

Product Specifications For 420



Engine

Net Power - SAE J1349	92 HP (68 kW) / 103 HP (76 kW)
Displacement	220 in ³
Power Rating Conditions - No De-Rating Required Up To	10000 ft
Ratings at 2,200 rpm - Gross Power ISO 14396	100 hp
Net Torque Rise - 1,400 rpm - SAE J1349	322 ft-lb
Net Peak Power Rating - ISO 9249 at 1,800 rpm	105 hp
Net Power Rating at 2,200 rpm - ISO 9249	91 hp
Engine Model	C3.6 74.5 kW (100 hp) Electronic Turbo Intercooled
Emissions	Engine meets Tier 4 Final/Stage V emission standards.
Ratings at 2,200 rpm - Gross Power SAE J1995	102 hp
Net Torque Rise - 1,400 rpm	47%
Net Power Rating at 2,200 rpm - SAE J1349	92 hp
Dimensions - Bore	3.86 in
Dimensions - Stroke	4.72 in
Net Peak Power Rating @ 1,800 rpm - SAE J1349	105 hp

Backhoe

Dig Depth - Standard	14 ft
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Weights

Operating Weight - Maximum	24251 lb
Cab - ROPS/FOPS	320 lb
Ride Control	33 lb
Air Conditioning	99 lb
Note	Machine configuration: standard stick hoe, OROPS canopy, AWD power shift transmission, 0.96 m ³ (1.25 yd ³) GP loader bucket, 610 mm (24 in) standard duty hoe bucket, 340/80-18 and rear 500/70-24 tires, 240 kg (530 lb) counterweight, 80 kg (176 lb) operator, full fuel tank.
MP Bucket (0.96 m³/1.25 yd³) - Without Fold-Over Forks	1642 lb
Operating Weight - Maximum - ROPS Capacity	24251 lb
MP Bucket (0.96 m³/1.25 yd³) - With Fold-Over Forks	2017 lb
Counterweights, base - Stackable, one	529 lb
Loader QC	540 lb
Operating Weight (estimated)	17271 lb
Counterweights, base	256 lb
Counterweights, base - Maximum	1014 lb

All-Wheel Drive	STD
Power-Shift Transmission	STD
Extendible Stick (excludes ft. counterweight)	595 lb

Hydraulic System

Pump Type	Variable-flow, Axial Piston
System Pressure - Loader	3626 psi
Pump Capacity at 2,200 rpm	49.4 gal/min
System Pressure - Backhoe	3626 psi
Type	Closed Center

Transmission

Power-Shift Transmission - Optional - Reverse - 2nd	7.7 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 2nd	5.8 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 4th	12 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 5th	17 mile/h
Power Shift Transmission - Standard - Reverse - 3rd	17 mile/h
Power-Shift Transmission - Optional - Forward - 3rd	8 mile/h

Power Shift Transmission - Standard - Forward - 3rd	12 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 1st	3.7 mile/h
Power Shift Transmission - Standard - Forward - 2nd	5.8 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 6th LTC*	25 mile/h
Power-Shift Transmission with LTC - Optional - Reverse - 2nd	7.7 mile/h
Power-Shift Transmission with LTC - Optional - Reverse - 1st	3.7 mile/h
Power-Shift Transmission - Optional - Forward - 1st	3.7 mile/h
Power-Shift Transmission - Optional - Reverse - 3rd	17 mile/h
Power-Shift Transmission - Optional - Forward - 6th	25 mile/h
Power-Shift Transmission - Optional - Forward - 4th	12 mile/h
Power Shift Transmission - Standard - Reverse - 2nd	7.7 mile/h
Power Shift Transmission - Standard - Forward - 4th	25 mile/h
Power-Shift Transmission - Optional - Reverse - 1st	3.7 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 6th	25 mile/h

Power Shift Transmission - Standard - Forward - 1st	3.7 mile/h
Power-Shift Transmission - Optional - Forward - 2nd	5.8 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 3rd	8 mile/h
Power-Shift Transmission with LTC - Optional - Reverse - 3rd	17 mile/h
Power Shift Transmission - Standard - Reverse - 1st	3.7 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 5th LTC	18 mile/h
Power-Shift Transmission - Optional - Forward - 5th	17 mile/h
Note (1)	Travel speeds of two wheel drive backhoe loader at full throttle, when equipped with 500/70-24 rear tires.
Note (2)	*Limited by engine speed to 40 km/h (25 mph).

Axle Ratings

Rear Axle - Dynamic	22046 lb
Rear Axle - Static	58422 lb
Front Axle, AWD - Static	51808 lb
Front Axle, AWD - Dynamic	19841 lb

Steering

Turning Circle - (inner wheel not braked) - Outside Front Wheels	26.92 ft
Bore	2.6 in

Axle Oscillation	11°
Type	Front Wheel
Rod Diameter	1.6 in
Turning Circle - (inner wheel not braked) - Outside Widest Loader Bucket	35.25 ft
Stroke	4.2 in
Power Steering	Hydrostatic
Cylinder	One Double-Acting

Service Refill Capacities

Engine Oil - With Filter	2.4 gal (US)
Rear Axle - Planetaries	0.4 gal (US)
Rear Axle	4.2 gal (US)
Cooling System with Air Conditioning	4.8 gal (US)
Hydraulic Tank	11.1 gal (US)
Fuel Tank	42.3 gal (US)
Hydraulic System	25.1 gal (US)
Diesel Exhaust Fluid (DEF)	5 gal (US)
Front Axle (AWD) - Planetaries	0.2 gal (US)
Transmission - Power Shuttle - AWD	4.8 gal (US)
Transmission - Power Shift - AWD	5 gal (US)

Front Axle (AWD)

2.9 gal (US)

Sustainability

Recyclability

92%

420 Standard Equipment

STANDARD EQUIPMENT

Adjustable auxiliary controls, backhoe loader

Air cleaner

Alarm, back-up

Audible system fault alarm

Automatic Engine Speed Control (AESC)

Battery, maintenance-free, 850 CCA

Battery disconnect switch

Boom transport lock

Brace, lift cylinder

Brake, parking, Spring Applied Hydraulically Released (SAHR)

Brakes, hydraulically boosted, oil disc, dual pedals, interlocking

Bucket level indicator

Canopy, ROPS/FOPS

Cat cushion swing system

Coat restraint

Coolant/antifreeze, extended life

Dome light (cab only)

Diagnostic port for engine, machine and gauge cluster Electronic Control Modules

Differential lock, loader joystick

Drink holders, two

Engine, Cat C3.6 (Direct Injection Turbocharged), meets Tier 4 Final/Stage V emission standards, Selective Catalytic Reduction, Diesel Oxidation Catalyst (DOC)

Engine enclosure, sound suppression removal panels

Face seals, O-ring

Fan, suction and guard

Fast reversing shuttle, all gears

Fenders, rear

Filters, spin-on: fuel, engine oil, transmission oil, water separator

Filters, bowl and cartridge: hydraulic fluid

Flashing hazards/signal lights

Floor mat

Four wheel drive

Four wheel drive shaft guard

Fuel tank, fully enclosed

Fully hinged front grill for cooling package cleaning access

Gauge cluster: coolant temperature, fuel level, torque converter temperature, DEF level

Ground level fuel fill and DEF fill

Halogen lights, working (2 front, 2 rear)
High ambient cooling package
Hood lock, inside cab
Hydraulic hose, XT™
Hydraulic oil cooler
Hydraulic oil level sight gauge
Hydraulic valves, loader 2 function
Hydraulic valves, backhoe 4 function
Hydraulics, load sensing with variable displacement piston pump
Indicator lights: wait to start, water in fuel, engine warning, warning lamp, emissions module malfunction
low battery/charging system warning, high hydraulic oil temperature: LCD warnings: engine oil pressure,
machine locked, service due, air filter blocked, high coolant temperature, auto idle shutdown, high torque
converter temperature, hydraulic filter bypass
Instrument panel lights
Joystick controls: pilot operated, excavator-style with pattern changer
Key start/stop system
LCD operator display with soft key controls: engine speed, hour meter, gear/direction, battery voltage,
hydraulic oil temperature, torque converter temperature, coolant temperature, trip totals (fuel and hours),
lifetime totals (fuel and hours), operator settings (units, brightness, programmable hoe auxiliary flow),
service mode diagnostics, maintenance intervals, ECM/system info
Loader, self-leveling, return-to-dig and transmission disconnect switch
Loader, single tilt
Mirror, interior, rearview
One-touch low idle
Open circuit breather
Pattern changer, in cab
Power receptacle, 5 volt USB, 1 internal
Power receptacle, 12 volt, 2 internal, 1 external
Power steering, hydrostatic
Product Link™, satellite, network manager
Product Link, cellular, network manager
Seat belt, retractable, 51 mm (2 in)
Socket, two roof
Stabilizer shoes, street
Steering knob
Seat, air suspension, vinyl cover, with armrest
Stabilizers, EH Control, Auto-UP
Starting system, glow plugs
Steering column, tilting, telescopic
Storage compartment, lockable
Storage tray
Stop and tail lights
Swing transport lock
Tires
Toolbox, external, lockable
Torque converter
Throttle, hand and foot, electronic
Transmission, 4 speed, powershift

Transmission neutralizer switch
Transport tie-downs
Vandalism locks, four
Warning horn, electric

420 Optional Equipment

OPTIONAL EQUIPMENT

Auxiliary hydraulics, loader, adjustable flow
Auxiliary hydraulics, rear, adjustable flow
Battery, additional, 850 CCA
Cab, deluxe
Cold weather fuel (-30° C/-22° F)
Cold weather package, including additional battery, engine block heater, radiator antifreeze, cold weather fuel (-30° C/-22° F) and mounting for an ether bottle
Counterweights, 115 kg (255 lb), 240 kg (530 lb) or 460 kg (1,015 lb)
Fenders, front with integral steps
Guard, boom protection plate
Guard, stabilizer, rock
Hydraulic valves, loader with auxiliary roller thumb control (3rd valve for MP or Quick Coupler)
Hydraulic valves, backhoe (5th and 6th function)
Hydraulic lines, combined function auxiliary
LED lights, working (2 front, 2 rear)
Quick Coupler, hydraulic, dual lock
Quick Coupler, manual, dual lock
Quick Coupler, manual, pin lock
Radio and CD player, Bluetooth®
Ride Control
Rotating beacon, magnetic mount
Seat, air suspension, fabric with armrest
Seat, air suspension, fabric with armrest, heated
Seat belt, retractable, 75 mm (3 in)
Security system, Bluetooth
Security system, operator display
Side mirrors, cab, external
Single Tilt Loader Coupler, Integrated Tool Carrier (IT) Interface
Stabilizer pads, reversible
Stick, extendible
Touch screen LCD Display : engine speed, hour meter, gear/direction, battery voltage, hydraulic oil temperature, torque converter temperature, coolant temperature, trip totals (fuel and hours), lifetime totals (fuel and hours), operator settings (units, brightness, programmable hoe auxiliary flow), service mode diagnostics, maintenance intervals, ECM/system info
Transmission, AutoShift with lock-up torque converter, 6 speed
Vandalism protection, gauge cover
Work Tool Attachments such as buckets, forks, material handling arms, augers, hammers, brooms, cold planers and vibratory plate compactors. See your Cat dealer for more information.