Engine

Model Caterpillar® 3034

Net Flywheel Power 44 kW 59 hp
Gross Power 47 kW 63 hp

Rated Operating Capacities:
- 35% tipping load 732 kg 1614 lb
- 50% tipping load 1046 kg 2306 lb
Operating Weight 3460 kg 7628 lb
Ground Pressure 30 kPa 4.3 psi
Caterpillar® 257 Multi Terrain Loader

High performance, compact machine delivers exceptional versatility, flotation, traction and stability over a wide range of terrains.

**High Performance Power Train**
Cat® 3034 engine provides high engine horsepower and torque, allowing part-throttle operation for lower sound and fuel consumption. An exclusive anti-stall feature delivers maximum power to the drive train and work tools without stalling the engine. **pg. 4**

**Rubber Track Undercarriage**
Low ground pressure, stability, high traction, fast travel and suspension allow the Cat 257 to excel in a wide range of applications and ground conditions. **pg. 5**

**Ease of Operation**
Operator comfort and ease of operation are designed into the operator’s station from every aspect. Ergonomic features such as low-effort joystick controls, comfortable, padded armrest and an adjustable contoured seat reduce operator fatigue. Excellent visibility to the work tools helps enhance productivity. **pg. 6**

Built for Versatility and Productivity
The 257 Multi Terrain Loader, with its suspended rubber track undercarriage, vertical lift linkage and many work tool options, is ideal for use in construction, landscaping, agriculture and other applications. It is designed to deliver traditional Cat reliability and durability with excellent productivity, even in tough working conditions.
**Vertical Lift Loader Linkage**
Higher lift, longer reach and near-vertical lift path make the 257 ideal for a wider range of truck loading, material handling and stockpiling applications. Exceptionally strong and durable linkage is also excellent for digging and other earthmoving applications.  

**Quick Coupler & Work Tools**
A universal work tool interface and quick coupler help make the 257 the most versatile machine on the jobsite. Auxiliary hydraulic power for work tools is standard. Add the wide range of Cat Work Tools for maximum utility and production.  

**Serviceability**
The 257 offers quick and easy routine maintenance and service. The rear door opens 90 degrees and the cooling package tilts up out of the way for unparalleled access to the engine compartment. The rubber track undercarriage uses sealed and tapered bearings to minimize maintenance requirements. 

**Customer Support**
Caterpillar Dealers offer unmatched customer support, with excellent warranty programs and fast parts availability, resulting in maximum uptime and minimum repair costs. Equipment maintenance services help optimize machine performance and reliability. They include:

- Customer Support Agreements
- S・O・S oil analysis
- Maintenance contracts
- Scheduled technical inspections

Equipment management services help optimize profits. They include assistance with:

- Machine and work tool selection
- Rental and leasing
- Purchase and financing
- Owning and operating cost management
Power Train

*Caterpillar hystat power train delivers aggressive performance and easy operation.*

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*Caterpillar 3034 engine* provides high engine horsepower and robust flywheel torque.

**Closed-loop, high-output hydrostatic system** and exclusive anti-stall system deliver maximum torque to the tracks. Dual, closed-loop, axial piston hydrostatic pumps are driven directly off the engine. The pumps provide pressure and flow to two fixed displacement motors which provide power to the final drive motors that drive the tracks.

**High-displacement, high-torque hydrostatic motor** has integral brake and no service points.

**Standard throttle controls** include both a hand throttle and a foot control. The hand control allows setting a constant engine speed, whereas the foot control allows modulation of engine speed. The foot control can help conserve fuel and lowers noise emissions while enabling optimum engine output at all times.

**Parking brake** is spring-applied and hydraulically released.

**Reliability is built in to ensure years of trouble-free operation.** The hydraulic system is cleaned to a level exceeding industry standards and the machine is tested to deliver the performance and reliability customers expect from Caterpillar.
Unique Rubber Track Undercarriage with Suspension

Provides exceptional flotation, traction and stability with minimal pressure on the ground.

- **The rubber track undercarriage transfers machine weight** to the ground through 24 wheeled contact points. Machine weight is evenly distributed throughout the track.
- Traction is dramatically increased;
- Low ground pressure and high flotation keep the machine working in soft or wet underfoot conditions;
- Track tread is designed to provide optimal gripping traction while preventing surface damage;
- Track life is increased and track guiding is improved;
- Ideal for applications where soil compaction should be avoided.

**Large ground contact area** helps maximize traction and minimize ground pressure. Tracks measure 381 mm/15 in. wide. Length of track on ground measures 1499 mm/59 in.

**Elevated internal positive track drive** keeps drive components away from ground debris. The sprocket is fitted with replaceable roller sleeves that mesh with molded rubber lugs inside the track for smooth operation. Track lugs travel on the outer edge of the undercarriage roller wheels to ensure proper tracking and to help prevent derailment.

**Rugged, durable rubber track** is lightweight and pliable, yet reinforced with high tensile strength cords. Edges of the track are beveled to help prevent scuffing or damage when maneuvering on sod, turf and other sensitive surfaces. No steel is used in the track to prevent excess weight and corrosion.

**Heavy-duty torsion axles suspend each side of the undercarriage from the machine frame.** These axles absorb most of the shock to the undercarriage, machine and operator - especially over rough conditions. That means smooth travel even at higher speeds. It also leads to better load retention and higher productivity.
**Operator’s Station**

_**Ergonomic design provides a comfortable working environment.**_

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**Cab.** The Cat Multi Terrain Loader’s ergonomic cab is designed to make operation easy and comfortable. Getting in and out of the cab through the wide cab opening is made even easier with three-point grab irons and skid-resistant steps. Tilt cylinders (two) are neatly located on the loader arms to not interfere with operator access and egress. The entire cab tilts rearward to provide excellent service access to the machine’s main hydraulic components.

**Standard Equipment.** The standard equipment for the Cat Multi Terrain Loader include:
- ROPS/FOPS cab;
- Static seat with fore/aft adjustment and retractable seat belt;
- Arm rests;
- Hand and foot throttle controls;
- Dome light;
- Rear wall liner;
- Overhead instrument panels;
- Pilot hydraulic control system.

**Cab Options.** A deluxe cab package includes a suspension seat, headliner, horn and additional working lights. A cold weather package includes sliding side windows, cab heater, engine coolant heater, a 950 CCA battery and a debris barrier. A cab door with a wiper/washer is also available.

**Hydraulic Joystick Controls.** Like Caterpillar Skid Steer Loaders and Hydraulic Excavators, the 257 Multi Terrain Loader is controlled by two pilot-operated joysticks. The right lever controls the machine’s loader functions and the left lever controls machine direction and speed.

**Operation.** The joystick controls are simple and easy to use. They use an “S” pattern for precise control of machine movement, loader arm lift and tilt. The operator can run the engine at a constant speed with the hand throttle control or use the foot throttle to vary engine speed throughout operation. Both throttle controls are standard. An optional fourth function control is also available for work tools such as side-shift cold planers or angle brooms.

**Auxiliary Hydraulics.** ON/OFF auxiliary hydraulics are standard for work tool operation. Proportional auxiliary hydraulics are optionally available. Proportional auxiliary hydraulics allow the operator to vary hydraulic flow to work tools.

**Instrument Panels.** Two instrument panels are located in the upper-right and upper-left hand corners of the cab to help maximize visibility.
**Vertical Lift Linkage**
The 257 provides high lift height, extended reach and a near-vertical lift path.

**Vertical Lift Linkage** - The 257 offers higher lift, longer reach and a near-vertical lift path. Two additional links per side allow the loader arms to move forward during the lift cycle, providing fifty-five percent more reach when fully raised. When lowered, reach is the same as conventional loaders to maintain good ride characteristics during loaded carry.

Loader arms are designed to handle heavy loads without twisting or bending. Combined with the high-traction rubber track undercarriage and anti-stall power train, the 257 is also an exceptional digging and earthmoving machine.

Caterpillar’s vertical lift linkage provide a substantially straight load path into the machine, offer good visibility to the work tool and protect tilt cylinders and associated hydraulic lines.

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**Quick Coupler**
Mechanical quick coupler enables fast and easy tool changes.

**Quick Coupler** - Work Tools can be changed quickly and easily with the machine’s integral mechanical quick coupler system. The universal coupler interface features:
- Opposing wedges ensure a tight tool fit, even after years of use;
- Rugged design and large contact area absorbs loads and minimizes stress;
- Tool engagement and release are quick and easy;
- Vertical pins are chrome-plated and lubricated for smooth engagement and prevention of corrosion;
- Coupler allows excellent visibility to work tools and unobstructed entry and exit to the cab.

All Cat Work Tools incorporate an interface that matches the machine’s integral quick coupler, allowing the operator to quickly change from one high performance work tool to another.
Work Tools

Choose from a wide variety of tools that are performance matched to Multi Terrain Loaders.

Cat Work Tools for Multi Terrain Loaders extend the versatility of the machines. Built for performance and durability, these tools deliver high productivity, long service life and excellent value:

- Angle blades
- Augers
- Brooms
- Buckets:
  - general purpose
  - grapple
  - light material
  - multi purpose
  - utility
- Cold planers
- Compactor, vibratory
- Hammers
- Landscape rake
- Landscape tiller
- Material handling arm
- Pallet forks
- Stump grinder

Most Cat Work Tools for Skid Steer Loaders are compatible and interchangeable with the 257 and other Cat Multi Terrain Loaders. See your Cat dealer for details.
Serviceability
Quick access and superior design make the 257 easy to maintain.

**Service Access.** The rear service door opens 90 degrees for easy access to both sides of the in-line (lengthwise) mounted engine.

**Filters.** All filters are easily accessible and vertically-mounted which makes routine service quicker and virtually spill-free.

**Cooling System.** The radiator, hydraulic oil cooler and grill tilt up to increase access to the cooling system during maintenance and allows easier cleaning of debris from between the grill and cooling package. The cooling fan is hydraulically driven for quieter operation and to eliminate the service and maintenance that comes with belt-driven fans.

**Tilting Cab.** The machine cab tilts rearward and is held in place by a self-latching mechanism. When the cab is tilted back, all hydraulic pumps, motors, valves, lines and the fuel tank are accessible for easier service.

**Maintenance Points** are grouped in easily accessible locations.

**Scheduled Oil Sampling (S•O•S) valves** are standard to allow regular monitoring of the engine and hydraulic oil quality.

**Other Standard Service Features:**
- Simplified track tensioning;
- Easy access to battery, air filter and single engine belt;
- Sight glass on hydraulic tank and radiator allow quick, easy level checks;
- Ecology drains simplify changing engine and hydraulic oils;
- Grease fittings are countersunk to prevent damage;
- Extended life coolant and 500-hour engine oil change intervals.
Engine
Caterpillar 3034 naturally aspirated, watercooled, four-stroke cycle, four-cylinder diesel.

Power Train and Brakes
Dual, closed-loop, axial piston hydrostatic pumps driven directly off engine. Pumps provide pressure and flow to two fixed displacement motors.

| Feature | Single, hydraulically operated joystick controls speed and direction |
| Feature | Anti-stall system maximizes torque to the tracks without stalling engine |
| Feature | Hydrostatic service brakes |
| Feature | Multi-disc, spring-applied hydraulically released parking brake |

Rated operating capacities:
- SAE J818 rating, 35% tipping load: 732 kg (1614 lb)
- SAE J818 rating, 50% tipping load: 1046 kg (2306 lb)

Operating weight: 3460 kg (7628 lb)

Ground contact area: 1.14 m² (1770 in²)

Ground pressure: 30 kPa (4.3 psi)

Tipping load: 2091 kg (4610 lb)

Breakout force, lift cylinder: 1583 kg (3490 lb ft)

Breakout force, tilt cylinder: 1602 kg (3532 lb ft)

*SAE J818 MAY87, ISO 5998:1986 define operating capacities of rubber-tired skid steer loaders (50% tipping load) and tracked loaders (35% tipping load). There are no standards defining the operating capacities of machines equipped with a suspended undercarriage or machines with rubber tracks.

Loader Hydraulic System
Open center, fixed displacement.

Output at 2600 rpm and 23,000 kPa (3300 psi) is 83 l/min (22 gpm) with SAE 10W oil at 66°C (150°F).

| Feature | Single, hydraulically operated joystick controls lift, lower and tilt functions |

Hydraulics, auxiliary, front, ON/OFF

Caterpillar 3034 engine meets the EPA and projected EU Stage I emissions requirements through 2004.

Cab
Rollover Protective Structure (ROPS) and Falling Objects Protective Structure (FOPS).
- ROPS meets SAE J1040 MAY94 and ISO 3471:1994
- FOPS meets SAE J1043 SEP87 and ISO 3449:1992 Level I
- FOPS Level II meets SAE J231 JAN81 and ISO 3449:1992 Level II (optional)

Standard Equipment
Standard equipment may vary. Consult your Caterpillar Dealer for specifics.

Instrumentation:
- Audible:
  - engine coolant temperature
  - engine oil pressure
  - hydraulic oil temperature
- Gauges:
  - fuel level
  - hour meter, digital
- Indicators:
  - air filter restriction
  - alternator output
  - engine coolant temperature
  - engine oil pressure
  - hydraulic filter restriction
  - hydraulic oil temperature
  - parking brake engaged

Air cleaner, dual element, radial seal
Alternator, 55-amp
Armrest, pull down
Battery, 12-volt, 650 CCA
Brake, parking, SAHR
Controls, pilot-operated, hydraulic
Coupler, mechanical, quick
Engine, Cat 3034 diesel
Falling Object Protective Structure, Level I
Fan, hydraulically-driven
Filter, fuel, bayonet-type
Filter, hydraulic, spin-on, 5 micron
Fuel/water separator, spin-on
Hydraulics, auxiliary, front, ON/OFF

Muffler, spark arresting
Precleaner, self-unloading
Pump, hydraulic implement
Pump, hystat charge and hydraulic fan
Rubber track undercarriage with 381 mm/15 in. wide rubber track
Scheduled Oil Sampling (S•O•S) valves
Seat, static
Seat belt, retractable, 50 mm (2 in.)
Starting aid, glow plugs
Support, lift arm
Switch, ignition
Tail lights
Throttle controls, hand and foot
Tie-downs, front and rear
Valve, hydraulic, three-section
Windows, top and rear
**Optional Equipment**

- Alarm, back up
- Battery, 12-volt, 950 CCA
- Control, work tool, electrical
- Debris barrier for cab
- Door, front, laminated glass with wiper/washer
- Door, front, polycarbonate, with wiper/washer, for demolition use
- Falling Object Protective Structure, Level II
- Headliner
- Heater, cab
- Heater, engine coolant
- Horn
- Hydraulics, auxiliary, front, proportional
- Hydraulics, self leveling, lift

**Service Refill Capacities**

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