

Product Specifications For 420 XE



Engine

Net Power - SAE J1349	92 HP (68 kW) / 103 HP (76 kW)
Displacement	220 in ³
Engine Model	C3.6 74.5 kW (100 hp) Electronic Turbo Intercooled
Net Power Rating at 2,200 rpm - ISO 9249	91 hp
Power Rating Conditions - No De-Rating Required Up To	10000 ft
Net Torque Rise - 1,400 rpm - SAE J1349	47%
Ratings at 2,200 rpm - Gross Power SAE J1995	102 hp
Ratings at 2,200 rpm - Gross Power ISO 14396	100 hp
Net Power Rating at 2,200 rpm - SAE J1349	92 hp
Net Torque Rise - 1,400 rpm - SAE J1349	322 ft-lb
Emissions	Engine meets Tier 4 Final/Stage V emission standards.
Net Peak Power - 1,800 rpm - ISO 9249	105 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 (General Purpose) loader bucket, 610 mm (24 in) standard duty hoe bucket, front 340/80-18 and rear 500/70-22.40 kg (530 lb) counterweight, 80 kg (176 lb) operator, full fuel tank.
MP Bucket (0.96 m³/1.25 yd³) - With Fold-Over Forks	2017 lb
Operating Weight - Maximum - ROPS Capacity	24251 lb
MP Bucket (0.96 m³/1.25 yd³) - Without Fold-Over Forks	1642 lb
Counterweights, base - Stackable, one	529 lb
Power-Shift Transmission	STD
Extendible Stick (excludes ft. counterweight)	595 lb
Counterweights, base - Maximum	1014 lb
Counterweights, base	256 lb

Loader QC	540 lb
All-Wheel Drive	STD
Operating Weight (estimated)	17271 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 with LTC - Optional - Forward - 2nd	5.8 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 6th LTC*	25 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 5th LTC	18 mile/h
Power Shift Transmission - Standard - Forward - 3rd	12 mile/h
Power Shift Transmission - Standard - Reverse - 2nd	7.7 mile/h
Power-Shift Transmission with LTC - Optional - Reverse - 3rd	17 mile/h
Power-Shift Transmission - Optional - Forward - 2nd	5.8 mile/h

Power-Shift Transmission - Optional - Reverse - 1st	3.7 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 4th	12 mile/h
Power Shift Transmission - Standard - Forward - 1st	3.7 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 5th	17 mile/h
Power-Shift Transmission - Optional - Reverse - 2nd	7.7 mile/h
Power-Shift Transmission with LTC - Optional - Reverse - 1st	3.7 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 1st	3.7 mile/h
Power-Shift Transmission - Optional - Reverse - 3rd	17 mile/h
Power Shift Transmission - Standard - Reverse - 1st	3.7 mile/h
Power-Shift Transmission - Optional - Forward - 3rd	8 mile/h
Power Shift Transmission - Standard - Reverse - 3rd	17 mile/h
Power-Shift Transmission with LTC - Optional - Forward - 6th	25 mile/h
Power Shift Transmission - Standard - Forward - 4th	25 mile/h
Power Shift Transmission - Standard - Forward - 2nd	5.8 mile/h

Power-Shift Transmission with LTC - Optional - Forward - 3rd	8 mile/h
Power-Shift Transmission with LTC - Optional - Reverse - 2nd	7.7 mile/h
Power-Shift Transmission - Optional - Forward - 6th	25 mile/h
Power-Shift Transmission - Optional - Forward - 4th	12 mile/h
Power-Shift Transmission - Optional - Forward - 5th	17 mile/h
Power-Shift Transmission - Optional - Forward -1st	3.7 mile/h
Note (2)	*Limited by engine speed to 40 km/h (25 mph).
Note (1)	Travel speeds of two wheel drive backhoe loader at full throttle, when equipped with 500/70-24 rear tires.

Axle Ratings

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

Steering

Bore	2.6 in
Turning Circle - (inner wheel not braked) - Outside Front Wheels	26.92 ft
Turning Circle - (inner wheel not braked) - Outside Widest Loader Bucket	35.25 ft

Power Steering	Hydrostatic
Rod Diameter	1.6 in
Type	Front Wheel Steering
Stroke	4.2 in
Axle Oscillation	11°
Cylinder	One Double-Acting

Service Refill Capacities

Fuel Tank	42.3 gal (US)
Engine Oil - With Filter	2.4 gal (US)
Hydraulic Tank	11.1 gal (US)
Hydraulic System	25.1 gal (US)
Cooling System with Air Conditioning	4.8 gal (US)
Rear Axle	4.2 gal (US)
Diesel Exhaust Fluid (DEF)	5 gal (US)
Rear Axle - Planetaries	0.4 gal (US)
Transmission - Power Shift - AWD	5 gal (US)
Transmission - Power Shuttle - AWD	4.8 gal (US)
Front Axle (AWD) - Planetaries	0.2 gal (US)
Front Axle (AWD)	2.9 gal (US)

420 XE 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, removable side 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 Lock Out, loader, backhoe, auxiliary hydraulics
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

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, EH Parallel Lift

Loader, Programmable Kick Out

Loader, Programmable Return To Dig

Loader, single tilt

Mirror, interior, rearview

One-touch low idle

Open circuit breather

Pattern changer, in cab

Power receptacle, 12 volt, 2 internal, 1 external

Power receptacle, 5 volt USB, 1 internal

Power steering, hydrostatic

Product Link™, satellite, network manager

Product Link, cellular, network manager

Seat belt, retractable, 51 mm (2 in)

Seat mounted joystick controls: backhoe and loader, EH operated, excavator style with pattern changer

Socket, two roof

Stabilizers, EH Control, Auto-UP

Stabilizer shoes, street

Steering knob

Seat, air suspension, vinyl cover, with armrest

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 XE 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.