

Cat[®] 297D2 XHP

MULTI TERRAIN LOADER

FEATURES:

The Cat® 297D2 XHP Multi Terrain Loader, with its vertical lift design, delivers extended reach and lift height for quick and easy truck loading. 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 297D2 XHP 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 Cat Multi Terrain Loaders 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.
- XHP hydraulic system provides high flow and high pressure that delivers industry leading hydraulic horsepower to efficiently run even the most power hungry work tools.

- Electronically controlled Cat C3.8 engine provides high horsepower and torque while meeting U.S. EPA Tier 4 Final/EU Stage IV emission standards.
- Cat "Intelligent Leveling" system (ILEV) provides industry leading technology, integration and features such as dual direction self level, work tool return to dig and work tool positioner.
- Standard dual level suspension undercarriage combined with the 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 the standard Advanced Display providing on-screen adjustments for implement response, HystatTM 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

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Engine Model	Cat C3.8 DI	Cat C3.8 DIT (turbo)	
Gross Power SAE J1995	82 kW	110 hp	
Net Power SAE 1349	79 kW	106 hp	
Net Power ISO 9249	80 kW	107 hp	
Peak Torque at 1,500 rpm SAE J1995	374 N⋅m	276 lbf-ft	
Displacement	3.8 L	232 in ³	
Stroke	120 mm	4.7 in	
Bore	100 mm	3.9 in	

Weights*

Operating Weight	4952 kg	10,918 lb	
Power Train			

Travel Speed (Forward or Reverse):		
One Speed	9.6 km/h	5.9 mph
Two Speed	15.1 km/h	9.4 mph

^{*}Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, two speed, ride control, enclosed cab with glass door, side windows, air conditioning, air ride seat, advanced display, rearview camera, 1,000 CCA battery, dual direction self level, 1981 mm (78 in) dirt bucket, MTL undercarriage and manual quick coupler (unless otherwise noted).

Hydraulic System

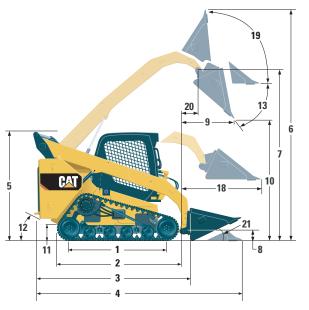
Hydraulic Flow – XHP:				
Maximum Loader Hydraulic Pressure	28 000 kPa	4,061 psi		
Maximum Loader Hydraulic Flow†	150 L/min	40 gal/min		
Hydraulic Power (calculated)	70 kW	94 hp		
Hydraulic Flow – Standard:				
Loader Hydraulic Pressure	23 000 kPa	3,335 psi		
Loader Hydraulic Flow	86 L/min	23 gal/min		
Hydraulic Power (calculated)	33 kW	44 hp		
†When equipped with Cat 400 Series work tools.				

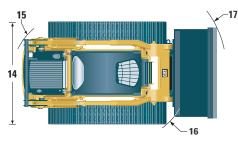
Operating Specifications*

Rated Operating Capacity:			
35% Tipping Load	1524 kg	3,360 lb	
50% Tipping Load	2177 kg	4,800 lb	
Rated Operating Capacity			
with Optional Counterweight	2295 kg	5,060 lb	
Tipping Load	4354 kg	9,600 lb	
Breakout Force, Tilt Cylinder	3387 kg	7,468 lb	
Breakout Force, Lift Cylinder	2754 kg	6,072 lb	
Ground Contact Area	1.65 m ²	2,561 in ²	
Ground Pressure	29.4 kPa	4.3 psi	



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Dimensions*

1	Length of Track on Ground	1807 mm	71.1 in
2	Overall Length of Track	2286 mm	90.0 in
3	Length without Bucket	3201 mm	126.0 in
4	Length with Bucket on Ground	3942 mm	155.2 in
5	Height to Top of Cab	2114 mm	83.2 in
6	Maximum Overall Height	4076 mm	160.5 in
7	Bucket Pin Height at Maximum Lift	3241 mm	127.6 in
8	Bucket Pin Height at Carry Position	200 mm	7.9 in
9	Reach at Maximum Lift and Dump	776 mm	30.5 in
10	Clearance at Maximum Lift and Dump	2445 mm	96.3 in
11	Ground Clearance	223 mm	8.8 in

12 Departure Angle	30°)
13 Maximum Dump Angle	52°	•
14 Vehicle Width	1984 mm	78.1 in
15 Turning Radius from Center – Machine Rear	1864 mm	73.4 in
16 Turning Radius from Center – Coupler	1504 mm	59.2 in
17 Turning Radius from Center – Bucket (racked)	2333 mm	91.8 in
18 Maximum Reach with Arms Parallel to Ground	1260 mm	49.6 in
19 Rack Back Angle at Maximum Height	83°	
20 Bucket Pin Reach at Maximum Lift	387 mm	15.2 in
21 Roll Back Angle	27°)

Cab

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

Service Refill Capacities

Cooling System	16 L	4.1 gal
Diesel Exhaust Fluid (DEF) Tank	19 L	5 gal
Engine Crankcase	13 L	3.5 gal
Fuel Tank	122 L	32.2 gal
Hydraulic System	55 L	14.5 gal
Hydraulic Tank	39 L	10.3 gal

Noise Level

Inside Cab**	83 dB(A)
Outside Cab***	104 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 0.81 kg of refrigerant which has a $\rm CO_2$ equivalent of 1.158 metric tonnes.

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MANDATORY EQUIPMENT

- Quick Coupler, Mechanical or Powered
- Seat Belt, 50 mm (2 in) or 75 mm (3 in)

PERFORMANCE PACKAGE

 Performance Package H3: XHP Hydraulics, Dual Direction Electronic Self Level (Raise and Lower), Work Tool Return to Dig, Work Tool Positioner, Electronic Snubbing (Raise and Lower)

COMFORT PACKAGE

■ Enclosed ROPS with A/C (C3): Foot Throttle, Headliner, Heater and Defroster, Side Windows, Cup Holder, Radio Ready, Air Ride Seat (High Back and Heated) and Door (Glass or Polycarbonate)

STANDARD EQUIPMENT

ELECTRICAL

- 12 volt Electrical System
- 100 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, 1,000 CCA, with Battery Disconnect

OPERATOR ENVIRONMENT

- Gauges: Fuel Level, DEF 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
- High Back Cloth Seat with Air Suspension, Heated with Recline and Lumbar Support and Fully Adjustable Seat Mounted Controls
- 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, Rear and Side Windows
- Floor Mat
- Interior Rearview Mirror
- 12 volt Electric Socket
- Horn
- Hand (Dial) and Foot Throttle, Electronic with Decel Feature
- Advanced Display: Full Color, 127 mm (5 in) LCD Screen, Advanced Multi-operator Security System, On-screen Adjustments for Implement Response, Hystat Drive Response, and Creep Control; Rearview Camera Included
- Storage Compartment with Netting

POWER TRAIN

- Cat C3.8, Turbo Diesel Engine, Meeting Tier 4 Final/Stage IV Emission Standards
- Air Cleaner, Dual Element, Radial Seal
- S.O.SSM 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)
- Speed Sensitive Ride Control

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

OPTIONAL ATTACHMENTS

- Beacon, Rotating
- Engine Block Heater 120V
- Oil, Hydraulic, Cold Operation
- Paint, Custom
- Variable Speed Demand Fan with Reversing Functionality
- External Counterweights
- Product Link PL641, Cellular
- Bluetooth Radio with Microphone (AM/FM/Weather Band Receiver with USB and Auxiliary Input Jack)



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