

# Cat<sup>®</sup> 772 Off-Highway Truck

Your long-term success is our goal here at Caterpillar, so we've developed our Cat<sup>®</sup> 772 Off-Highway Truck to be more productive and economical for our customers for years to come. Equipped with productive transmission controls, the 772 is built for heavy-duty, off-road applications and delivers quick haul cycles with automotive-quality shifting and comfort. The 772 is also built with a Cat C18 diesel engine, and with our fuel saving strategies, you can adjust engine power to meet your specific needs. Ideal pass match options for the 772 are the Cat 986K or the 988K Wheel Loader and the 390F L Hydraulic Excavator. When you consider its fuel efficiency and performance, the 772 is the right off-highway truck for all generations.

### **Achieve Greater Productivity**

- Haul your materials faster with an accelerated travel speed.
- Put more power to the ground with increased torque.
- Enjoy greater productivity while using a more responsive traction control system (TCS).
- Reduce tire wear with maximum traction by engaging TCS early in the slip.
- Strong, predictable performance helps operators achieve the lowest cost per ton.

# **Boost Fuel Efficiency**

- Up to 11% less fuel consumption.
- Advanced productivity electronic control system (APECS) allows the engine and transmission to communicate on a high level. This communication allows the machine to better utilize the power and torque the engine is producing.
- Automatically optimize fuel consumption with the adaptive economy mode feature, which reduces fuel use without affecting productivity and can be engaged with a single button.
- Gain improvements in fuel efficiency with auto neutral idle.
- Haul your 772 Off-Highway Truck at a more fuel-efficient engine speed and gear selection with speed limiting.
- Conserve fuel with integrated engine idle shutdown by the engine automatically initiating when the truck is in park and idle for a preset amount of time.

## **Designed for Safety**

- Improvements in accessibility with safe, ground-level access to fuel fill and daily maintenance points.
- Ensure three points of contact when entering and exiting the machine with strategically placed walkways and grab rails.
- Superior brake performance meets the latest brake standards ISO 3450:2011.
- The ground-level engine shutoff switch stops all fuel to the engine when activated and shuts down the machine safely.
- Sturdy 4-point mounted cabin meets rollover protective structure/ falling objects protective structure (ROPS/FOPS) standard.
- 4-point seat belt provides enhanced safety to the operator.
- Seat belt indicator implements both visual and audible alerts to the operator when seat belt is not fastened.
- Lockout features help the service technician to perform maintenance work on the machine with safe mode.
- Secondary steering activates automatically in case of primary system failure.
- Overload speed limiter works with truck payload system to reduce machine speed automatically when the truck is overloaded.

# Work in Comfort

- Completely redesigned cab for a whole new standard in visibility, comfort, and productivity.
- The new operator seat placement provides easier operation and comfort to the operator.
- Improvements in enlarged views of the work area and its surroundings.
- Access connectivity and decrease clutter with more storage areas in the newly designed cab.
- Automatic cab temperature controls.
- Cat next-generation deluxe seat for better operator comfort.



## **Technology That Gets Work Done**

- Integrated systems give you the ability to make timely, fact-based decisions to maximize efficiency, improve productivity, and lower costs.
- Gain valuable insight into how your machine is performing by continuously monitoring and collecting vital machine data via the advisor display with the software Vital Information Management System (VIMS™). Applicable to both U.S. EPA Tier 4 Final/ EU Stage V and U.S. EPA Tier 2 equivalent.
- Truck production management system (TPMS) provides accurate weighing of the materials, stores 2,400 payload cycles, and reports on haul cycle times and distances with date and time stamps.
- External payload indicator lights alert the loader when to stop, reducing the risk of machine overloading.
- Product Link<sup>™</sup> system connects to each machine wirelessly, allowing you to monitor location, hours, fuel use, productivity, idle time, and diagnostic codes.
- VisionLink<sup>®</sup> wirelessly connects you to your equipment, giving you access to essential information you need to know to run your business.
- The Cat 772 is MineStar<sup>™</sup> ready and includes Cat Product Link Elite and VIMS to help optimize equipment management, remote monitoring capabilities, machine availability, and component life while reducing both repair costs and the risk of catastrophic failure.
- Tons kilometers per hour/tons miles per hour (TKPH/TMPH) tire management system works with TPMS for improved tire life.

### **Reduced Maintenance Cost and Other Costs**

- Grouped service points.
- Control particulate matter (PM) with two engine-mounted diesel oxidation catalyst canisters. (Tier 4)
- NOx reduction system (NRS) technology replaces a portion of intake air with exhaust gas to control combustion temperatures and NOx production. (Tier 4)
- Parts commonality with other Cat equipment.
- Resolve problems before failure occurs with VIMS notifications.
- Torque converter stall (autostall) enables quick operating temperatures for best performance life.
- All LED lights provide longer life, brighter light, consume less power, and are more resistant to vibration or water damage.

## **Application Versatility**

- Get the right body option dual slope, flat floor, or quarry for your material and jobsite needs.
- For haul profiles including steep slopes, an optional dual slope body is available offering excellent material retention.
- The flat floor body is perfect for metering material, especially when feeding the crusher.
- Optimize your body life by selecting a liner package best suited for your application. We offer steel liners that work for most applications as well as rubber liners for extreme applications.

## **Standard and Optional Equipment**

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

|  | Standard     | Optional     |
|--|--------------|--------------|
| POWERTRAIN   |              |              |
| Air filter with precleaner (1)   | ✓            |              |
| Air-to-air aftercooler (ATAAC)   | √            |              |
| Automatic cold mode idle control   | ✓            |              |
| Auto neutral idle  | ✓            |              |
| Auto stall   | ✓            |              |
| Braking system, hydraulic actuated: automatic<br>retarder control (ARC) (utilizes rear oil-cooled,<br>multiple disc brakes), brake release motor<br>(towing), caliper-disc (front), extended life<br>brakes, oil-cooled – multiple disc (rear), parking,<br>secondary, service   | √            |              |
| Brake wear indicator (Tier 4/Stage V)  | $\checkmark$ |              |
| Brake wear indicator (Tier 3 and Tier 2)   |              | $\checkmark$ |
| Cat C18 diesel engine  | $\checkmark$ |              |
| Cat engine brake   |              | $\checkmark$ |
| Electric start   | $\checkmark$ |              |
| Engine idle shutdown   | $\checkmark$ |              |
| Second gear start  | $\checkmark$ |              |
| Transmission – 7-speed automatic powershift with<br>electronic clutch pressure control with advanced<br>productivity electronic control strategy (APECS),<br>body up-shift inhibitor, controlled throttle shifting,<br>directional shift management, downshift inhibitor,<br>neutral start switch, neutral coast inhibitor,<br>reverse shift inhibitor, reverse neutralizer during<br>dumping, programmable top gear selection | v            |              |
| Turbocharger   | $\checkmark$ |              |
| ELECTRICAL   |              |              |
| Alarm, backup  | $\checkmark$ |              |
| Batteries, maintenance-free, 12V (2),<br>190 amp-hour  | $\checkmark$ |              |
| Lighting system: backup light, directional<br>signals/ hazard warning (front and rear LED),<br>LED headlights with dimmer, operator access<br>courtesy lights  | √            |              |
| OPERATOR ENVIRONMENT   |              |              |
| Advisor display  | ✓            |              |
| Air conditioning   | ✓            |              |
| Diagnostic connection port, 24V  | ✓            |              |
| Entertainment radio ready: 5 amp converter,<br>speakers, antenna, wiring harness   | ~            |              |
| Fluid level monitoring (Tier 4 only)   | ✓            |              |
| Fluid level monitoring (Tier 3/2 only)   |              | ✓            |
| Gauges/indicators: service indicator – electronic,   | $\checkmark$ |              |

Gauges/indicators: service indicator – electronic, brake oil temperature gauge, coolant temperature gauge, hour meter, tachometer, engine overspeed indicator, fuel level, speedometer with odometer, transmission gear indicator

|   | Standard     | Optional     |
|---|--------------|--------------|
| <b>OPERATOR ENVIRONMENT (CONTINUED)</b>   |              |              |
| Lights, halogen   |              | $\checkmark$ |
| Mirrors   | $\checkmark$ |              |
| Mirrors, heated   |              | ~            |
| Power port, 12V   | $\checkmark$ |              |
| Visibility package (WAVS)   |              | $\checkmark$ |
| Rollover protective structure (ROPS) cab, insulated/sound suppressed                  | $\checkmark$ |              |
| Seat, full air suspension, 4-point seat belt with shoulder harness                    | $\checkmark$ |              |
| Steering wheel – padded, tilt, and telescopic   | $\checkmark$ |              |
| Throttle lock   | $\checkmark$ |              |
| Windshield wiper (intermittent) and washer  | $\checkmark$ |              |
| TECHNOLOGY PRODUCTS   |              |              |
| Product Link™   |              | $\checkmark$ |
| Product Link ready  | $\checkmark$ |              |
| Traction control system (TCS)   |              | $\checkmark$ |
| Economy modes, standard and adaptive  | $\checkmark$ |              |
| OTHER   |              |              |
| Lube/auto lube  | $\checkmark$ |              |
| Body: flat floor, quarry, dual slope  |              | ✓            |
| Body heat/diverter box  |              | ✓            |
| Body down indicator   | $\checkmark$ |              |
| Body sideboards/liner   |              | ✓            |
| Clustered lube  | $\checkmark$ |              |
| Coolant heater  |              | ✓            |
| Ether aid   |              | $\checkmark$ |
| Extended life coolant to -35° C (-30° F)  | $\checkmark$ |              |
| Fan, hydraulic demand   | $\checkmark$ |              |
| Fuel heater   |              | $\checkmark$ |
| Fuel tank (530 L/140 gal)   | $\checkmark$ |              |
| Ground level battery disconnect   | $\checkmark$ |              |
| Ground level engine shutdown  | $\checkmark$ |              |
| Reservoirs (separate): brake/converter/hoist, steering, transmission/torque converter | $\checkmark$ |              |
| Rock ejectors   | $\checkmark$ |              |
| Suspension, front and rear  | √            |              |
| Spare rims  |              | ~            |
| Wheel chocks  |              | ~            |
| Vandalism protection locks  | $\checkmark$ |              |

#### **Technical Specifications**

| Engine – U.S. EPA Tier 4 Final/EU Stage V |                      |                       |  |
|---|----------------------|-----------------------|--|
| Engine Model                              | Cat <sup>®</sup> C18 |                       |  |
| Rated Engine Speed                        | 1,700                | rpm                   |  |
| Gross Power – SAE J1995:2014              | 451 kW               | 605 hp                |  |
| Net Power – SAE J1349:2011                | 410 kW               | 550 hp                |  |
| Net Power – ISO 9249:2002                 | 410 kW               | 550 hp                |  |
| Engine Power – ISO 14396:2002             | 446 kW               | 598 hp                |  |
| Net Torque – SAE J1349:2011               | 3012 N·m             | 2,221 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 1,700 rpm when tested under the specified condition for the specified standard.

• Net power advertised is the power available at the flywheel when the engine is

equipped with fan at minimum speed, air intake system, exhaust system, and alternator. 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).

• Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.

| Engine – U.S. EPA Tier 3/EU Stage IIIA or<br>U.S. EPA Tier 2/EU Stage II |          |                       |  |  |
|--|----------|-----------------------|--|--|
| Engine Model   | Cat (    | C18                   |  |  |
| Rated Engine Speed   | 1,800    | rpm                   |  |  |
| Gross Power – SAE J1995:2014   | 446 kW   | 598 hp                |  |  |
| Net Power – SAE J1349:2011   | 415 kW   | 557 hp                |  |  |
| Net Power – ISO 9249:2002  | 421 kW   | 565 hp                |  |  |
| Net Power – 80/1269/EEC  | 421 kW   | 565 hp                |  |  |
| Engine Power – ISO 14396:2002  | 435 kW   | 583 hp                |  |  |
| Net Torque – SAE J1349:2011  | 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.
- Net power advertised is the power available at the flywheel when the engine is
- equipped with fan at minimum speed, air intake system, exhaust system, and alternator. • 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).
- · Emits equivalent to U.S. EPA Tier 3 and EU Stage IIIA, or U.S. EPA Tier 2 and EU Stage II.

| Transmission – Tier 4 Final/Stage V |           |          |           |           |          |
|-------------------------------------|-----------|----------|-----------|-----------|----------|
| Forward 1                           | 12.8 km/h | 8.0 mph  | Forward 5 | 43.3 km/h | 26.9 mph |
| Forward 2                           | 17.5 km/h | 10.9 mph | Forward 6 | 58.4 km/h | 36.3 mph |
| Forward 3                           | 23.7 km/h | 14.7 mph | Forward 7 | 79.1 km/h | 49.2 mph |
| Forward 4                           | 31.9 km/h | 19.8 mph | Reverse   | 16.8 km/h | 10.4 mph |
|                                     |           |          |           |           |          |

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

| Transmission – Tier 3 and 2 Equivalent |           |          |           |           |          |
|--|-----------|----------|-----------|-----------|----------|
| Forward 1                              | 12.8 km/h | 7.9 mph  | Forward 5 | 43.1 km/h | 26.8 mph |
| Forward 2                              | 17.4 km/h | 10.8 mph | Forward 6 | 58.2 km/h | 36.1 mph |
| Forward 3                              | 23.7 km/h | 14.7 mph | Forward 7 | 78.9 km/h | 49.0 mph |
| Forward 4                              | 31.8 km/h | 19.8 mph | Reverse   | 16.7 km/h | 10.4 mph |

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

| Capacity – Dual Slope                   | - 100% Fill F       | actor                |
|---|---------------------|----------------------|
| Struck                                  | 23.9 m <sup>3</sup> | 31.3 yd <sup>3</sup> |
| Heaped (SAE 2:1)                        | 31.2 m <sup>3</sup> | 40.8 yd <sup>3</sup> |
|   |                     |                      |
| Capacity – Flat Floor                   | – 100% Fill Fa      | actor                |
| Struck                                  | 23.9 m <sup>3</sup> | 31.3 yd <sup>3</sup> |
| Heaped (SAE 2:1)                        | 31.3 m <sup>3</sup> | 40.9 yd <sup>3</sup> |
|   |                     |                      |
| Capacity – Quarry Body                  | y — 100% Fill       | Factor               |
| Struck                                  | 23.7 m <sup>3</sup> | 31.0 yd <sup>3</sup> |
| Heaped (SAE 2:1)                        | 31.0 m <sup>3</sup> | 40.6 yd <sup>3</sup> |
|   |                     |                      |
| Suspens                                 | sion                |                      |
| Empty to loaded cylinder stroke – Front | 234 mm              | 9.2 in               |
| Empty to loaded cylinder stroke – Rear  | 149 mm              | 5.8 in               |
| Rear Axle Oscillation                   | 8.9°                |                      |
|   |                     |                      |

| Sound – Tier 4 Final/Stage V         |           |  |
|--------------------------------------|-----------|--|
| Operator Sound Level (ISO 6396:2008) | 78 dB(A)  |  |
| Machine Sound Level (ISO 6395:2008)  | 118 dB(A) |  |

- · The operator sound pressure level is measured according to the test procedures and conditions specified in ISO 6396:2008 for the standard machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.
- The machine sound power level is measured according to the test procedures and conditions specified in ISO 6395:2008 for the standard machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.

| Sound – Tier 3 and 2 Equivalent      |           |
|--------------------------------------|-----------|
| Operator Sound Level (ISO 6396:2008) | 81 dB(A)  |
| Machine Sound Level (ISO 6395:2008)  | 117 dB(A) |

- The operator sound pressure level is measured according to the test procedures and conditions specified in ISO 6396:2008 for the standard machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.
- The machine sound power level is measured according to the test procedures and conditions specified in ISO 6395:2008 for the standard machine configuration. The measurement was conducted at 70% of the maximum engine cooling fan speed.

#### **Air Conditioning System**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.2 kg (4.84 lb) of refrigerant which has a CO<sub>2</sub> equivalent of 3.15 metric tonnes (3.467 tons).

| Steering                          |        |         |  |
|-----------------------------------|--------|---------|--|
| Steering Standards 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 |  |

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