



Cat[®] 793 (04)

Mining Truck

Technical Specifications

Configurations and features may vary by region. Please consult your Cat[®] dealer for availability in your area.

Table of Contents

Specifications	2
Engine	2
Weights – Approximate	2
Weights Distributions – Approximate	2
Final Drives	2
Transmission	2
Tires and Rims	2
Braking System	2
Standard Body – High Performance (HP)	3
Body Hoists	3
Suspension	3
Service Refill Capacities	3
Cab	3
Steering	3
Dimensions	4
793 (04) Gradeability/Speed/Rimpull	5
793 (04) Standard Resistive Braking (Retarding) – Continuous	6
793 (04) Standard Resistive Braking – 450 m (1,475 ft)	7
793 (04) Standard Resistive Braking – 600 m (1,968 ft)	7
793 (04) Standard Resistive Braking – 900 m (2,953 ft)	8
793 (04) Standard Resistive Braking – 1500 m (4,900 ft)	8
793 (04) Additional Resistive Braking (Retarding) – Continuous	9
793 (04) Additional Resistive Braking – 450 m (1,475 ft)	10
793 (04) Additional Resistive Braking – 600 m (1,968 ft)	10
793 (04) Additional Resistive Braking – 900 m (2,953 ft)	11
793 (04) Additional Resistive Braking – 1500 m (4,900 ft)	11
Standard and Optional Equipment	12

793 (04) Mining Truck Specifications

Engine

Engine Model	Cat® 3516E	
Gross Power – SAE J1995	1801 kW	2,415 hp
Net Power – SAE J1349	1694 kW	2,272 hp
Rated Speed	1,750 rpm	
Emissions Rating	U.S. EPA Tier 1 Equivalent	
Bore	170 mm	6.7 in
Stroke	215 mm	8.5 in
Displacement	78 L	4,760 in ³

- Net power advertised is the power available at the flywheel when the engine is equipped with air intake system, exhaust system, and alternator.

Weights – Approximate

Rated Gross Machine Weight (RGMW)		
Tire size 40R57	383 739 kg	846,000 lb
Chassis Weight (CW)	119 271 kg	262,947 lb
Body Weight (BW)	32 072 kg	70,707 lb
Nominal Rated Payload (NRP)		
Tire size 40R57	232 tonnes	256 tons

- Consult your tire manufacturer for maximum tire load.
- Chassis weight with full fuel and fluids, standard and mandatory attachments, hoist, body mounting group, rims, and tires.

Weights Distributions – Approximate

Front Axle – Empty	48.8%
Rear Axle – Empty	51.2%
Front Axle – Loaded	33%
Rear Axle – Loaded Idle	67%

- Weight distributions optimized with Cat body.

Final Drives

Double reduction, planetary with full floating axles.

Differential Ratio 1.8:1

Planetary Ratio 16:1

Total Reduction Ratio 28.8:1

Transmission

Forward 1 11.7 km/h 7.2 mph

Forward 2 15.7 km/h 9.8 mph

Forward 3 21.5 km/h 13.4 mph

Forward 4 29.1 km/h 18.1 mph

Forward 5 39.4 km/h 24.5 mph

Forward 6 54.3 km/h 33.7 mph

Reverse 10.9 km/h 6.8 mph

Top Speed – Loaded 54.3 km/h 33.7 mph

Tires and Rims

40.00R57 (standard)

46/90R57 (optional)

29" x 57" Rims

- Quick Change Rims (QCR) optional
- Extended Life Wheel Station (XLWS) optional
- Caterpillar recommends the customer evaluate all job conditions and consult tire manufacturer for proper tire selection and Tonne Kilometres Per Hour (TKPH) Ton-Miles Per Hour (TMPH) capabilities.

Braking System

Service Brakes Four-Corner, Wet Disc, Oil Cooled, Hydraulically Actuated

Front Wet Disc Brake Surface Area

Standard Wheel Station 89 727 cm² 13,907 in²

Extended Life Wheel Stations 134 665 cm² 20,873 in²

Rear Wet Disc Brake Surface Area

Standard Wheel Station 134 590 cm² 20,861 in²

Extended Life Wheel Stations 155 383 cm² 24,084 in²

Standards (Service and Secondary) ISO 3450:2011

Parking Brake Four-Corner, Multi-Disk, Spring Applied, Hydraulically Released

Standard Body – High Performance (HP)

Volume – Heaped (SAE 2:1)	152-191 m ³	199-250 yd ³
Base Body Weight	29 500- 32 600 kg	65,000- 71800 lbs

• Contact your local Cat dealer for body recommendation.

Body Hoists

Twin, two-stage hydraulic cylinders with snubbing valve.

Pump Flow – High Idle	854 L/min	226 gal/min
Relief Valve Setting – Raise	20 370 kPa	2,955 psi
Body Raise Time – High Idle	19.8 Seconds	
Body Lower Time – Float	19.9 Seconds	
Body Power Down – High Idle	17.8 Seconds	

Suspension

Self-contained nitrogen/oil cylinders, pin-to-pin mounting, top and bottom double shear clevis attachments.

Effective Cylinder Stroke – Front	292 mm	11.50 in
Effective Cylinder Stroke – Rear	140 mm	5.51 in
Rear Axle Oscillation	±4.9 degrees	

Service Refill Capacities

Fuel Tank	4354 L	1,150 gal
Fuel Tank (optional)	4922 L	1,300 gal
Cooling System	852 L	225 gal
Crankcase	291 L	77 gal
Front Wheels, Each (SWS)	30 L	8 gal
Front Wheels, Each (XLWS)	56 L	15 gal
Differential and Final Drives	1022 L	270 gal
Steering System (Includes Tank)	291 L	77 gal
Brake/Hoist System (Includes Tank)	1070 L	282 gal
Torque Converter/Transmission System (Includes Sump)	227 L	60 gal

Cab

Air Conditioning (1234YF refrigerant)	Ambient capabilities up to 50°C (122°F)
---------------------------------------	---

Heater/Defroster	Ambient capabilities down to –30°C (–22°F)
------------------	--

Operator Sound pressure level Tested to ISO 6396:2008	78 dB(A)
---	----------

Rollover Protective Structure (ROPS) for:

Operator meets	ISO 3471:2008
----------------	---------------

Trainer meets	ISO 13459:2012
---------------	----------------

Falling Objects Protective Structure (FOPS) for:

Operator meets	ISO 3449:2005 Level II
----------------	------------------------

Trainer meets	ISO 13459:2012 Level II
---------------	-------------------------

Steering

Steer Angle	30.3 degrees
-------------	--------------

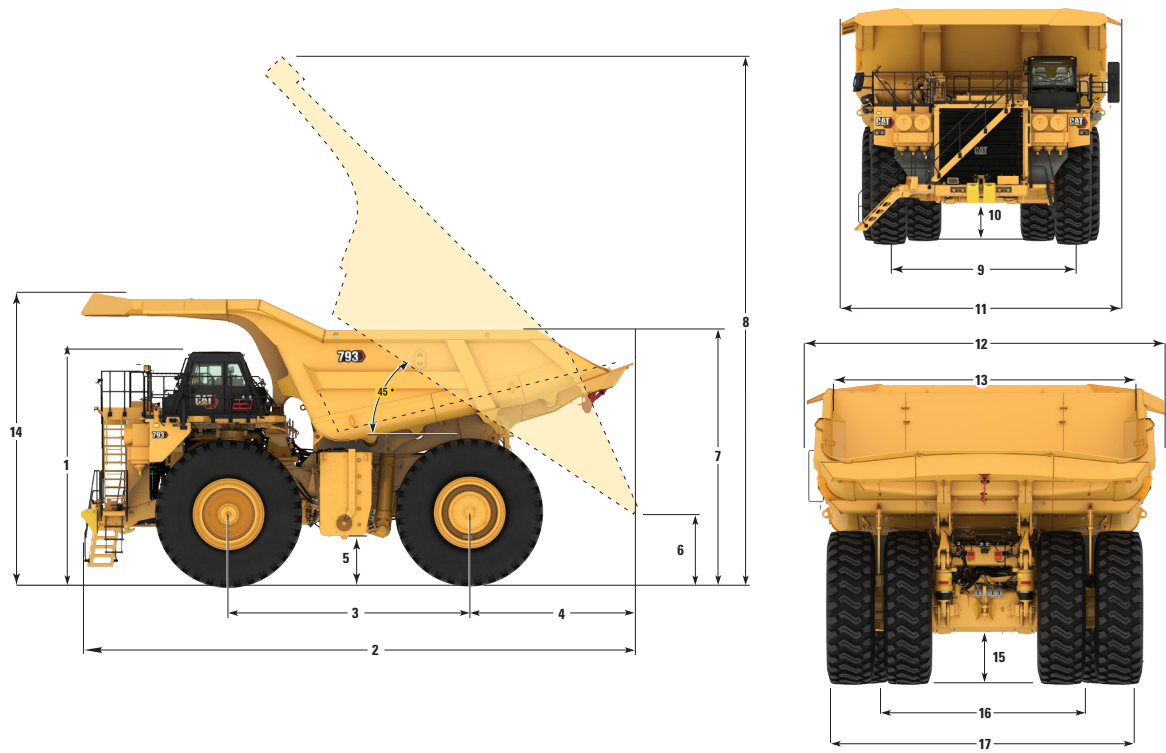
Turning Diameter	29.36 m	96.33 ft
------------------	---------	----------

Steering Standards	ISO 5010:2019
--------------------	---------------

793 (04) Mining Truck Specifications

Dimensions

All dimensions are approximate with 162 m3 (212 yd3) HP Body and 40.00R57 tires.



DIMENSION		
1	Height to Top of ROPS	5 630 mm18 ft 6 in
2	Overall Length	13 640 mm44 ft 9 in
3	Wheelbase	5 900 mm19 ft 4 in
4	Rear Axle to Tail	3 620 mm11 ft 11 in
5	Ground Clearance	1 110 mm3 ft 8 in
6	Dump Clearance	1 630 mm5 ft 4 in
7	Loading Height – Empty	6 170 mm20 ft 3 in
8	Overall Height – Body Raised	13 690 mm44 ft 11 in
9	Centerline Front Tire Width	5610 mm18 ft 6 in
10	Engine Guard Clearance	1294 mm4 ft 0 in
11	Overall Canopy Width	8 600 mm28 ft 3 in
12	Outside Body Width	7 996 mm26 ft 3 in
13	Inside Body Width	7 270 mm23 ft 10 in
14	Front Canopy Height	6 810 mm22 ft 4 in
15	Rear Axle Clearance	1 230 mm4 ft 0 in
16	Centerline Rear Dual Tire Width	5 090 mm16 ft 8 in
17	Overall Tire Width	7 600 mm24 ft 11 in

793 (04) Mining Truck Specifications

793 (04) 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.

GROSS WEIGHT

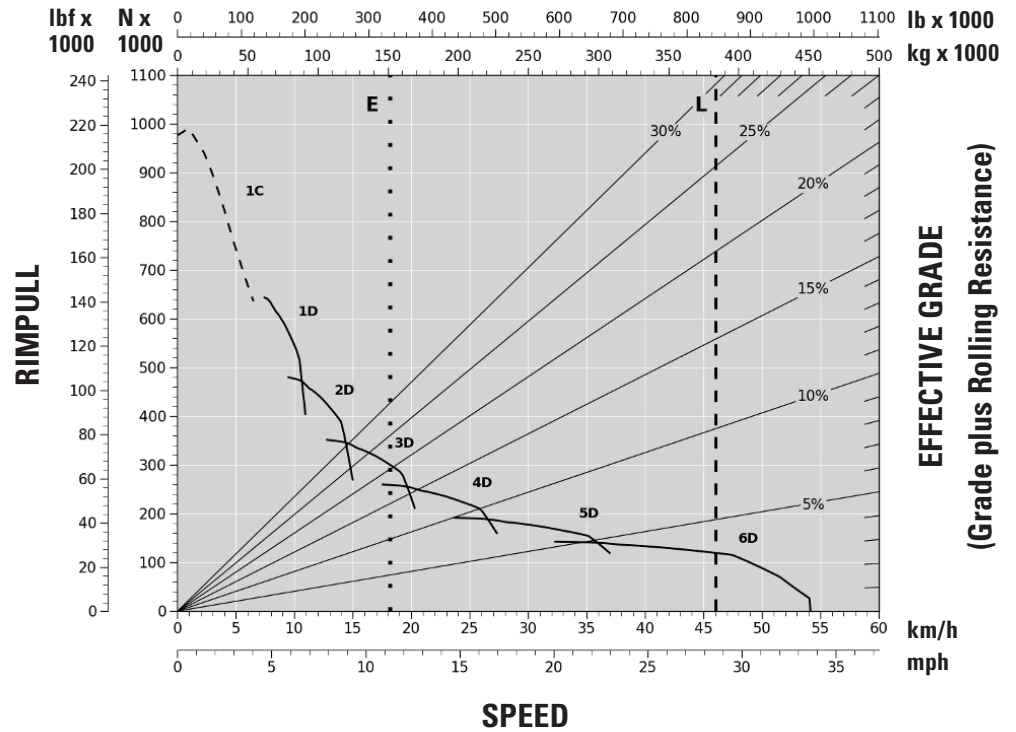
Typical Field Empty Weight (E)

Gross Machine Operating
Loaded Weight (L)
383 739 kg (846,000 lb)

Torque Converter Drive

Direct Drive

1 – 1st Gear
2 – 2nd Gear
3 – 3rd Gear
4 – 4th Gear
5 – 5th Gear
6 – 6th Gear



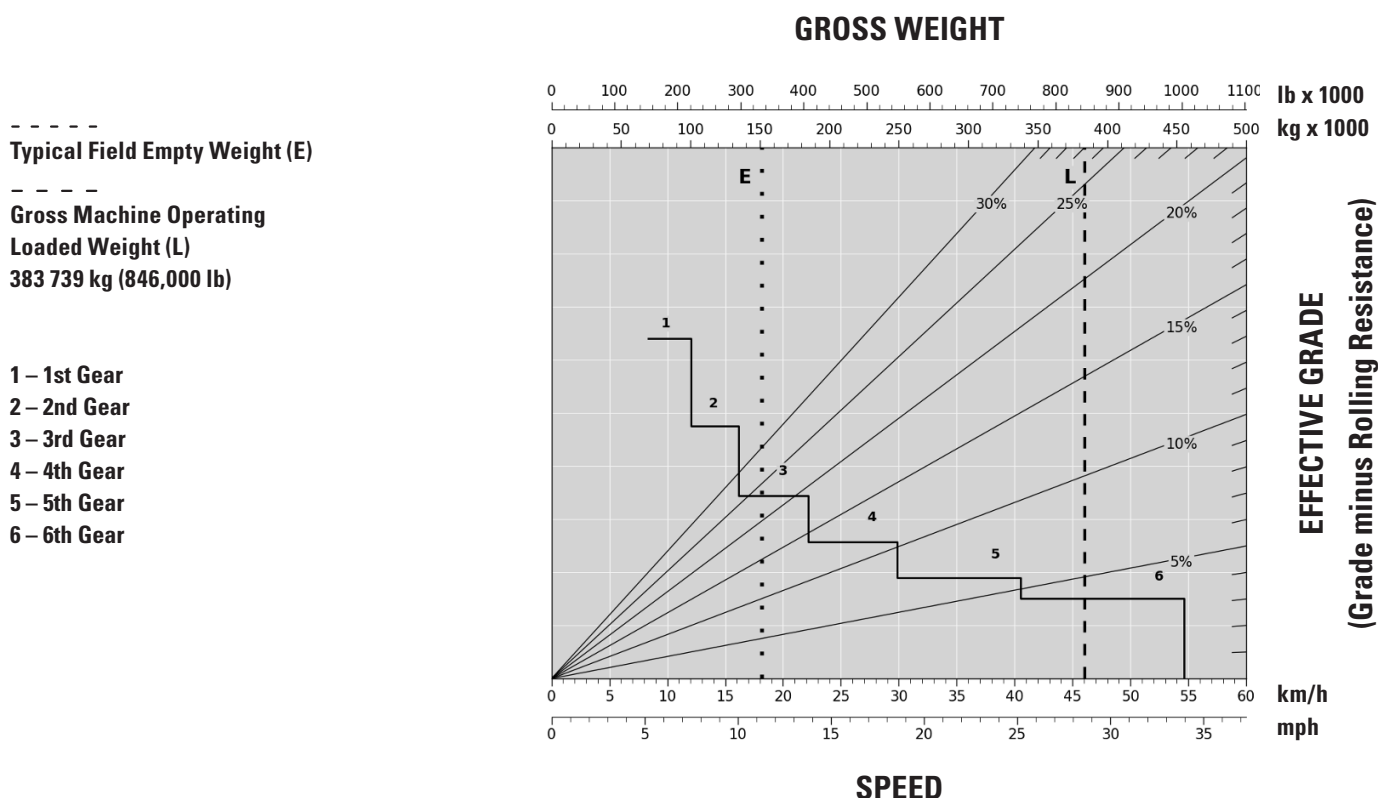
* at sea level

793 (04) Mining Truck Specifications

793 (04) Standard Resistive Braking (Retarding) – Continuous*

To determine performance: Add lengths of all downhill segments and, using this total, refer to proper resistive braking 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 40.00R57 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.



* at sea level

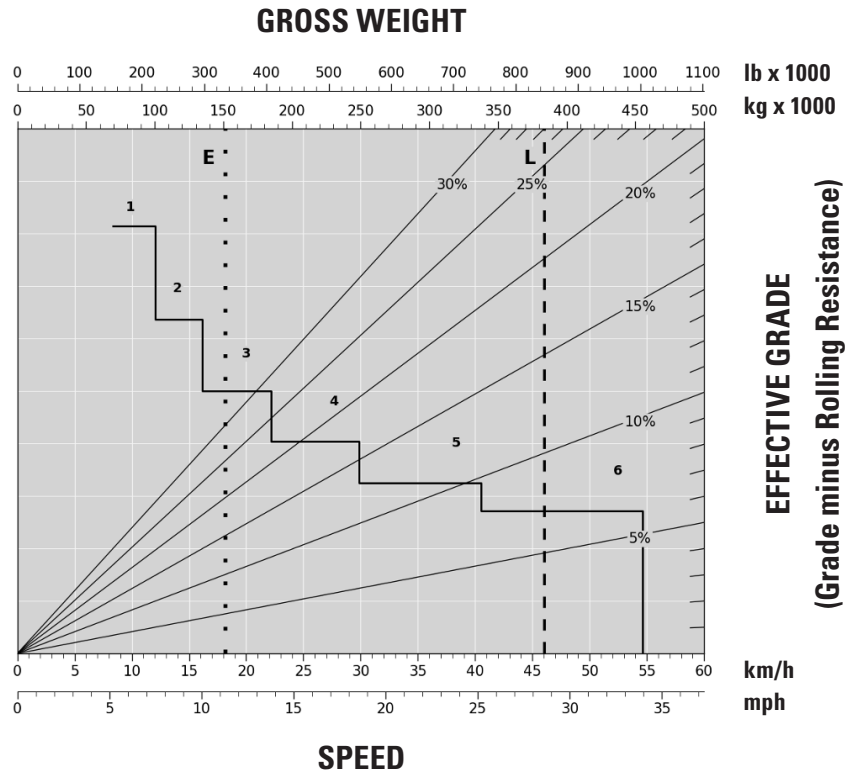
793 (04) Mining Truck Specifications

793 (04) Standard Resistive Braking – 450 m (1,475 ft)*

Typical Field Empty Weight (E)

Gross Machine Operating
Loaded Weight (L)
383 739 kg (846,000 lb)

- 1 – 1st Gear
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear

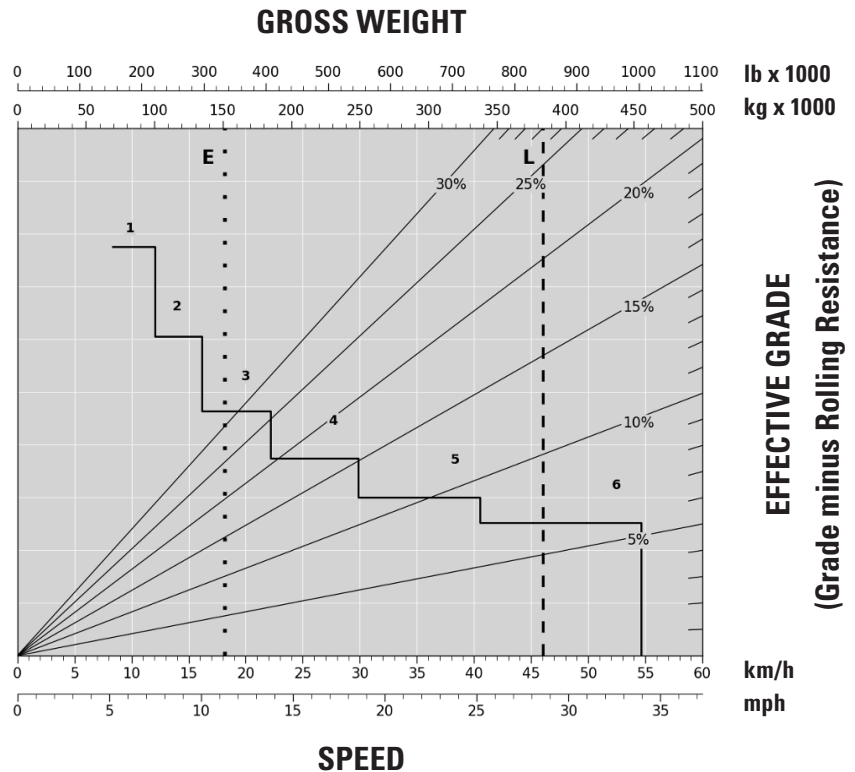


793 (04) Standard Resistive Braking – 600 m (1,968 ft)*

Typical Field Empty Weight (E)

Gross Machine Operating
Loaded Weight (L)
383 739 kg (846,000 lb)

- 1 – 1st Gear
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear



* at sea level

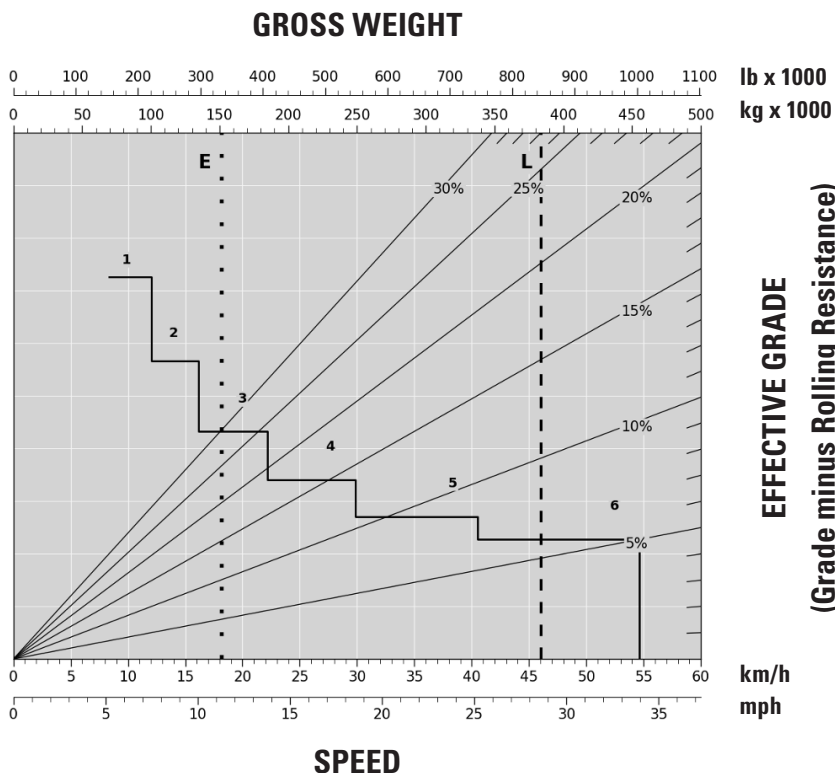
793 (04) Mining Truck Specifications

793 (04) Standard Resistive Braking – 900 m (2,953 ft)*

Typical Field Empty Weight (E)

Gross Machine Operating
Loaded Weight (L)
383 739 kg (846,000 lb)

- 1 – 1st Gear
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear

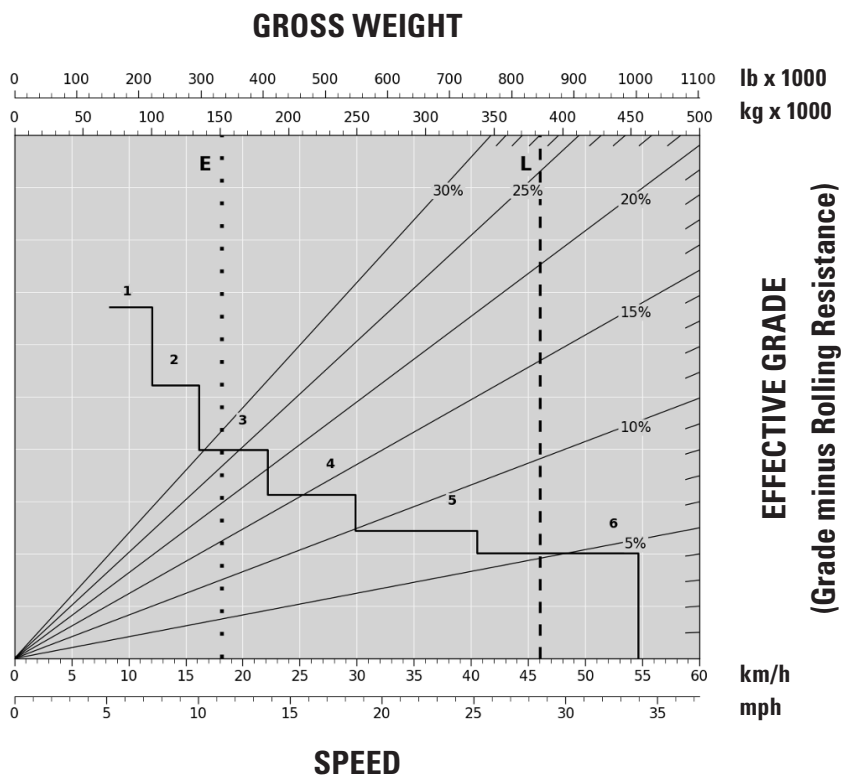


793 (04) Standard Resistive Braking – 1500 m (4,900 ft)*

Typical Field Empty Weight (E)

Gross Machine Operating
Loaded Weight (L)
383 739 kg (846,000 lb)

- 1 – 1st Gear
- 2 – 2nd Gear
- 3 – 3rd Gear
- 4 – 4th Gear
- 5 – 5th Gear
- 6 – 6th Gear

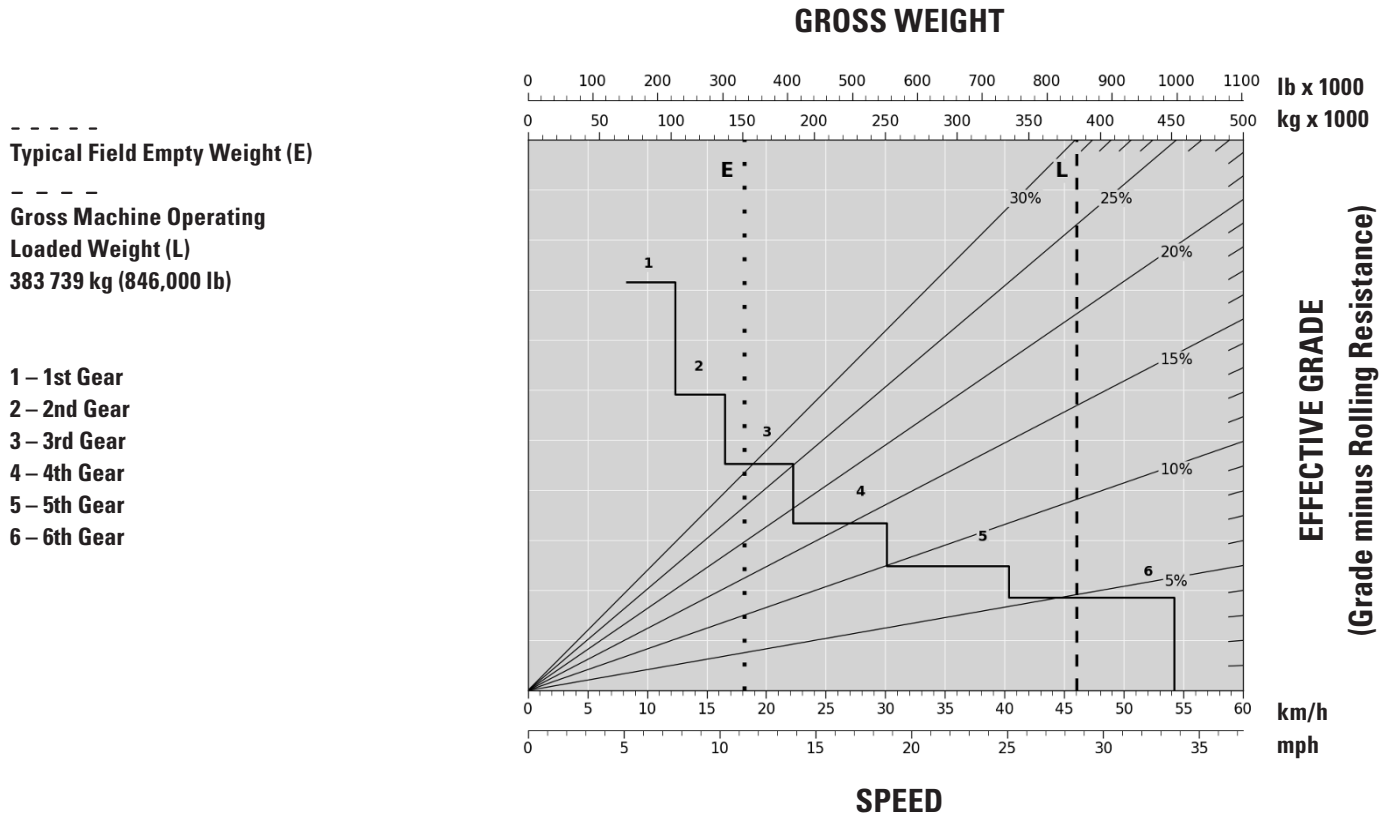


* at sea level

793 (04) Additional Resistive Braking (Retarding) – Continuous*

To determine performance: Add lengths of all downhill segments and, using this total, refer to proper resistive braking 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 40.00R57 tires.

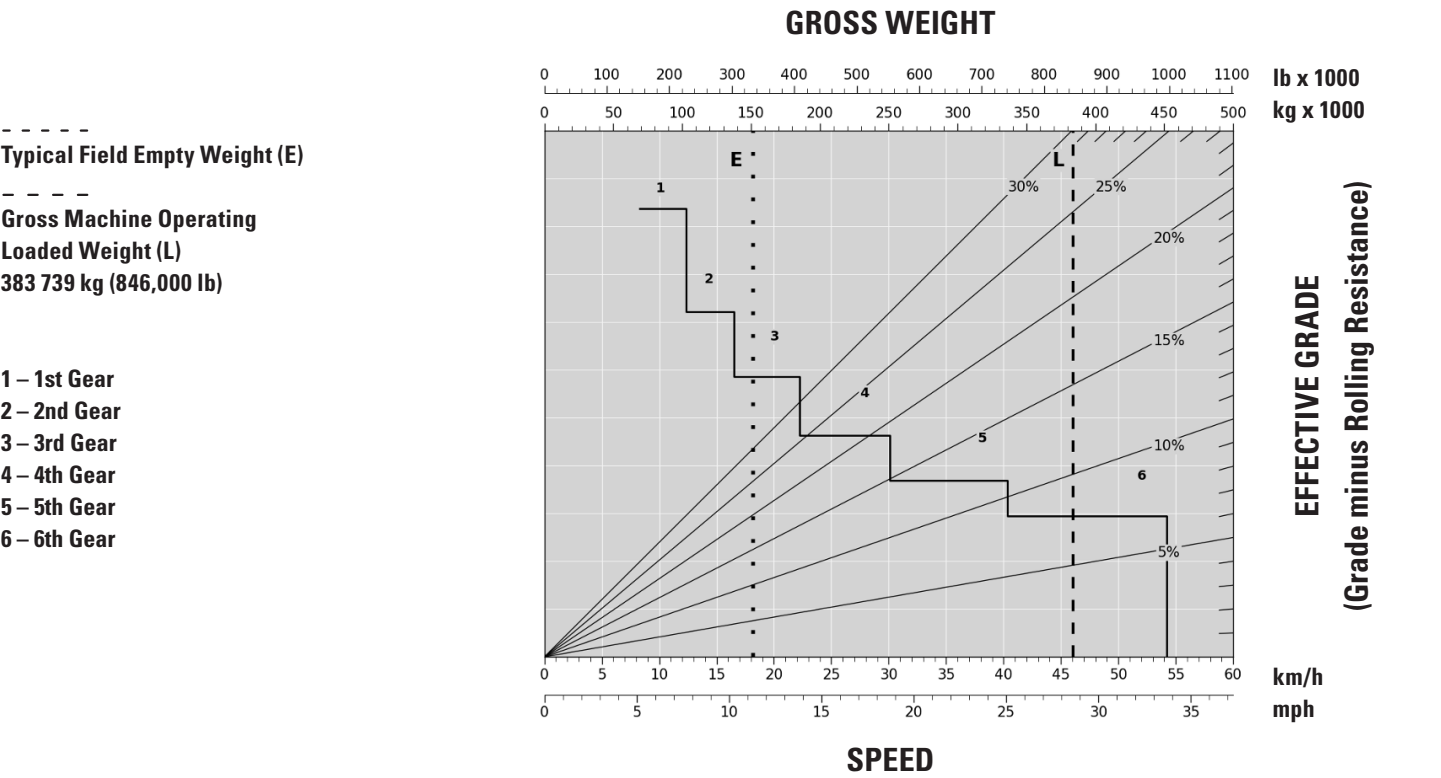
NOTE: Select the proper gear to maintain engine rpm at the highest possible level, without overspeeding the engine. If cooling oil overheats, reduce ground speed to allow transmission to shift to the next lower speed range.



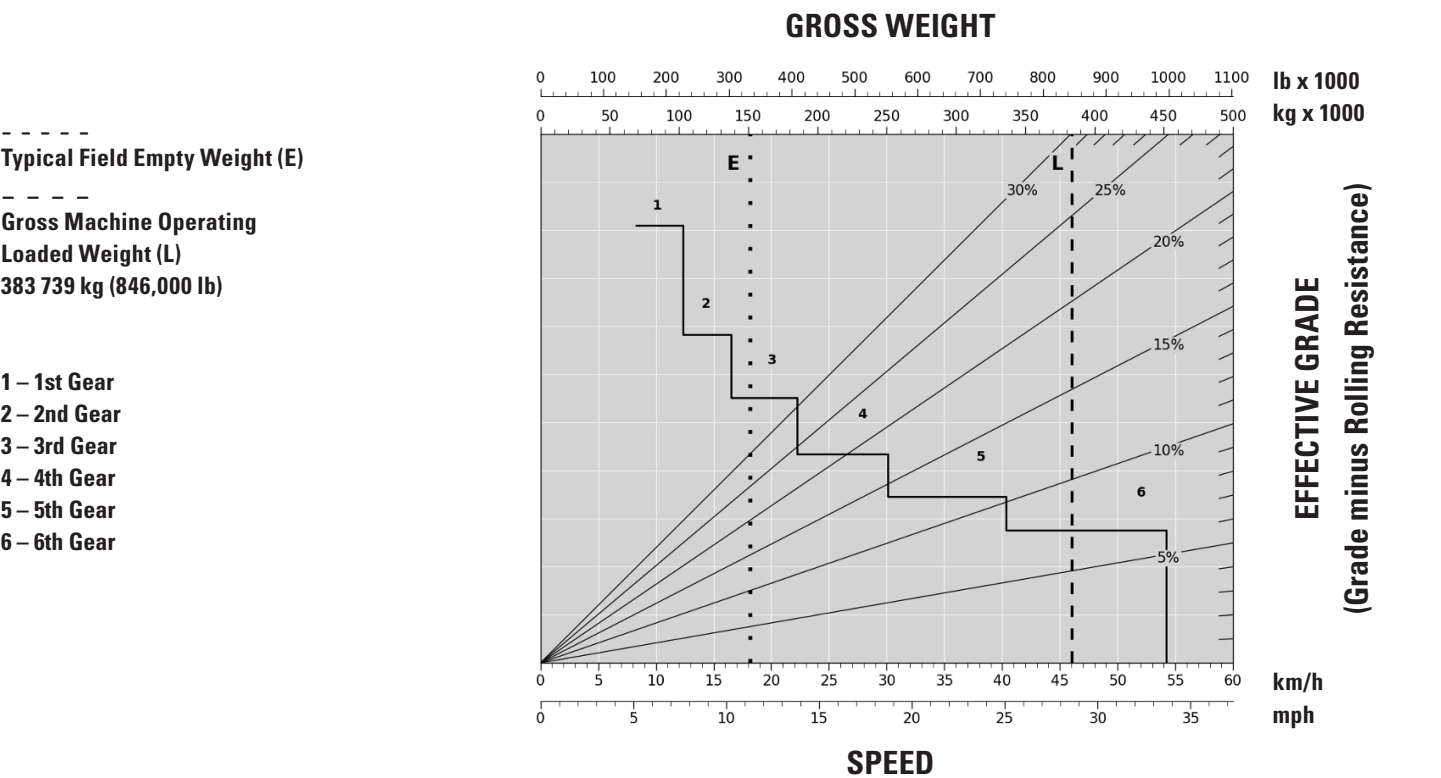
* at sea level

793 (04) Mining Truck Specifications

793 (04) Additional Resistive Braking – 450 m (1,475 ft)*



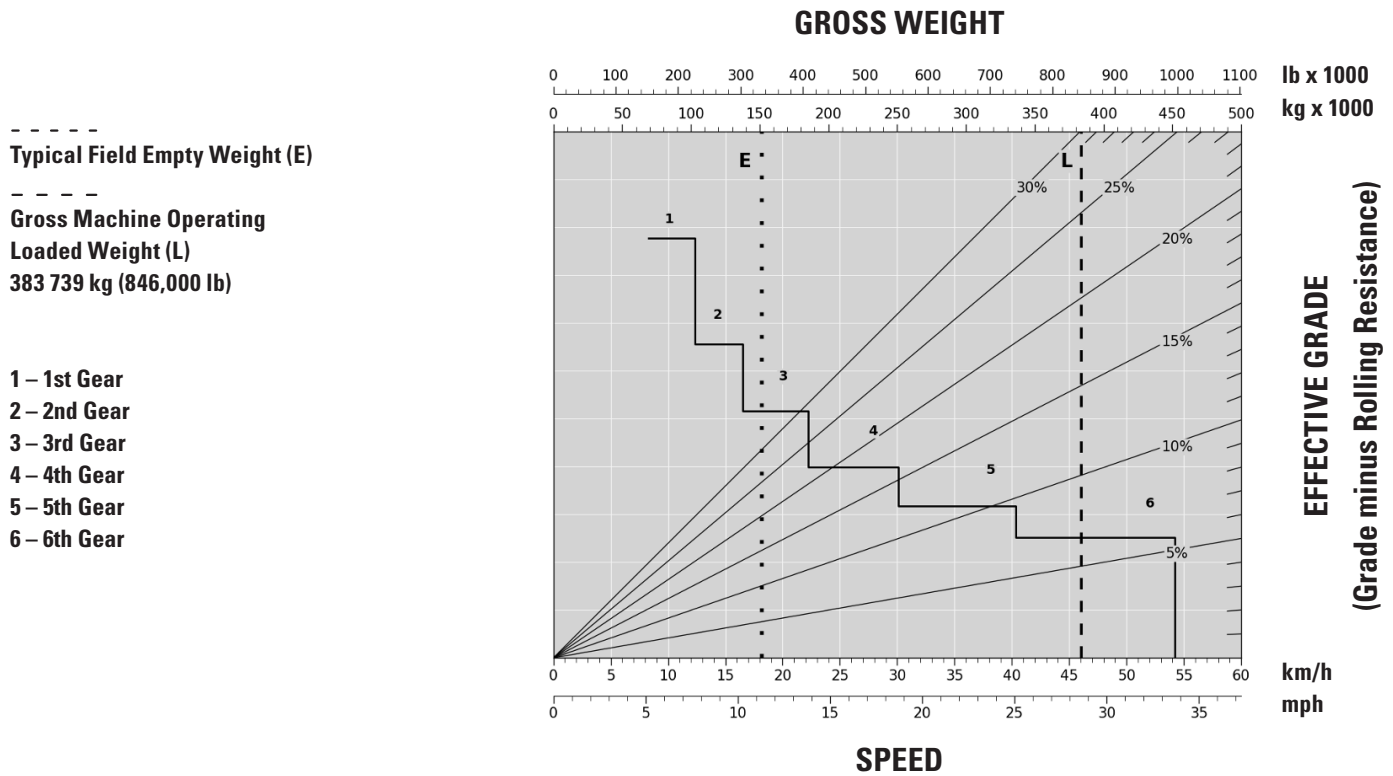
793 (04) Additional Resistive Braking – 600 m (1,968 ft)*



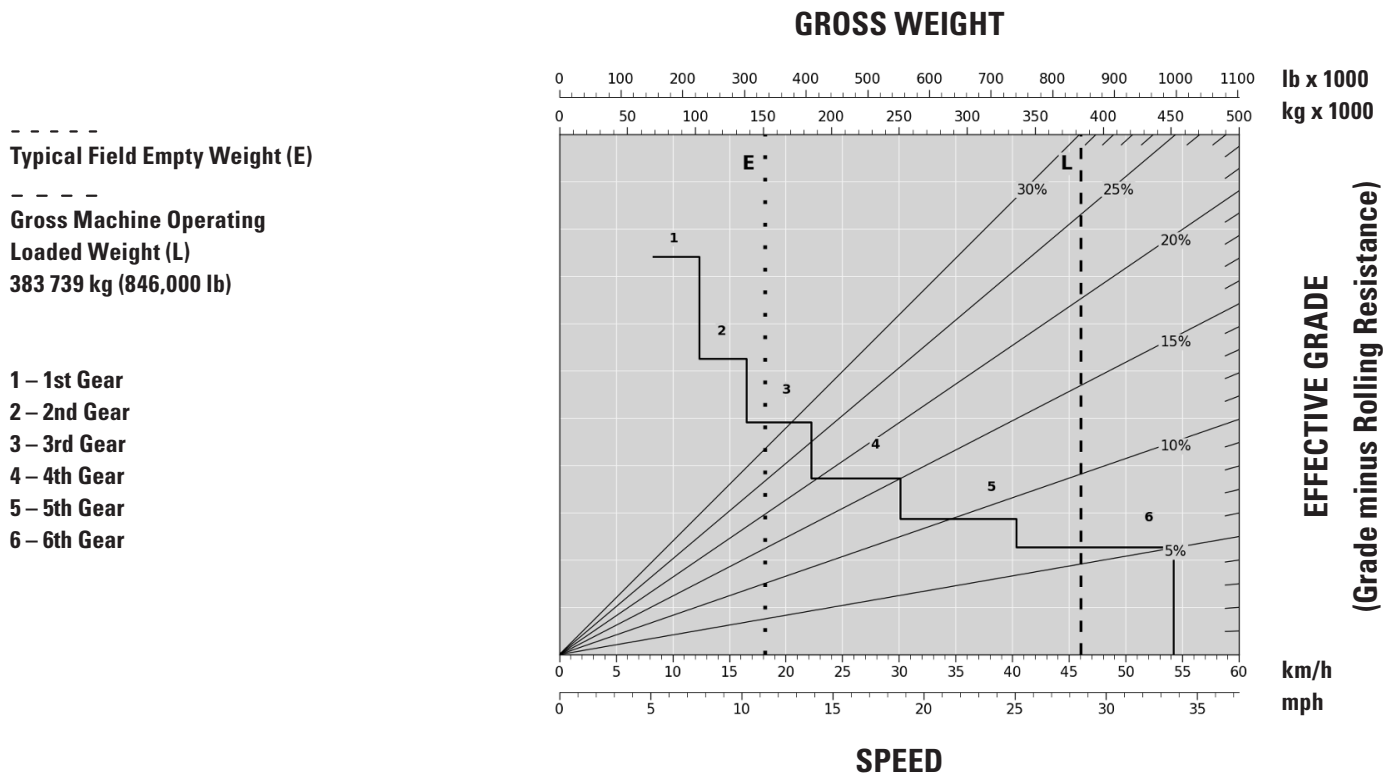
* at sea level

793 (04) Mining Truck Specifications

793 (04) Additional Resistive Braking – 900 m (2,953 ft)*



793 (04) Additional Resistive Braking – 1500 m (4,900 ft)*



* at sea level

793 (04) Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWERTRAIN			BRAKING SYSTEM		
Cat 3516E Diesel Engine:			Oil-cooled, Multi-disc (front and rear) – Service, Resistive Braking, Parking, Secondary	✓	
Air Cleaner with Pre-cleaner (2)	✓		Secondary, Emergency, spring applied with pressure release	✓	
Elevated Low Idle Control	✓		Automatic Resister Control	✓	
Ether starting aid (automatic)	✓		Additional brake cooling package for downhill hauling		✓
Multi-Point Oil Pressure Sensing	✓		Brake Release Motor (towing)	✓	
Turbocharger (4)/Aftercooler	✓		Brake wear indicator gauges		✓
Engine pre-lube		✓	Engine Overspeed Protection	✓	
Air Starter, turbine		✓	Extended life brake disc material	✓	
Electric Start	✓		ELECTRICAL		
Automatic starter protection	✓		Alarm, Back-up	✓	
Multi-point oil pressure sensing	✓		Alternator (150-amp)	✓	
Oil Renewal System (ORS)		✓	Batteries, 93-amp-hour, Low-maintenance, 12-volt (2)	✓	
Heater, engine coolant and oil (240-volt)		✓	Converter, 12-volt	✓	
High speed crankcase oil change (Wiggins port)	✓		Electrical System, 24-volt, 15 amp	✓	
Transmission:			LED Lighting System:		
6-speed, automatic powershift w/electronic control (ECPC) and Advanced Productivity Electronics Control Strategy (APECS)	✓		Back-up Lights	✓	
Body-up Shift Inhibitor	✓		Direction Signals and Hazard Warning	✓	
Anti-rollback strategy	✓		Headlights, with Lo-hi beam selector	✓	
Directional Shift Management	✓		Front stair access/service deck	✓	
Electronic Control and Downshift Inhibitor	✓		Stop and Tail Lights	✓	
Lock-up Torque Converter	✓		Under-hood Light	✓	
Neutral Coast Inhibitor	✓		Payload Indicator Lights	✓	
Neutral Start Switch, Reverse Shift Inhibitor	✓		Payload digital display		✓
Programmable Top Gear	✓		Battery disconnect – ground level switch	✓	
Reverse Neutralizer during Dumping	✓		Engine shutdown – ground level switch	✓	
Driveline Guard	✓		Machine lockout – ground level switch	✓	
Extended Life Wheel Station (XLWS) powertrain		✓	FLUIDS		
Traction Control System	✓		Antifreeze protection to –35° C (–30° F)	✓	
Rear axle continuous filtration	✓		Antifreeze protection to –50° C (–58° F)		✓
Rear axle filtration cooler		✓	FUEL SYSTEM		
Service Center, Fast Fill		✓	Fast-fill fuel system, ground level, Wiggins-Non-pressurizing 800 L/min (210 gal/min)	✓	
			Fuel tank (4354 L/1,150 gal)	✓	
			Fuel tank (4922 L/1,300 gal)		✓
			Fuel filter with separator	✓	
			Heater, fuel recirculation type, non-electric		✓

(continued on next page)

Standard and Optional Equipment (continued)

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Air Cleaner Service Indicator	✓	
Air Conditioner	✓	
Ashtray	✓	
Auxiliary power connection/cigarette lighter	✓	
Coat Hook	✓	
Standard Cab:		
Deluxe operator seat	✓	
Basic companion seat	✓	
Payload Indicator lamps	✓	
Retractable windshield visor	✓	
Deluxe Cab:		
Premium Plus, heated, cooled and ventilated operator seat		✓
Deluxe air suspended trainer seat		✓
Cab cleanout vacuum		✓
Operator footrest		✓
External digital payload displays		✓
Road Analysis Control (RAC)	✓	
Diagnostic connection port	✓	
Dome Courtesy Light	✓	
Electric Engine Control Fault Indicator	✓	
Electric hour meter	✓	
Electric Window (Operator Only)	✓	
Entertainment radio ready: – 5-amp converter, speakers, antenna, and wiring	✓	
Gauge panel: – Air pressure, Brake oil temperature, Engine coolant temperature, Fuel level	✓	
Glass, Tinted	✓	
Heated mirrors, right and left	✓	
Heater/defroster	✓	
Horn	✓	
Insulated and Sound Suppressed	✓	
Integrated Object Detection System:		
Radar and camera	✓	
Camera only (radar ready)		✓
Omission, camera and radar		✓
Product Link™ Elite monitoring system:		
Max payload speed manager	✓	
Cellular radio	✓	
Satellite radio		✓
Seat, operator, air suspended	✓	
Seat, trainer, non-suspended, full-size	✓	
Seatbelt, operator, park brake safety	✓	
Seatbelt, operator, three points, retractable, 75 mm (3 in) wide	✓	

	Standard	Optional
Seatbelt, trainer, two points, retractable, 75 mm (3 in) wide	✓	
Speedometer and tachometer	✓	
Supplemental steering (automatic)	✓	
Steering Wheel, Tilt, Padded, Telescopic	✓	
Storage Compartment	✓	
Transmission gear indicator	✓	
VIMS™ Keypad	✓	
VIMS Message Center with Universal Gauge	✓	
Windshield Wiper and Washer	✓	
Windshield Visor, Retractable	✓	

RIMS AND WHEELS

Rim mounting arrangements for Standard and Quick Change rims		✓
Standard 29" x 57" rims with 6" high flange		✓
Quick Change 29" x 57" rims with 6" high flange		✓
Rim diffuser		✓
Rim mounting guard		✓

OTHER EQUIPMENT

24-volt starting receptacle (for air start)		✓
Air Line Dryer (2)	✓	
Automatic Lubrication System (Lincoln)	✓	
Body Mounting Group	✓	
Dumping, Auxiliary Quick Connect for "Buddy Dumping"	✓	
Heated body exhaust package		✓
Hub odometer (km)		✓
Portable fire extinguisher		✓
Powered access stairway		✓
Reservoirs (Separate):		
Brake/Hoist	✓	
Steering/Fan	✓	
Transmission/Converter	✓	
Rock Ejectors	✓	
Stairway access, 600 mm (24 in)	✓	
Steering, Auxiliary Quick Connect for Towing	✓	
Tie Down Eyes	✓	
Tow Hooks, Front	✓	
Tow Pin, Rear	✓	
Vandalism Protection Locks	✓	
VIMS Dataports (2)	✓	
Walkway and Handrail for Rear Cab Access		✓
Wheel chocks		✓
Working at heights package		✓

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

© 2026 Caterpillar
All rights reserved

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

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

TELQ0260 (05-2026)
(Afr-ME, Asia Pacific, CIS,
China, Hong Kong, Korea,
Taiwan, India, Indonesia,
LACD, Pacific Island, SE Asia)

