

Compact Track Loaders (CTL) 279D3 / 289D3



279D



289D3

Compact Track Loaders (CTL)

279D3 Radial Lift

Superior digging performance and mid-lift reach.



279D shown

289D3 Vertical Lift

Extended reach and lift height for material handling and truck loading.



Nimble footprint.
Rapid modification.
Critical comfort.

Dig, reach, lift and load from the industry's most user-centric cab – pressurized and sealed for clean, focused work. Cat® D3 Compact Track Loaders (CTL) deliver resilient, enduring performance, with the ability to quickly adapt to a variety of mission profiles. All on an 88.8" turning radius.

Applications

Counter IED and Mine
Clearing

Route Clearance

Base Camp
Development

General Construction

Modify Environments

Horizontal and
Vertical Construction

For missions requiring as much protection as performance.

Operators performing counter IED operations or clearing rubble to enable mobility can count on 360° protection when inside the cab, as well as technology solutions to increase stand-off distance to threats.

Technology Solutions

Cat® Remote Control

Portable operator console
Range 1,312.34 ft/400 m LOS
Frequency 900 MHz or 2.4 GHz
Remote control indicator lights up and horn sounds during training
Conceal mode for tactical operations

Cat® Remote Control with Vision System

Vision system control box and 4 cameras
2.4 GHz IP radios range 6,561.68 ft/2000 m LOS with video and sound
Vision system tablet displays 4-camera view: front/rear/left/right
Optional: 1 additional camera for custom views

Crew Protection Kit
360° protection from small arms and fragmentation threats
Integrated roof and floor armor
Transparent armor provides visibility



279D with Crew Protection Kit (CPK).



Cab interior with modular CPK.

Military Modifications

- MIL-STD-209K lift and tie downs
- Cab rifle bracket
- Keyless engine start switch
- Crew Protection Kit (CPK)
- Green, tan or commercial paint options
- Military data plates
- S•O•SSM sample port
- C-5, C-17 and C-130 air transportable
- Trailer hitch, standard receiver tube (2 in / 50.8 mm)
- Remote control with vision system (optional)
- NSE (National Security Exemption) engine (optional)
- EU AFE (Armed Forces Engine) (optional)

Consult Caterpillar Defense for specific details on military modifications.

A productive power train no matter the terrain.

Get the engine performance, automatic load leveling and RPM control to move more materials with less operator strain.

Electronically Controlled Cat C3.3B Engine: Provides high horsepower and torque while meeting U.S. EPA Tier 4 Final and EU Stage V emission standards, as well as:

- Tier 2 NSE (National Security Exemption) engine (optional).
- Tier 2 EU AFE (Armed Forces Engine) (optional).

Cat Intelligent Leveling (ILEV) System: Automate the heavy lifting.

- Electronic Dual Self Leveling maintains load level during lifting or lowering.
- Electronic Snubbing cushions lift arm descent before stopping.
- Return to Dig feature allows operator presets for digging angles with automatic recall.
- Work Tool Positioner designates individual tool presets for work angles with automatic recall when machine is repositioned.

Electronic Dial-Type Throttle: Dial to high-idle and the foot throttle functions as a decelerator pedal, allowing quick adjustment of travel speed during precise maneuvers or to regulate engine speed. Engage the throttle-smoothing feature to provide a steadier, more even travel speed over rough terrain.



289D3 with General Purpose Bucket with teeth.

A suspended undercarriage extends durability while improving ride quality.

The Cat Compact Track Loaders feature the industry's only standard, fully suspended undercarriage with a steel embedded rubber track.

Heavy-duty torsion axles absorb most of the shock to the undercarriage, machine and operator. Travel is smoother. Material retention is greater. Mission productivity is greater. Choose bar or block style tread to optimize ride, traction, flotation and ground disturbance for your application.

Outstanding Structural Integrity For Every Mission

- Highly durable and easily maintained components.
- Rigid support the entire width of the track via steel imbeds.
- Continuously wound cables secure imbeds and ensure the track does not stretch.
- Elevated external positive drive system clears drive components of ground debris.
- Planetary final drive motors improve torque and drawbar performance, delivering more power to the ground.
- Steel rollers with metal face seals provide maximum protection for wheel bearings.
- Simple recoil grease tensioning system adjusts to operating conditions, providing only the hydraulic flow required for improved fuel efficiency.



289D3 with Industrial Bucket.

High performance hydraulics.

Maximum power and reliability are built into the Cat hydraulic system to help you get the job done faster. The hydraulic system features outstanding lift and breakout forces. The standard demand fan provides improved fuel efficiency and increased horsepower.

Speed sensitive ride control system delivers a smoother ride on uneven terrain for superior comfort, higher speed operation and better material retention.

Hydraulic System Features

- High flow XPS for maximum work tool performance
- Two speeds for increased productivity
- Speed sensitive ride control

More physical space. More mental rigor.

The Cat D3 CTL Series sets the standard in operator comfort, with a wide, spacious interior and uncluttered floor to help you focus and respond.

- One piece, modular design provides a premium sealed and pressurized cab for cleaner and quieter working environment.
- High back, heated, air ride seat with seat-mounted joystick controls for added comfort (option).
- Clear sight lines provide excellent visibility.
- Air conditioner and heater for greater comfort in all climates (option).
- Ample leg room.
- Selectable Pattern Control which allows the operator to select the control pattern they are most familiar with for greater productivity (option).

Useful, legible, customizable data display.

Set and store machine performance for up to 50 individual operator codes. Measuring 5 in / 127 mm, the Cat D3 LCD display panel is extremely easy to read. Access on-screen adjustments to working parameters and preferences such as implement response adjustment, drive response adjustment, creep setting, ride control activation speed, top speed limit setting, language, background color and gauge display style.

Display Panel Features:

- Built-in security system prevents unauthorized machine usage.
- Integrated rearview camera enhances job site visibility.
- Displays dedicated information and control screens for Smart Attachments



All run time. Minimal down time.

Beyond lifting and loading, your Cat CTL will saw, trench, till, grind, hammer and more with quick-hitch attachments that fulfill whatever the mission demands.

Quick Couplers

Work tools can be changed quickly and easily with standard quick couplers that feature manual engagement and disengagement using two high leverage handles. The optional electric quick coupler allows the operator to quickly change tools without leaving the cab.

Smart Attachments

Plug-and-play recognition between the machine and attachment adapts the joystick controls to match specific Smart Attachments. Dedicated information and control screens can be accessed in the Advanced Display, making complex attachments easy to set up and use from the comfort of the cab.

Attachments	
Augers	Backhoes
Blades (Angle, Dozer)	Buckets (General Purpose, High Capacity, Dirt, Utility, Light Material, Multi-purpose, Industrial Grapple, Utility Grapple)
Brooms (Angle, Pickup, Utility)	Brushcutters
Cold Planers	Forks (Pallet, Industrial Grapple, Utility Grapple, Utility)
Hydraulic Hammers	Landscape Tillers
Landscape Rakes	Material Handling Arm
Mulchers	Power Box Rakes
Sectional Snow Push	Shear
Snow Blower	Stump Grinders
Trenchers	Vibratory Compactor
Wheel Saws	



Grapple Fork.



Dozer Blade.



Utility Broom.



Backhoe.

Support and Serviceability

OEM Diagnostic Capability

With the 279D3 and 289D3, military units benefit from the industry-leading OEM diagnostics capability. These sophisticated electronic control modules monitor all major machine systems and conveniently displays that information to the operator in the cab.

Easy to maintain. Ready for work.

Proper maintenance of your CTL will keep it running at peak performance with minimal downtime. The 279D3 and 289D3 offer easy to access maintenance points and other convenient serviceability features, allowing more work to be done at a lower cost.



Engine compartment.

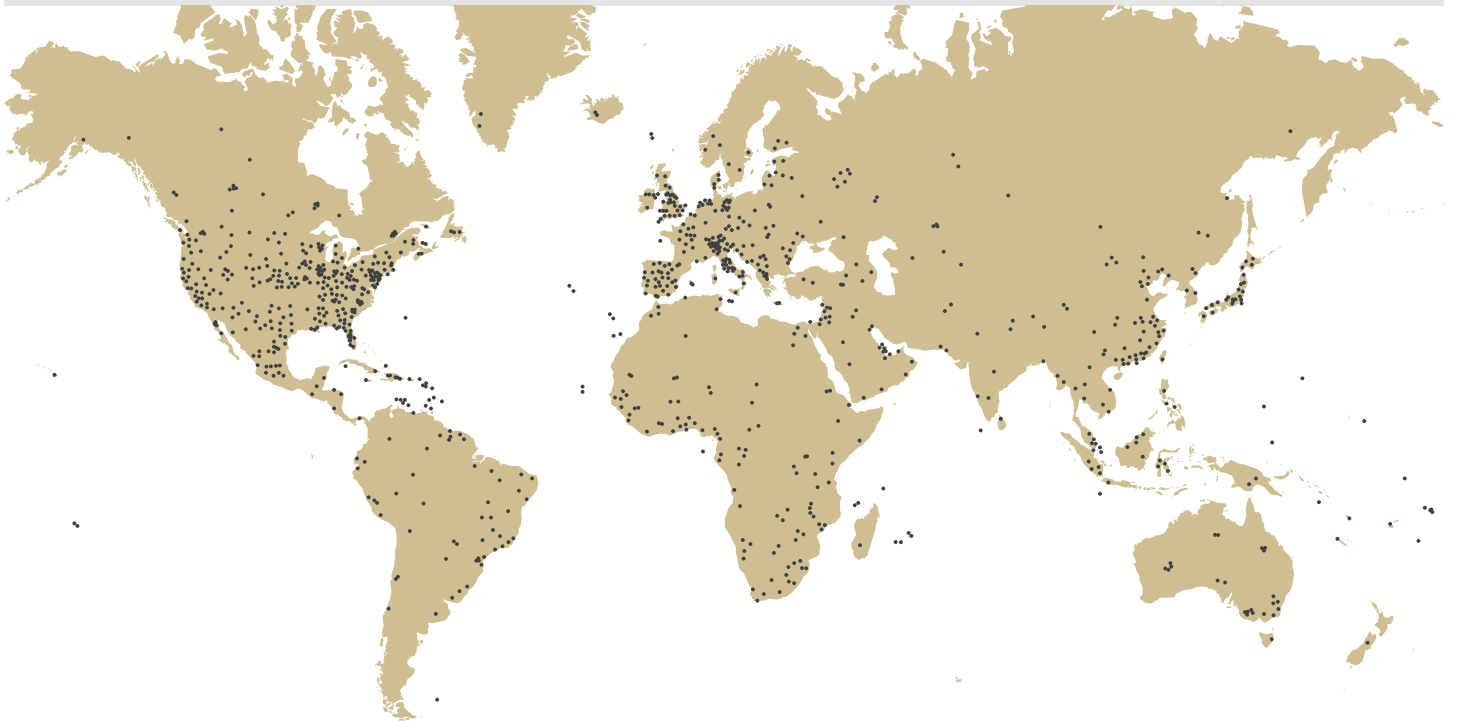
Hydraulic service center	Electric service center
Well-protected, easily visible sight gauges	Ground level maintenance points
Easy access to engine compartment	Ecology drains for simple and clean fluid drainage
Maintenance-free batteries	Compartment test ports
Airborne debris-resistant, swing-out grill provides more efficient airflow	

Worldwide Service Capabilities

Cat dealer field service technicians have the experience and tools necessary to service your machine on-site. Field service trucks are fully loaded with state-of-the-art tools and diagnostic equipment, as well as specifications and schematics for every Cat machine. Technical experts at the dealership and the Caterpillar team are available to provide assistance to field service technicians. When on-site repair isn't enough, Cat dealerships are fully-equipped to service your compact track loader quickly.

Dealer Support

The Caterpillar global network of dealers is the best in the world at providing support to keep your CTL up and running. With over 99% of customer orders shipped the same day, Cat dealers are partners in support.



Lift Linkage Comparison

Choose one of two heavy-duty lift designs according to the working conditions and job profile.



279D3 Radial Lift

Delivers excellent digging performance and superior mid-lift reach.



289D3 Vertical Lift

Provides extended reach and lift height for material handling or quick and easy truck loading.

Operating Specifications

Engine

MODEL	Cat® C3.3B Turbocharged Diesel
Gross Power SAE J1995 (hp/kW)	74.3 / 55.4
Net Power SAE 1349 (hp/kW)*	72.9 / 54.4
Net Power ISO 9249 (hp/kW)*	73.7 / 54.9
Peak Torque @ 1,500 rpm SAE J1995 (lb-ft/Nm)	195 / 265
Displacement (in³/L)	203 / 3.3
Stroke (in/mm)	4.7 / 120
Bore (in/mm)	3.7 / 94

* Net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler/after-treatment and cooling fan.

Weights†

Operating Weight	279D3	289D3
Without Armor (lb/kg)	9,893 / 4487	10,688 / 4848
With Armor (lb/kg)	10,988 / 4984	11,783 / 5345
Rated Capacity (lb/kg)	2,935 / 1331	4,130 / 1880

† Operating Weight, Operating Specifications and Dimensions all based on 165 lb/75 kg operator, all fluids, two speed, OROPS, 80 in/2036 mm low profile bucket, 17.7 in/450 mm tracks, dual flange front idler/single flange rear idler, standard flow hydraulics, mechanical suspension seat, no optional counterweights and manual quick coupler (unless otherwise noted).

Power Train

Travel Speed (Forward or Reverse)	
One Speed (mph/km/h)	4.5 / 7.2
Two Speed (mph/km/h)	8.3 / 13.3

Hydraulic System

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

Operating Capacities

Rated Capacity	279D3	289D3
35% Tipping Load (lb/kg)	2,220 / 1010	2,890 / 1315
50% Tipping Load (lb/kg)	3,170 / 1445	4,130 / 1880
With Optional Counterweight (lb/kg)	3,390 / 1540	4,370 / 1985
Tipping Load (lb/kg)	6,345 / 2885	8,255 / 3750
Breakout Force, Tilt Cylinder (lb/kg)	7,285 / 3304	7,291 / 3307
Ground Contact Area, 17.7 / 450 mm in Track (in²/m²)	2,272 / 1.47	2,272 / 1.47
Ground Pressure, 17.7 / 450 mm in Track (psi/kPa)	4.4 / 30.4	4.7 / 32.2

Service Refill Capacities

Cooling System (gal/L)	3.7 / 14
Engine Crankcase (gal/L)	3 / 11
Fuel Tank (gal/L)	27.7 / 105
Hydraulic System (gal/L)	13.7 / 52
Hydraulic Tank (gal/L)	10.3 / 39

Noise Level

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

• 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.

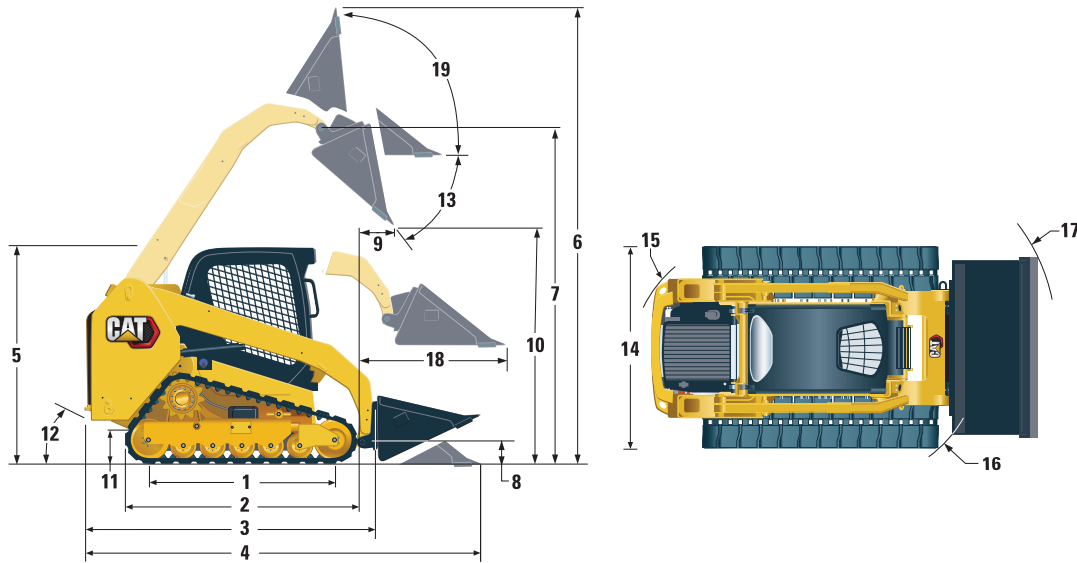
Cab

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

Air Conditioning System (if equipped)

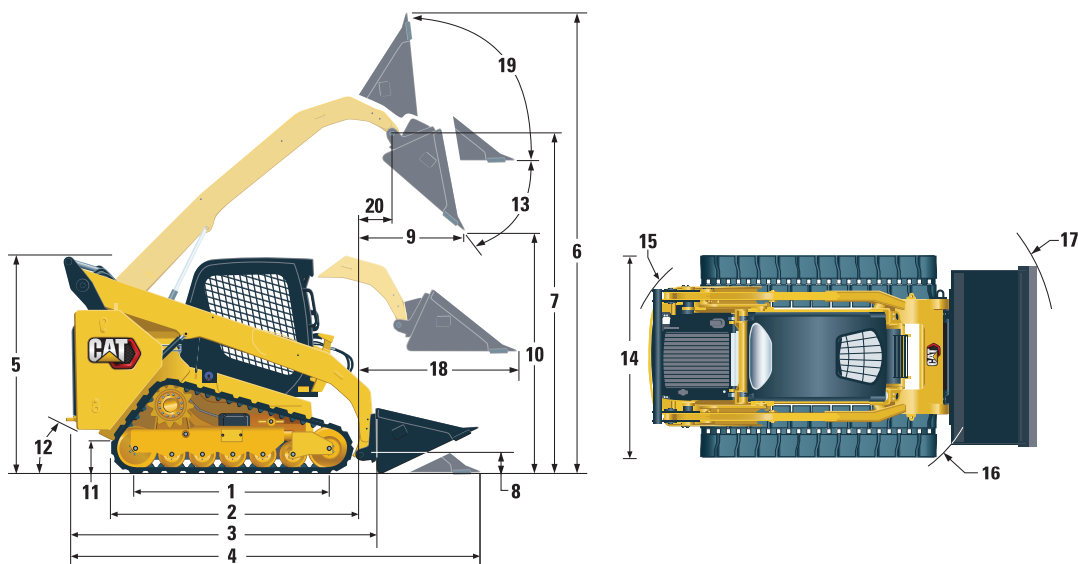
The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.2 lb/1.0 kg of refrigerant which has a CO₂ equivalent of 3,152.61 lb/1.430 metric tonnes.

Dimensions



279D3 - Radial Lift

1) Length of Track on Ground (in/mm)	64.2 / 1630
2) Overall Length of Track (in/mm)	83.8 / 2129
3) Length without Bucket (in/mm)	117.9 / 2995
4) Length with Bucket on Ground (in/mm)	146.2 / 3714
5) Height to Top of Cab (in/mm)	83.2 / 2113
6) Maximum Overall Height (in/mm)	159.5 / 4051
7) Bucket Pin Height at Maximum Lift (in/mm)	124.9 / 3173
8) Bucket Pin Height at Carry Position	7.8 / 198
9) Reach at Maximum Lift and Dump	22.6 / 575
10) Clearance at Maximum Lift and Dump	97.8 / 2485
11) Ground Clearance	8.9 / 226
12) Departure Angle (°)	32°
13) Maximum Dump Angle (°)	39°
14) Vehicle Width - 17.7 in/450 mm tracks (in/mm)	78 / 1981
15) Turning Radius from Center - Machine Rear (in/mm)	70.7 / 1796
16) Turning Radius from Center - Coupler (in/mm)	55.5 / 1410
17) Turning Radius from Center - Bucket (in/mm)	88.8 / 2256
18) Maximum Reach with Arms Parallel to Ground (in/mm)	54 / 1373
19) Rack Back Angle at Maximum Height (°)	84°



289D3 - Vertical Lift

1) Length of Track on Ground (in/mm)	64.2 / 1630
2) Overall Length of Track (in/mm)	83.8 / 2129
3) Length without Bucket (in/mm)	117.9 / 2995
4) Length with Bucket on Ground (in/mm)	146.2 / 3714
5) Height to Top of Cab (in/mm)	83.2 / 2113
6) Maximum Overall Height (in/mm)	158.1 / 4015
7) Bucket Pin Height at Maximum Lift (in/mm)	125.1 / 3178
8) Bucket Pin Height at Carry Position	7.5 / 190
9) Reach at Maximum Lift and Dump	30 / 761
10) Clearance at Maximum Lift and Dump	94.0 / 2387
11) Ground Clearance	8.9 / 226
12) Departure Angle (°)	33°
13) Maximum Dump Angle (°)	51°
14) Vehicle Width - 17.7 in/450 mm tracks (in/mm)	78 / 1981
15) Turning Radius from Center - Machine Rear (in/mm)	70.7 / 1796
16) Turning Radius from Center - Coupler (in/mm)	55.5 / 1410
17) Turning Radius from Center - Bucket (in/mm)	88.8 / 2256
18) Maximum Reach with Arms Parallel to Ground (in/mm)	50 / 1270
19) Rack Back Angle at Maximum Height (°)	84°
20) Bucket Pin Reach at Maximum Lift (in/mm)	14.5 / 369

Standard Equipment

- Hydraulic, standard or high flow XPS
- Quick coupler, hydraulic
- Steel embedded rubber track, 17.7 in / 450 mm
- Dual flange front idler/single flange rear idler or triple flange front/rear idlers

Power Train

- Cat C3.3B, turbo diesel engine
- Air cleaner, dual element, radial seal
- S•O•SSM sampling valve, hydraulic oil
- Filters, cartridge-type, hydraulic
- Filters, canister-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)

Electrical

- 12 volt electrical system
- 80 ampere alternator
- Ignition key start/stop switch
- Lights:
 - Gauge backlighting
 - Two rear tail lights
 - Two rear LED working lights
 - Two adjustable front LED lights
 - Dome light
- Backup alarm
- Heavy duty battery, 1000 CCA, disc switch

Operator Environment

- Seat belt, 3 in/76 mm
- Suspension seat, vinyl or cloth
- Enclosed ROPS with A/C (C3): C2 + air conditioner
- 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
- Fold in ergonomic contoured armrest
- Control interlock system, when operator leaves seat or armrest is raised:
 - Hydraulic system disables
 - Hydrostatic transmission disables
 - Parking brake engages
- ROPS, cab, open, tilt up
- FOPS, level I
- Top and rear windows
- Headliner, deluxe
- Floor mat
- Interior rear view mirror
- USB electric socket
- Horn
- Hand (dial) throttle, electronic
- Adjustable joystick controls
- Anti-theft security system with 6-button keypad
- Storage compartment with netting

Other Standard Equipment

- Engine enclosure, lockable
- Extended life antifreeze: -34° F/-37° C
- 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

Comfort Packages Options

- 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)

Performance Packages Options

- Performance Package H1: Standard Flow Hydraulics (No Self Level)
- Performance Package H2: Standard Flow Hydraulics, Dual Direction Electronic Self Level (Raise and Lower), Work Tool Return to Dig, Work Tool Positioner, and Electronic Snubbing (Raise and Lower)
- Performance Package H3: High Flow XPS, Dual Direction Electronic Self Level (Raise and Lower), Work Tool Return to Dig, Work Tool Positioner, and Electronic Snubbing (Raise and Lower)

Optional Equipment

- Hand-foot style controls
- External counterweights
- Beacon, rotating
- Engine block heater – 120V
- Oil, hydraulic, cold operation
- Paint, custom
- Speed sensitive ride control
- Bluetooth® radio with microphone (AM/FM/ Weather Band receiver with USB and auxiliary input jack)
- Product Link™ PL641, cellular
- Lights:
 - Rear, with Stop/Tail/Turn
 - Roading lights

Optional Attachments

- Augers
- Backhoes
- Blades (Angle, Dozer)
- Buckets (General Purpose, High Capacity, Dirt, Utility, Light Material, Multi-purpose, Industrial Grapple, Utility Grapple)
- Brooms (Angle, Pickup, Utility)
- Brushcutters
- Cold Planers
- Forks (Pallet, Industrial Grapple, Utility Grapple, Utility)
- Hydraulic Hammers
- Landscape Tillers
- Landscape Rakes
- Material Handling Arm
- Mulchers
- Power Box Rakes
- Sectional Snow Push
- Shear
- Snow Blower
- Stump Grinders
- Trenchers
- Vibratory Compactor
- Wheel Saws

Standard equipment may vary.

Consult Caterpillar Defense for details.

All dimensions are approximate and may vary with configuration.

Specific military service configurations are available upon request.

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