



# Cat<sup>®</sup> 277D

## MULTI TERRAIN LOADER

### FEATURES:

The Cat<sup>®</sup> 277D Multi Terrain Loader, with its radial lift design, delivers impressive mid-lift reach and excellent digging performance with outstanding drawbar power. Its standard, suspended undercarriage system provides superior traction, flotation, speed and ride quality with very low ground pressure and minimal ground disturbance across a wide range of underfoot conditions. The 277D features the following:

- **Industry leading sealed and pressurized cab option** provides a cleaner and quieter operating environment with excellent work tool visibility.
- **Available high-back, heated, air ride seat with seat mounted adjustable joystick controls** makes the D Series the industry leader in operator comfort.
- **High performance power train** provides maximum performance and production capability through the Electronic Torque Management system, standard two speed travel and an electronic hand/foot throttle with decel pedal capability.
- **High Flow XPS hydraulic system** is available for applications that demand maximum hydraulic work tool performance.
- **Electronically controlled Cat C3.3B engine** provides high horsepower and torque while meeting U.S. EPA Tier 4 Final (EU Stage IIIB) emission standards.
- **Cat "Intelligent Leveling" system (ILEV)** provides industry leading technology, integration and optional features such as dual direction self level, work tool return to dig and work tool positioner.
- **Standard dual level suspension undercarriage** combined with the optional Speed Sensitive Ride Control system provides better load retention, improved operator comfort and one of the smoothest rides in the industry. The dual suspension undercarriage features oscillating roller wheel assemblies that independently pivot to provide maximum track on the ground.
- **Maximize machine capability and control** with optional Advanced Display providing on-screen adjustments for response, hystat response and creep control. Also features multi-language functionality with customizable layouts, security system and rearview camera.
- **Ground level access** to all daily service and routine maintenance points helps reduce machine downtime for greater productivity.
- **Broad range of performance matched Cat Work Tools** make the Cat Multi Terrain Loader the most versatile machine on the job site.

## Specifications

### Engine

Engine Model	Cat C3.3B DIT (turbo)	
Gross Power SAE J1995	55.4 kW	74.3 hp
Net Power SAE 1349	54.4 kW	72.9 hp
Net Power ISO 9249	54.9 kW	73.7 hp
Peak Torque at 1,500 rpm SAE J1995	265 N·m	195 lbf·ft
Displacement	3.3 L	203 in <sup>3</sup>
Stroke	120 mm	4.7 in
Bore	94 mm	3.7 in

### Weights\*

Operating Weight	4215 kg	9,293 lb
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### Power Train

Travel Speed (Forward or Reverse):		
One Speed	8.3 km/h	5.2 mph
Two Speed	12.9 km/h	8.0 mph

\*Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, two speed, OROPS, 1981 mm (78 in) dirt bucket, standard flow hydraulics, mechanical suspension seat, no optional counterweights and manual quick coupler (unless otherwise noted).

### Hydraulic System

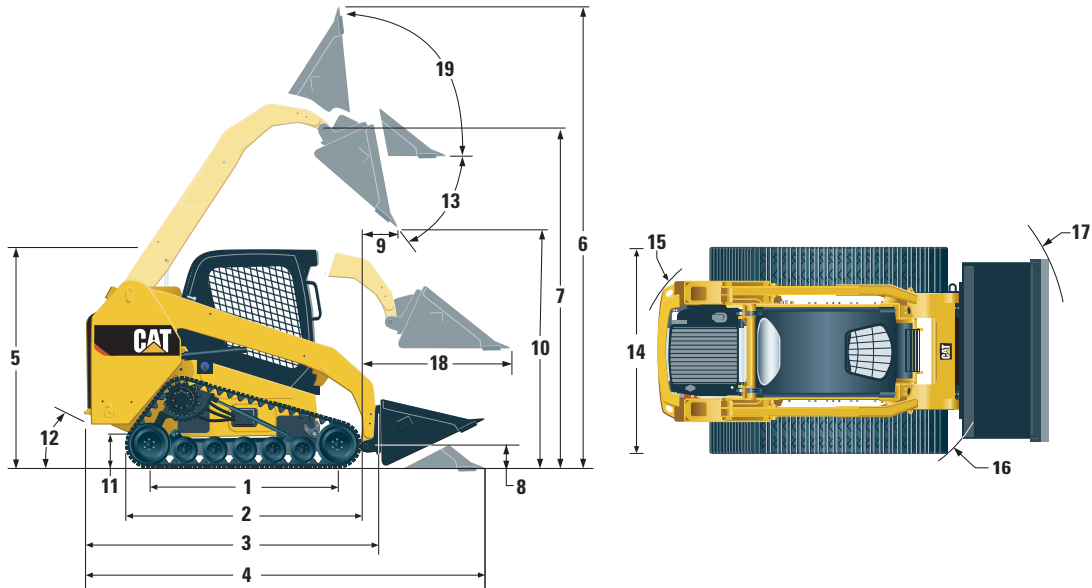
Hydraulic Flow – Standard:			
Loader Hydraulic Pressure	23 000 kPa	3,335 psi	
Loader Hydraulic Flow	86 L/min	23 gal/min	
Hydraulic Power (calculated)	33 kW	44 hp	
Hydraulic Flow – High Flow XPS:			
Maximum Loader Hydraulic Pressure	28 000 kPa	4,061 psi	
Maximum Loader Hydraulic Flow	121 L/min	32 gal/min	
Hydraulic Power (calculated)	57 kW	76 hp	

### Operating Specifications\*

Rated Operating Capacity:			
35% Tipping Load	1045 kg	2,303 lb	
50% Tipping Load	1492 kg	3,290 lb	
Rated Operating Capacity with Optional Counterweight			
Tipping Load	1505 kg	3,540 lb	
Breakout Force, Tilt Cylinder	2985 kg	6,580 lb	
Breakout Force, Tilt Cylinder	3304 kg	7,285 lb	
Ground Contact Area	1.65 m <sup>2</sup>	2,561 in <sup>2</sup>	
Ground Pressure	25.0 kPa	3.6 psi	



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## Dimensions\*

1 Length of Track on Ground	1807 mm	71.1 in	11 Ground Clearance	226 mm	8.9 in
2 Overall Length of Track	2285 mm	90.0 in	12 Departure Angle		38°
3 Length without Bucket	2995 mm	117.9 in	13 Maximum Dump Angle		39°
4 Length with Bucket on Ground	3714 mm	146.2 in	14 Vehicle Width	1981 mm	78.0 in
5 Height to Top of Cab	2113 mm	83.2 in	15 Turning Radius from Center – Machine Rear	1713 mm	67.4 in
6 Maximum Overall Height	4052 mm	159.5 in	16 Turning Radius from Center – Coupler	1493 mm	58.8 in
7 Bucket Pin Height at Maximum Lift	3174 mm	125.0 in	17 Turning Radius from Center – Bucket	2336 mm	92.0 in
8 Bucket Pin Height at Carry Position	202 mm	8.0 in	18 Maximum Reach with Arms Parallel to Ground	1395 mm	54.9 in
9 Reach at Maximum Lift and Dump	598 mm	23.5 in	19 Rack Back Angle at Maximum Height		94°
10 Clearance at Maximum Lift and Dump	2488 mm	97.9 in			

## Cab

ROPS	ISO 3471:2008
FOPS	ISO 3449:2005 Level I
FOPS Level II	ISO 3449:2005 Level II

## Service Refill Capacities

Cooling System	14 L	3.7 gal
Engine Crankcase	11 L	3.0 gal
Fuel Tank	94 L	24.8 gal
Hydraulic System	52 L	13.7 gal
Hydraulic Tank	39 L	10.3 gal

## Noise Level

Inside Cab**	81 dB(A)
Outside Cab***	103 dB(A)

- Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.

\*\*The declared dynamic operator sound pressure levels per ISO 6396:2008. The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

\*\*\*The labeled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC.

## Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.0 kg of refrigerant which has a CO<sub>2</sub> equivalent of 1.430 metric tonnes.

## MANDATORY EQUIPMENT

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- Hydraulics, Standard or High Flow XPS
- Quick Coupler, Mechanical or Powered
- Seat Belt, 50 mm (2 in) or 75 mm (3 in)

### PERFORMANCE PACKAGES

- Performance Package H1: *Standard Flow Hydraulics (No Self Level)*
- Performance Package H2: *Standard Flow Hydraulics, Dual Direction Electronic Self Level (Raise and Lower), Electronic Snubbing (Raise and Lower)*
- Performance Package H3: *High Flow XPS, Dual Direction Electronic Self Level (Raise and Lower), Electronic Snubbing (Raise and Lower)*

## STANDARD EQUIPMENT

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### ELECTRICAL

- 12 volt Electrical System
- 80 ampere Alternator
- Ignition Key Start/Stop Switch
- Lights: *Gauge Backlighting, Two Rear Tail Lights, Two Rear Halogen Working Lights, Two Adjustable Front Halogen Lights, Dome Light*
- Backup Alarm
- Heavy Duty Battery, 880 CCA

### OPERATOR ENVIRONMENT

- Gauges: *Fuel Level, Hour Meter*
- Operator Warning System Indicators: *Air Filter Restriction, Alternator Output, Armrest Raised/Operator Out of Seat, Engine Coolant Temperature, Engine Oil Pressure, Glow Plug Activation, Hydraulic Filter Restriction, Hydraulic Oil Temperature, Park Brake Engaged, Engine Emission System*
- Adjustable Vinyl Seat
- Fold in Ergonomic Contoured Armrest
- Control Interlock System, when operator leaves seat or armrest raised: *Hydraulic System Disables, Hydrostatic Transmission Disables, Parking Brake Engages*
- ROPS Cab, Open, Tilt Up
- FOPS, Level I
- Top and Rear Windows
- Floor Mat
- Interior Rearview Mirror
- 12 volt Electric Socket
- Horn
- Hand (Dial) Throttle, Electronic
- Adjustable Joystick Controls
- Anti-theft Security System with 6-button Keypad
- Storage Compartment with Netting

## OPTIONAL EQUIPMENT

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- Hand-Foot Style Controls
- External Counterweights
- Beacon, Rotating
- Engine Block Heater – 120V
- Oil, Hydraulic, Cold Operation
- Paint, Custom
- Heavy Duty Battery, 1,000 CCA
- Product Link PL641, Cellular

### COMFORT PACKAGES

- Open ROPS (C0): *Static Seat (No Foot Throttle, Headliner, Heater or Door)*
- Open ROPS (C1): *Foot Throttle, Headliner, Cup Holder, and choice of Seat (Mechanical Suspension or High Back, Heated, Air Ride Seat) (No Heater or Door)*
- Enclosed ROPS with Heater (C2): *Foot Throttle, Headliner, Heater and Defroster, Side Windows, Cup Holder, Radio Ready, choice of Seat (Mechanical Suspension or High Back, Heated, Air Ride Seat) and Door (Glass or Polycarbonate)*
- Enclosed ROPS with A/C (C3): *C2 + Air Conditioner*

### POWER TRAIN

- Cat C3.3B, Turbo Diesel Engine, Meeting U.S. EPA Tier 4 Final (EU Stage IIIB) Emission Standards
- Air Cleaner, Dual Element, Radial Seal
- S-O-S<sup>SM</sup> Sampling Valve, Hydraulic Oil
- Filters, Cartridge-type, Hydraulic
- Filters, Cartridge-type, Fuel and Water Separator
- Radiator/Hydraulic Oil Cooler (side-by-side)
- Spring Applied, Hydraulically Released, Wet Multi Disc Parking Brakes
- Hydrostatic Transmission, Two Speed Travel
- Suspension – Independent Torsion Axles (4) and Oscillating Bogie Wheels
- Rubber Track 457 mm (18 in)

### OTHER

- Engine Enclosure, Lockable
- Extended Life Antifreeze, -37° C (-34° F)
- Machine Tie Down Points (6)
- Support, Lift Arm
- Hydraulic Oil Level Sight Gauge
- Radiator Coolant Level Sight Gauge
- Radiator, Expansion Bottle
- Cat ToughGuard™ Hose
- Auxiliary, Hydraulics, Continuous Flow
- Heavy Duty, Flat Faced Quick Disconnects with Integrated Pressure Release
- Split D-Ring to Route Work Tool Hoses Along Side of Left Lift Arm
- Electrical Outlet, Beacon
- Belly Pan Cleanout
- Variable Speed Demand Fan
- Product Link™ PL240, Cellular

- Speed Sensitive Ride Control
- Advanced Display: Full Color, 5 in LCD screen, Advanced Multi-operator Security System, On-screen Adjustments for Implement Response, Hystat Response, and Creep Control; Rearview Camera Ready
- Advanced Display: Rearview Camera Included
- Work Tool Return to Dig and Work Tool Positioner
- Bluetooth Radio with Microphone (AM/FM/Weather Band Receiver with USB and Auxiliary Input Jack)

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AEHQ7016-04 (03-2017)  
Replaces AEHQ7016-03  
(NACD, EU)

