

Product Specifications For 415 IL



Engine

Net Power - SAE J1349:2011	69 hp
Engine Model	Cat C3.6
Bore	3.86 in
Stroke	4.72 in
Displacement	220 in ³
Emissions	Engine meets U.S. EPA Tier 4 Final emission standards.
Net Peak Torque SAE J1349	308 ft·lbf
Gross Power - SAE J1995:2014	75 hp
Net Peak Power - 2,200 rpm - SAE J1349	69 hp
Gross Power - ISO 14396	74 hp
Net Torque Rise - 1,200 rpm	86 %
Note	No derating required up to 2286 m (7,500 ft).
Net Power - 2,200 rpm - SAE J1349	69 hp
Rated Net Power - 2,200 rpm - ISO 9249	69 hp
Net Peak Power - 2,200 rpm - ISO 9249	69 hp

Weights

Operating Weight - Maximum	17637 lb
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Cab - ROPS/FOPS	359 lb
Air Conditioning	101 lb
MP Bucket (0.96 m³/1.25 yd³) - Without Fold-Over Forks	1642 lb
MP Bucket (0.96 m³/1.25 yd³) - With Fold-Over Forks	2017 lb
Operating Weight - Maximum - ROPS Capacity	17637 lb
Front Counterweight - Counterweights - Option 3	1015 lb
Rear Counterweight	198 lb
Note	*Specifications shown are for machine equipped with 0.76 m ³ (1 yd ³) general purpose loader bucket, 115 kg (255 lb) front counterweight, 80 kg (176 lb) operator, all wheel drive and full fuel tank.
Front Counterweight - Counterweights - Option 1	255 lb
Front Counterweight - Counterweights - Option 2	530 lb
Minimum Operating Weight	14035 lb

Hydraulic System

Pump Type	Variable Flow, Axial Piston
Type	Closed Center
System Pressure - Loader	2973 psi
System Pressure - Hitch/Box Scraper	2973 psi

Pump Capacity at 2,200 rpm

33 gal/min

Transmission

Power Shuttle Transmission - Standard - Reverse - 2nd	5.5 mile/h
Power Shuttle Transmission - Standard - Forward - 3rd	13 mile/h
Power Shuttle Transmission - Standard - Reverse - 3rd	13 mile/h
Power Shuttle Transmission - Standard - Reverse - 4th	23 mile/h
Power Shuttle Transmission - Standard - Forward - 4th	23 mile/h
Power Shuttle Transmission - Standard - Forward - 2nd	5.5 mile/h
Power Shuttle Transmission - Standard - Forward - 1st	3.4 mile/h
Power Shuttle Transmission - Standard - Reverse - 1st	3.4 mile/h

Axle Ratings

Rear Axle - Dynamic	20233 lb
Front Axle (4WD) - Static	26455 lb
Front Axle (4WD) - Dynamic	13228 lb
Rear Axle - Static	50582 lb

Steering

Bore	2.6 in
Stroke	4.2 in
Rod Diameter	1.6 in
Power Steering	Hydrostatic

Axle Oscillation	11°
Type	Front Wheel
Turning Circle - AWD (inner wheel not braked) - Outside, Front Wheels	26.8 ft
Turning Circle - AWD (inner wheel not braked) - Outside, Widest Loading Bucket	36 ft

Service Refill Capacities

Hydraulic System	23.8 gal (US)
Rear Axle	4.4 gal (US)
Cooling System with Air Conditioning	4.4 gal (US)
Fuel Tank	42 gal (US)
Front Axle (4WD) - Planetaries	0.2 gal (US)
Engine Oil - With Filter	2.3 gal (US)
Front Axle (4WD)	2.9 gal (US)
Rear Axle - Planetaries	0.4 gal (US)
Transmission - Power Shuttle - 2WD	4 gal (US)
Transmission - Power Shuttle - 4WD	4 gal (US)
Hydraulic Tank	10.6 gal (US)

Note	Requires ultra-low sulfur fuel less than or equal to 15 ppm fuel sulfur
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Tires

Counterweights - Front - Minimum Recommendations

Standard Stick - MP Loader Bucket - 4WD

no counterweight

Standard Stick - GP Loader Bucket - 4WD

255 lb

415 IL Standard Equipment

STANDARD EQUIPMENT

Air cleaner
Alarm, back-up
Audible system fault alarm
Box Blade Controls, finger lever pilot
Battery, maintenance-free, 880 CCA
Battery disconnect switch
Brace, lift cylinder
Brake, secondary parking
Brakes, hydraulically boosted, oil disc, dual pedals, interlocking
Bucket level indicator
Canopy, ROPS/FOPS
Coat restraint
Coolant/antifreeze, extended life
Counterweight, bumper
Dome light (cab only)
Diagnostic port for engine
Differential lock, floor mounted
Differential lock, loader joystick
Drink holders, two
Engine, Cat C3.6, meets Tier 4 Final emission standards, diesel particulate filter
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
Fuel tank, fully enclosed
Fully hinged front grill for cooling package cleaning access
Gauge cluster: coolant temperature, fuel level, torque converter temperature, battery voltage
Ground level fuel fill
High ambient cooling package

Hitch, rear 3-point
Hood lock, inside cab
Hydraulic hose, Cat XT™-3
Hydraulic oil cooler
Hydraulic oil level sight gauge
Hydraulic valve, hydrostatic steering
Hydraulic valves, loader 3 function
Hydraulic valves, rear 5 function
Hydraulics, load sensing with variable displacement piston pump
Indicator lights and LCD warnings for system status
Instrument panel lights
Key start/stop system
LCD screen with machine system information
Lights, working (2 front, 2 rear)
Loader, self-leveling, return-to-dig and transmission disconnect switch
Loader, single tilt
Mirror, rearview
Open circuit breather
Power receptacle, 12 volt, 2 internal, 2 external roof mounted
Power steering, hydrostatic
Seat belt, retractable, 75 mm (3 in)
Steering knob
Seat, mechanical suspension, fabric or vinyl cover, with armrest
Starting system, glow plugs
Steering, hydrostatic
Storage compartment, lockable
Storage tray
Stop and tail lights
Tires, 12.5/80-18 front, 16.9-24 rear
Toolbox, external, lockable
Torque converter
Throttle, foot, electronic
Transmission, four speed, syncromesh
Transmission neutralizer switch
Transport tie-downs
Four Wheel Drive
Warning horn, electric
Product Link™, cellular, PLE643
Product Link, dual mode, PLE683

415 IL Optional Equipment

OPTIONAL EQUIPMENT

Battery, additional, 880 CCA
Box, blade/scarifier
Cab, standard with air conditioning
Cold weather fuel (–30° C/–22° F)

Cold weather package, including additional battery, engine block heater, radiator antifreeze (–50° C/–58° F), 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)

Counterweight, rear 90 kg (198 lb)

Dual tilt rear hitch

Face fan

Fenders, front with integral steps

Radio and CD player, Bluetooth®

Ride Control

Rotating beacon, magnetic mount

Security system keypad

Vandalism protection, gauge cover

Work Tool Attachments such as buckets, forks, and material handling arms. See your Cat dealer for more information.

LED lights, working (2 front, 2 rear)

Security system, Bluetooth

Security System, operator display

Side mirrors, cab, external

Single Tilt Loader Coupler, Integrated Tool Carrier (IT) Interface