

Product Specifications For 773 (05)



Operating Specifications

Nominal Payload Class (100%)	59.1 t
Top Speed - Loaded	67.8 km/h

Engine

Engine Model	Cat® 3412E
Rated Engine Speed	2000 r/min
Gross Power - SAE J1995:2014	567 kW
Net Power - SAE J1349:2011	537 kW
Number of Cylinders	12
Torque Rise	33 %
Bore	137 mm
Stroke	152 mm
Displacement	27 l
Note (1)	These engine ratings apply at 2,000 rpm when tested under the specified condition for the specified standard in effect at the time of manufacture.
Note (2)	Power rating conditions based on standard conditions of 25° C (77° F) and 99 kPa (29.32 in Hg) dry barometer, using 35° C (95° F) API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30° C (86° F) [reference fuel density of 838.9 g/L (7.001 lb/gal)].

Note (3) Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.

Note (4) No engine derating required up to 3048 m (10,000 ft).

Note (5) Meets China Nonroad Stage III emission standards equivalent to Tier 2.

Weights - Approximate

**Target Gross Machine
Operating Weight** 99300 kg

Operating Weight - Empty 40192 kg

Operating Weight - Loaded 59108 kg

Note (1) Does not include Liner.

Note (2) Empty operating weight may vary based on the machine configuration. Refer to Off-Highway Truck Payload Policy.

Cab

**ROPS Standards
(1)** Rollover Protective Structure (ROPS) for cab offered by Caterpillar meets ISO 3471:2008 for operator and ISO 13459:2012 for trainer.

FOPS Standards Falling Objects Protective Structure (FOPS) meets ISO 3449:2005 Level II FOPS criteria for operator and ISO 13459:2012 Level II criteria for trainer.

Note (1) The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.4 kg (5.29 lbs) of refrigerant, which has a CO₂ equivalent of 3.43 metric tonnes (3.78 tons).

Tires

Standard Tire 24.00-R35 (E4)

Note (1) Productive capabilities of the 773 truck are such that, under certain job conditions, TKPH (TMPH) capabilities of standard or optional tires could be exceeded and, therefore, limit production.

Note (2) Caterpillar recommends the customer evaluate all job conditions and consult the tire manufacturer for proper tire selection.

Sound

Sound Standards ISO 6393:2008, SAE J1166:2008

Note (1) For cab offered by Caterpillar, the operator sound exposure Leq (Equivalent Sound Pressure Level) is 80 dB(A) when measured according to work cycle procedures specified in SAE J1166:2008. This occurs when the cab is properly installed and maintained. The test was conducted with doors and windows closed.

Note (2) 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.

Capacity - Dual Slope - 100% Fill Factor

Struck 26.6 m³

Heaped 2:1 (SAE) 35.2 m³

Note (1) ISO 6483:1980

Note (2) Contact your local Cat dealer for body recommendation.

Weight Distributions - Approximate

Front Axle - Empty 46.6 %

Front Axle - Loaded 33.8 %

Rear Axle - Empty 53.4 %

Rear Axle - Loaded 66.2 %

Transmission

Forward - 1 10.8 km/h

Forward - 2	15.1 km/h
Forward - 3	20.4 km/h
Forward - 4	27.4 km/h
Forward - 5	37 km/h
Forward - 6	50 km/h
Forward - 7	67.8 km/h
Reverse	13.1 km/h

Note Maximum travel speeds with standard 24.00R35 (E4) tires.

Final Drives

Differential Ratio	3.64:1
Planetary Ratio	4.8:1
Total Reduction Ratio	17.48:1

Brakes

Brake Surface - Front	1395 cm ²
Brake Surface - Rear	61269 cm ²
Brake Standards	ISO 3450: 2011

Service Refill Capacities

Fuel Tank	700 l
Cooling System	122 l
Differential - Final Drives	155 l

Steering Tank	34 l
Steering System - Including Tank	60 l
Torque Converter - Brake - Hoist Hydraulic Tank	133 l
Brake Hoist System - Includes Tank	307 l
Torque Converter - Transmission System - Including Sump	72 l
Torque Converter - Transmission System	53 l
Crankcase	68 l

Body Hoists

Pump Flow - High Idle	562 l/min
Relief Valve Setting - Raise	17225 kPa
Relief Valve Setting - Lower	3445 kPa
Body Raise Time - High Idle	9.5 s
Body Lower Time - Float	12.5 s
Note (1)	Twin, two-stage hydraulic cylinders mounted outside the main frame; double acting cylinders in second stage.
Note (2)	Power raise in both stages and power down in second stage.

Suspension

Effective Cylinder Stroke - Front	234 mm
Effective Cylinder Stroke - Rear	149 mm

Rear axle - Oscillation

8.1 °

Approximate Weights - Dual Slope

Chassis 30219 kg

Gross Vehicle 99300 kg

Steering

Turning Diameter - Front 22 m

Steering Standards Steering Standards Meets ISO 5010:2007

Steer Angle 31 °

Turning Circle - Clearance Diameter 25 m

Dimensions

Height - Top of ROPS 4000 mm

Overall Body Length 8535 mm

Inside Body Length 6400 mm

Overall Length 9120 mm

Wheel Base 4191 mm

Rear Axle - Tail 2782 mm

Ground Clearance 566 mm

Dump Clearance 676 mm

Loading Height - Empty 3773 mm

Inside Body Depth - Maximum 1805 mm

Overall Height - Body Raised	8787 mm
Operating Width	5076 mm
Centerline Front Tire Width	3275 mm
Engine Guard Clearance	667 mm
Overall Canopy Width	4393 mm
Outside Body Width	3910 mm
Inside Body Width	3658 mm
Front Canopy Height	4393 mm
Rear Axle - Clearance	591 mm
Centerline of Rear Dual Tire Width	2927 mm
Overall Tire Width	4457 mm

773 (05) Standard Equipment

NOTE

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

Powertrain

Cat® 3412E HEUI™ engine: 12-cylinder diesel, air-to-air aftercooler (ATAAC), hydraulic electronic unit injection, air filter with precleaner (2), automatic cold mode idle control, turbocharger (2)

Extended life coolant to -35° C (-30° F)

Transmission: 7-speed automatic power shift with ICM control, body upshift inhibitor, controlled throttle shifting, directional shift management, downshift inhibitor, neutral coast inhibitor, neutral start switch, programmable top gear/speed selection, reverse neutralizer during dumping, reverse shift inhibitor

Electrical

Alarm, backup

Alternator, 115 ampere

Batteries, maintenance-free, 12V (2), 190 amp-hour

Electrical system, 24V

Brakes

Caliper disc (front)
Oil disc (rear)
Parking
Secondary

Cab, ROPS

Air filter service indicator
Air system pressure gauge
Insulated and sound-suppressed
Ashtray and cigarette lighter
Audiovisual seat belt reminder
Camera System
Sun visor
Coat hook, cup holder
Coolant temperature gauge
Diagnostic connection port
Engine overspeed indicator
Entertainment radio ready: speakers, antenna, wiring harness
Hoist lever
HVAC
Left side power window
Load counter, automatic: Advisor display
Mirrors, left and right
Right side access door
ROPS cab, insulated/sound suppressed
Seat, Cat Comfort, full air suspension and retractable four-point seat belt with shoulder harness
Seat, trainer with lap belt
Throttle lock
Tinted, laminated glass
Transmission oil temperature gauge

Gauges

Transmission gear indicator
Air pressure
Brake oil temperature
Coolant temperature
Fuel
Hour meter, electric
Odometer
Speedometer
Tachometer

Lighting System

Backup light (halogen)

Dome/courtesy light
Directional signals/hazard warning (front and rear LED)
Headlights (LED) with dimmer
Hazard lights (LED)
Stop/tail lights, LED

Reservoirs (Separate)

Brake/hoist
Steering
Transmission/torque converter

Technology Products

Product Link™

Other

Airline dryer
Body down indicator
Body mounting group
Body safety pin (secures body in up position)
Center-mounted rims
Driveline guards, operator safety vandalism protection lock
Engine crankcase guards
Ground level battery disconnect
Ground level grease fittings
Hydro pneumatic suspension at front and rear
Parts manual — digital (QR)
Rock ejectors
Supplemental steering, automatic

773 (05) Optional Equipment

Powertrain

Auto retarder control (ARC)
Traction Control System (TCS)
IBC (ARC &TCS)

Cab, ROPS

Fog lamp
Heated mirrors

Technology Products

Vital Information Management System (VIMS™)
Truck Payload Management System (TPMS)

Other

Automatic lubrication system
Body liner
Body sideboards
Cluster/grouped lubrication system
Cold weather package
Exhaust Muffler
Fast fluid fill system
Fire extinguisher
Fuel system, Fast fill
Guard, Turbocharger
Oil change system — high speed
Spare rim
Wheel Chocks