTU)
- Hoist lever

- Horn, electric
- Light – dome
- Light – courtesy
- Messenger, display unit
- Mirrors
- Power port, 12V
- ROPS cab, insulated/sound suppressed
- Seat, Cat Comfort
  - Full air suspension
  - Retractable 3-point seat belt with shoulder harness
- Seat, training with lap belt
- Steering wheel, padded, tilt and telescopic
- Storage compartment
- Sun visor, tinted glass
- Throttle lock
- Windshield wiper (intermittent) and washer

### POWER TRAIN

- Air-To-Air Aftercooler (ATAAC)
- Air cleaner with precleaner (1)
- Automatic cold mode idle control
- Electric start
- Turbocharger
- Braking system, hydraulic actuated:
  - Automatic Retarder Control (ARC) (utilizes rear oil-cooled, multiple disc brakes)
  - Brake release motor (towing)
  - Caliper-disc (front)
  - Extended Life Brakes
  - Oil-cooled, multiple disc (rear)
  - Parking
  - Secondary
  - Service
- Transmission:
  - 7-speed automatic powershift
  - Body up-shift inhibitor
  - Controlled throttle shifting
  - Directional shift management
  - Downshift inhibitor
  - Neutral start switch
  - Neutral coast inhibitor
  - Reverse shift inhibitor
  - Reverse neutralizer during dumping
  - Programmable top gear selection

### SUSPENSION SYSTEMS

- Suspension, front and rear

### OTHER STANDARD EQUIPMENT

- Body safety pin (secures body in up position)
- Body down indicator
- CD-ROM parts book
- Fan, hydraulic demand
- Fuel tank (530 L/140 gal)
- Guard, engine compartment
- Guard, mud
- Ground level battery disconnect
- Ground level engine shutdown
- Ground level grease fittings
- Reservoirs (separate):
  - Brake/converter/hoist
  - Steering
  - Transmission/torque converter
- Rims 15 × 33
- Rock ejectors
- Service platform, left and right side
- Supplemental steering (automatic)
- Tie down eyes
- Tow hooks (front)/Tow pin (rear)
- Vandalism protection locks

### ANTIFREEZE

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

## Optional Equipment

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

- Traction Control System (TCS)
- Cat Engine Brake
- Cat C18 ACERT diesel engine as:
  - Tier 2/Stage II equivalent, OR
  - Tier 3/Stage IIIA equivalent
- Body heat
- Diverter box
- 4 batteries
- HID lights
- Truck Production Management System
- Cab heat
- Cab air conditioning
- Product Link
- Backup alarm
- Heated mirrors
- Fuel heater
- Ether aid
- Coolant heater
- Auto lube
- Rear vision camera (WAVS)
- Spare rims
- Wheel chocks
- Body sideboards

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

AEHQ6362-02 (03-2019)  
Replaces AEHQ6362-01

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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