

Service & Repair Guide

John Deere 210g 210glc Excavator Service Manual



DOWNLOAD



210G/210G LC

21 metric ton



JOHN DEERE





Cover all the angles.

Heavier and stronger than their popular predecessors, the 210G and 210G LC are also more productive. So, whether you use them to excavate footings, load trucks, set stone, place pipe, or whatever, you'll get more done per gallon of fuel. Their rugged EPA Interim Tier 4 (IT4)/EU Stage IIIB PowerTech™ diesel engines meet rigid emission regulations, enabling you to work, wherever you work, even in nonattainment areas. What's more, they're loaded with customer-inspired refinements such as more comfortable and spacious cabs. Enhanced LCD monitors with simplified navigation that lets an operator easily dial-in a wealth of machine info and functionality. Exceptional power, smoothness, operating ease, and IT4 compliance — the highly versatile 210G and 210G LC cover all the angles so you can, too.



	210G	210G LC
Net rated power	119 kW (159 hp)	119 kW (159 hp)
Operating weight	22 309 kg (49,139 lb.)	22 910 kg (50,463 lb.)
Maximum digging depth	6.68 m (21 ft. 11 in.)	6.68 m (21 ft. 11 in.)
Arm digging force	114 kN (25,543 lb.)	114 kN (25,543 lb.)
Bucket digging force	156 kN (35,138 lb.)	156 kN (35,138 lb.)

Both the standard-undercarriage 210G and long-undercarriage 210G LC pack plenty of ability into highly versatile and easy-to-transport packages.

The IT4/Stage IIIB technology utilized in our PowerTech diesel engine is simple, fuel efficient, fully integrated, and fully supported. It allows the 210G and 210G LC to exceed your expectations while meeting the EPA's.

Highly efficient hydraulically driven fans run only as fast as needed, reducing noise, fuel consumption, and operating costs. Reversing option automatically back-blows cooler cores to keep them clean.

With John Deere WorkSight™, JDLINK™ monitoring provides real-time machine utilization and health data, plus location information. Fleet Care proactively suggests maintenance to correct problems early before they turn into costly downtime. And Service ADVISOR™ Remote enables your dealer to read diagnostic codes, record performance data, and even update software without a trip to the jobsite. It's the most comprehensive, easy-to-use suite of technology available for increasing uptime and productivity while lowering operating costs. And it's only available from John Deere.

Unearth more work.

With more arm force, bucket breakout force, and lift capacity, the 210G and 210G LC are impressive performers. But even with all of their extra muscle, their no-compromise Powerwise™ III hydraulic management system yields the pinpoint metering and smooth-as-silk low-effort control that have become trademarks of our excavators. And if you're looking to put even more work within reach, add any of the many options and attachments that increase machine capability and expand your profit potential.

Additional hydraulic capability a necessity?
Two factory-installed high-pressure, high-flow
auxiliary packages enable you to meet the need.

Changing hydraulic flow is push-button easy right from the
seat. Accommodates a wide assortment of attachment needs.

Choose from a variety of track widths, arm lengths, buckets,
and other options.

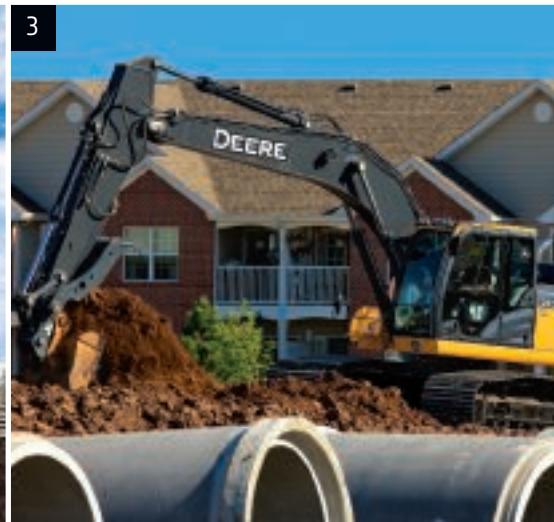
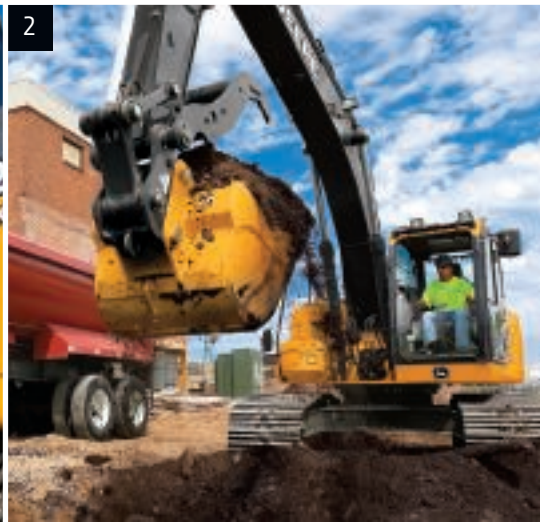
Powerwise III perfectly balances engine performance and
hydraulic flow for predictable operation. Three productivity
modes allow you to choose the digging style that fits the job.
High productivity delivers more power and faster hydraulic
response to move more material. **Power** delivers a balance
of power, speed, and fuel economy for normal operation.
Economy reduces top speed and helps save fuel.



1. For work that requires extra finesse, short-throw low-effort controls, unmatched metering, and smooth multi-function operation give you the precision you need.

2. Generous hydraulic flow and ample swing torque help speed cycles, so you can keep trucks rolling and excavate efficiently.

3. When the digging gets tough, simply press the power-boost button on the right-hand control and muscle through.



A detailed view of the operator's seat and control area inside a John Deere machine cab. The seat is upholstered in grey fabric. In the center, there is a large grey joystick with a red trigger. To the left, a red insulated cup sits in a holder. The dashboard and control panel are visible, featuring several warning and safety labels with text like 'WARNING', 'DANGER', 'IMPORTANT', and 'CAUTION'. The background shows the large glass window of the cab.

Get in touch with your productive side.

Now it's easier than ever for your operators to "dial things up." The refined monitor employs a rotary control that makes it quick and easy to tap into an abundance of performance and convenience functions and features. Operators will also appreciate the comfortable fabric-covered high-back seat and increased legroom in the spacious, well-appointed cab. As always, unsurpassed all-round visibility, low-effort joysticks, a highly efficient HVAC system, and numerous other amenities provide everything your operators need to do their best work.



With large self-cleaning steps and wide entryways, getting in and out of an excavator has never been easier.

Spacious cab is comfortable and noticeably quiet. Silicone-filled mounts effectively isolate operators from noise and vibration.

We've got your back with a sculpted mechanical-suspension high-back seat. Seat has 318 mm (12½ in.) of travel, sliding together or independent of the joystick console. So it won't cramp an operator's style. For even more support and comfort, opt for the air-suspension heated seat.

Ergonomically correct short-throw pilot levers provide smooth, predictable fingertip control with less movement or effort. Push buttons in the right lever allow fingertip control of auxiliary hydraulic flow for operating attachments.

No shortage of storage in here. There's a place for a cooler, cup holders, and even a hot/cold box that keeps beverages at just the right temperature.

Available boom and cab lights illuminate the way when your workday extends beyond daylight hours (left-side boom light is standard).

1. Multi-language LCD monitor and rotary dial provide intuitive access to a wealth of information and functions. Just turn and tap to select attachments, access operating info, check maintenance intervals, source diagnostic codes, adjust cab temperature, and tune the radio. Plus much more.
2. Wide expanse of front and side glass, narrow front cab posts, large overhead glass, and numerous mirrors provide virtually unobstructed all-around visibility. If you need to see more, choose the optional camera that displays the action behind on the monitor.
3. Automatic, high-velocity bi-level climate-control system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.





Nothing runs like a Deere, because nothing is built like one.

Unlike some excavators that scream for attention, the hydraulically driven on-demand fans in our G-Series run only as fast as needed. For reduced noise and fuel consumption. Their highly efficient cooling systems keep things running cool, even in high-trash environments and high altitudes. You'll also continue to profit from traditional durability-enhancing "extras" such as tungsten-carbide thermal-coated arm surfaces, oil-impregnated bushings, and welded-boom bulkheads. For maximum uptime and long-term durability. When you know how they're built, you run a Deere.

1. Reinforced D-channel side frames provide maximum cab and component protection.





Reinforced resin thrust plates, grooved bushings, and thermal-coated bucket joints increase arm and boom lube intervals to 500 hours.

Oil-impregnated bushings enhance durability and extend grease intervals to 500 hours for the arm-and-boom joint and 100 hours for the bucket joint.

Tungsten-carbide coating creates an extremely wear-resistant surface to protect the all-important bucket-to-arm joint.

A John Deere exclusive, three welded bulkheads within the boom resist torsional stress for unsurpassed durability. Booms, arms, and mainframes are so tough, they're warranted for three years or 10,000 hours.

Thick-plate single-sheet mainframe, box-section track frames, and industry-exclusive double-seal swing bearing deliver rock-solid durability.

Wet-sleeve cylinder liners, mono-steel pistons, and large-diameter connecting rods ensure long-term engine durability.

2. With large idlers, rollers, and strutted links, the sealed and lubricated undercarriage delivers long and reliable performance.

3. Highly efficient, heavy-duty cooling system keeps things cool, even in tough environments or high altitudes.

4. Optional TK-Series bucket teeth are engineered for maximum strength and impact absorption. Hammer-free installation and removal simplifies changes, minimizes downtime.



Uncover all the ways we keep costs down.

Like all John Deere machines, the G-Series Excavators are loaded with features that make them hassle-free to service and low-cost to maintain. Large, easy-to-open doors and easy-access service points make quick work of the daily routine. Remote-mounted vertical oil and fuel filters and extended engine and hydraulic oil-change intervals minimize maintenance, too. Plus the Machine Information Center (MIC), state-of-the-art LCD color monitor, and fluid-sample ports help you make timely decisions about machine upkeep — and manage uptime and costs.

Auto-idle automatically reduces engine speed when hydraulics aren't in use. Auto-shutdown further preserves precious fuel.

Optional reversing fan back-blows cooler cores to reduce debris buildup. It's a welcome addition that helps increase uptime.

Large fuel tanks and 500- and 5,000-hour engine and hydraulic oil-service intervals decrease downtime for routine maintenance.

Centralized lubrication banks place difficult-to-lube zerks within easy reach. They make greasing less messy and time consuming, too.

Seamless diesel particulate filter (DPF) cleaning happens automatically without impacting machine productivity. The DPF is easily removed through the top of the engine compartment. Minimum service interval is 4,500 hours and can be done by your John Deere dealer.

Machine Information Center captures and stores vital machine performance and utilization data to help improve uptime.

Fluid-level sight gauges are conveniently located and can be checked at a glance.

Convenient color-coded lubrication and maintenance chart helps ensure that nothing gets overlooked.



1 Engine Oil Filter		
Previous Maintenance		
2012/04/07	0.0 h	
Remains		
	375.8 h	
Maintenance Interval		
	500.0 h	





1. Easy-to-read LCD monitor tracks scheduled maintenance intervals and issues reminders. Should a problem arise, it provides diagnostic information to help decrease downtime.
2. Convenient fluid-sample and diagnostic test ports help speed preventative maintenance and defeat downtime.
3. Vertical spin-on fuel and engine oil filters are positioned in the right rear compartment for simplified ground-level servicing.
4. Fresh-air cab filter is quickly serviced from outside the cab where it's more likely to get done.
5. Easy-to-reach dipstick and nearby coolant reservoir make daily checks and/or additions quick and easy.
6. Perforations in the side shields act as a "first filter." Anything that passes through will also clear the 10-fin-per-inch cooler cores.



210G / 210G LC

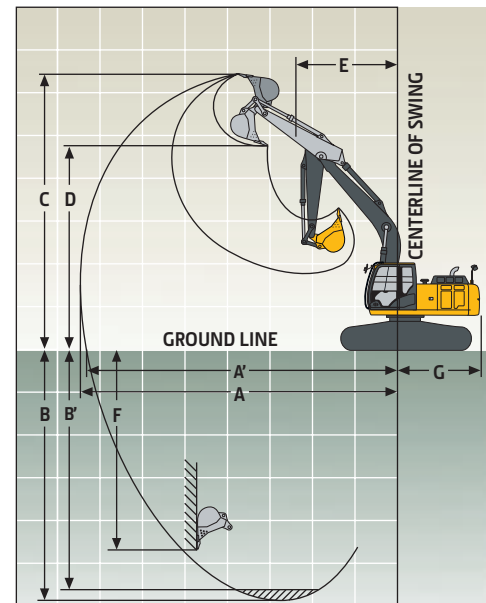
Engine	210G / 210G LC		
	Base engine for use in the U.S., U.S. Territories, and Canada	Optional engine for use outside the U.S., U.S. Territories, and Canada	Optional engine for use outside the U.S., U.S. Territories, and Canada
Manufacturer and Model	John Deere PowerTech™ PVX	John Deere PowerTech™ Plus	John Deere PowerTech™
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II
Net Rated Power (ISO 9249)	119 kW (159 hp) at 1,900 rpm	119 kW (159 hp) at 1,900 rpm	119 kW (159 hp) at 1,900 rpm
Cylinders	6	6	6
Displacement	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)
Off-Level Capacity	70% (35 deg.)	70% (35 deg.)	70% (35 deg.)
Aspiration	Turbocharged, air-to-air charge-air cooler	Turbocharged, air-to-air charge-air cooler	Turbocharged, air-to-air charge-air cooler
Cooling			
Cool-on-demand hydraulic-driven, suction-type fan with remote-mounted drive			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.5 km/h (2.2 mph)		
High	5.5 km/h (3.4 mph)		
Drawbar Pull	20 693 kg (45,620 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps	2 variable-displacement axial-piston pumps		
Maximum Rated Flow	212 L/m (56 gpm) x 2		
Pilot Pump	One gear		
Maximum Rated Flow	30.0 L/m (7.9 gpm)		
Pressure Setting	3999 kPa (580 psi)		
System Operating Pressure			
Circuits			
Implement	34 336 kPa (4,980 psi)		
Travel	34 336 kPa (4,980 psi)		
Swing	34 336 kPa (4,980 psi)		
Power Boost	38 000 kPa (5,511 psi)		
Controls	Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever		
Cylinders			
	Bore	Rod Diameter	Stroke
Boom (2)	120 mm (4.72 in.)	85 mm (3.35 in.)	1260 mm (49.61 in.)
Arm (1)	135 mm (5.31 in.)	95 mm (3.74 in.)	1475 mm (58.07 in.)
Bucket (1)	115 mm (4.53 in.)	80 mm (3.15 in.)	1060 mm (41.73 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	1,400 CCA		
Alternator Rating	100 amp		
Work Lights	2 halogen (one mounted on boom, one on frame)		
Undercarriage	210G	210G LC	
Rollers (each side)			
Carrier	2	2	
Track	7	8	
Shoes, Triple Semi-Grousers (each side)	46	49	
Track			
Adjustment	Hydraulic	Hydraulic	
Guides	Center	Center	
Chain	Sealed and lubricated	Sealed and lubricated	
Ground Pressure			
Triple Semi-Grouser Shoes			
600 mm (24 in.)	45.0 kPa (6.53 psi)		47.9 kPa (6.95 psi)
700 mm (28 in.)	39.0 kPa (5.66 psi)		41.7 kPa (6.05 psi)
800 mm (32 in.)	34.0 kPa (4.93 psi)		36.9 kPa (5.35 psi)
Swing Mechanism			
Speed	13.3 rpm		
Torque	68 900 Nm (50,662 lb.-ft.)		



Serviceability	210G / 210G LC
Refill Capacities	
Fuel Tank	403 L (106.5 gal.)
Cooling System	30.5 L (32.2 qt.)
Engine Oil with Filter	20.8 L (22 qt.)
Hydraulic Tank	135 L (35.7 gal.)
Hydraulic System	240 L (63.4 gal.)
Gearbox	
Swing	6.2 L (6.6 qt.)
Propel (each)	7.8 L (8.2 qt.)
Pump Drive	1.0 L (1.1 qt.)

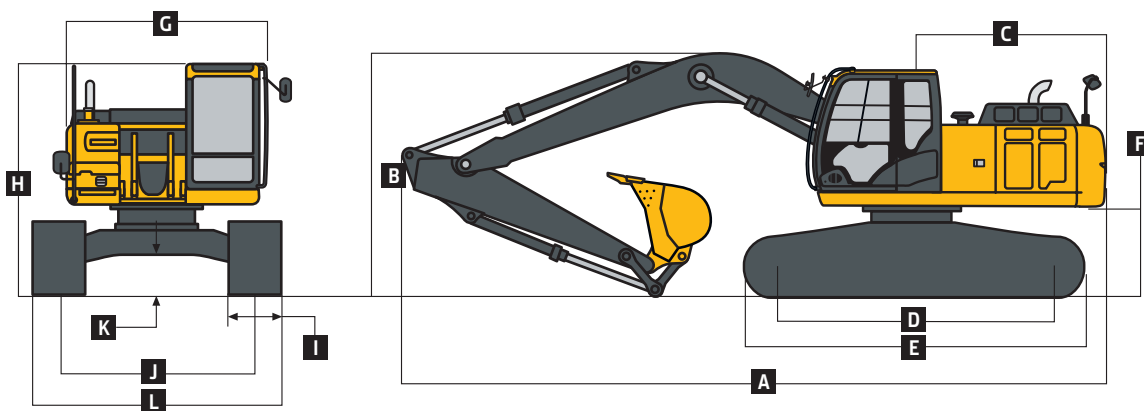
Operating Weights	210G	210G LC
With full fuel tank; 79-kg (175 lb.) operator; 1065-mm (42 in.), 0.91-m ³ (1.19 cu. yd.), 886-kg (1,951 lb.) general-purpose bucket; 2.91-m (9 ft. 7 in.) arm; 4250-kg (9,370 lb.) counterweight; and 800-mm (32 in.) triple semi-grouser shoes		
Operating Weight	22 309 kg (49,139 lb.)	22 910 kg (50,463 lb.)

Component Weights		
Undercarriage with Triple Semi-Grouser Shoes		
600 mm (24 in.)	6752 kg (14,873 lb.)	7353 kg (16,196 lb.)
700 mm (28 in.)	7143 kg (15,733 lb.)	7743 kg (17,055 lb.)
800 mm (32 in.)	7437 kg (16,381 lb.)	8038 kg (17,705 lb.)
One-Piece Boom (with arm cylinder)	1732 kg (3,815 lb.)	1732 kg (3,815 lb.)
Arm with Bucket Cylinder and Linkage		
2.22 m (7 ft. 3 in.)	928 kg (2,044 lb.)	928 kg (2,044 lb.)
2.91 m (9 ft. 7 in.)	990 kg (2,181 lb.)	990 kg (2,181 lb.)
Boom-Lift Cylinders (2), Total Weight		
1065-mm (42 in.), 0.91-m ³ (1.19 cu. yd.), Heavy-Duty Bucket	341 kg (751 lb.)	341 kg (751 lb.)
Counterweight, Standard	4250 kg (9,370 lb.)	4250 kg (9,370 lb.)



Operating Dimensions	210G		210G LC	
Arm Length	2.42 m (7 ft. 11 in.)	2.91 m (9 ft. 7 in.)	2.42 m (7 ft. 11 in.)	2.91 m (9 ft. 7 in.)
Arm Digging Force				
SAE	133 kN (29,959 lb.)	110 kN (24,773 lb.)	133 kN (29,959 lb.)	110 kN (24,773 lb.)
ISO	139 kN (31,355 lb.)	114 kN (25,543 lb.)	139 kN (31,355 lb.)	114 kN (25,543 lb.)
Bucket Digging Force				
SAE	142 kN (31,865 lb.)	142 kN (31,865 lb.)	142 kN (31,865 lb.)	142 kN (31,865 lb.)
ISO	156 kN (35,138 lb.)	156 kN (35,138 lb.)	156 kN (35,138 lb.)	156 kN (35,138 lb.)
A Maximum Reach	9.43 m (30 ft. 11 in.)	9.92 m (32 ft. 7 in.)	9.43 m (30 ft. 11 in.)	9.92 m (32 ft. 7 in.)
A' Maximum Reach at Ground Level	9.25 m (30 ft. 4 in.)	9.75 m (32 ft. 0 in.)	9.25 m (30 ft. 4 in.)	9.75 m (32 ft. 0 in.)
B Maximum Digging Depth	6.18 m (20 ft. 3 in.)	6.68 m (21 ft. 11 in.)	6.18 m (20 ft. 3 in.)	6.68 m (21 ft. 11 in.)
B' Maximum Digging Depth at 2.44-m (8 ft. 0 in.) Flat Bottom	5.95 m (19 ft. 6 in.)	6.50 m (21 ft. 4 in.)	5.95 m (19 ft. 6 in.)	6.50 m (21 ft. 4 in.)
C Maximum Cutting Height	9.67 m (31 ft. 9 in.)	10.04 m (32 ft. 11 in.)	9.67 m (31 ft. 9 in.)	10.04 m (32 ft. 11 in.)
D Maximum Dumping Height	6.83 m (22 ft. 5 in.)	7.18 m (23 ft. 7 in.)	6.83 m (22 ft. 5 in.)	7.18 m (23 ft. 7 in.)
E Minimum Swing Radius	3.28 m (10 ft. 9 in.)	3.18 m (10 ft. 5 in.)	3.28 m (10 ft. 9 in.)	3.18 m (10 ft. 5 in.)
F Maximum Vertical Wall	5.30 m (17 ft. 5 in.)	5.99 m (19 ft. 8 in.)	5.30 m (17 ft. 5 in.)	5.99 m (19 ft. 8 in.)
G Tail-Swing Radius	2.89 m (9 ft. 6 in.)	2.89 m (9 ft. 6 in.)	2.89 m (9 ft. 6 in.)	2.89 m (9 ft. 6 in.)

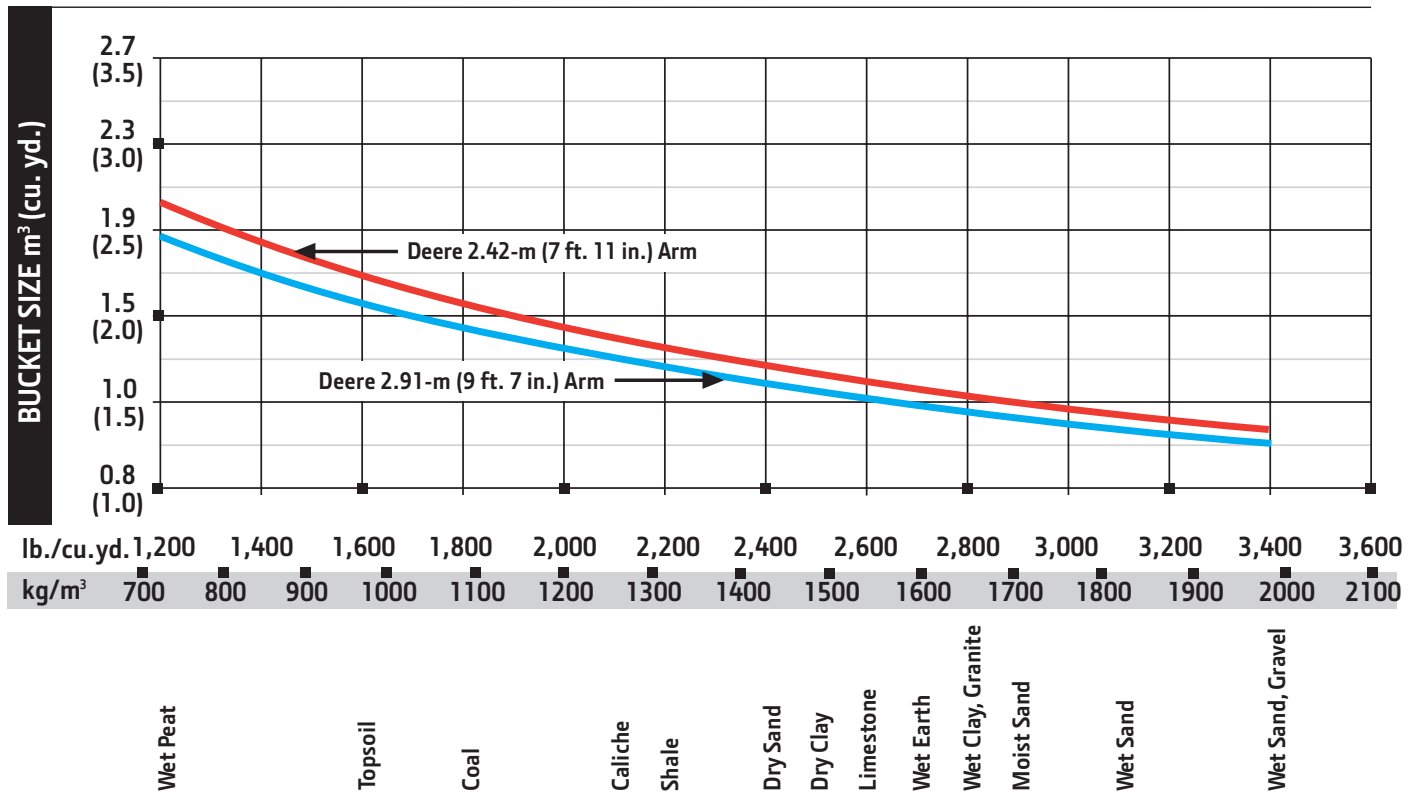
Machine Dimensions		210G	210G LC
A Overall Length with Arm	2.42 m (7 ft. 11 in.)	9.75 m (32 ft. 0 in.)	9.75 m (32 ft. 0 in.)
	2.91 m (9 ft. 7 in.)	9.53 m (31 ft. 3 in.)	9.53 m (31 ft. 3 in.)
B Overall Height with Arm	2.42 m (7 ft. 11 in.)	3.18 m (10 ft. 5 in.)	3.18 m (10 ft. 5 in.)
	2.91 m (9 ft. 7 in.)	3.01 m (9 ft. 11 in.)	3.01 m (9 ft. 11 in.)
C Rear-End Length/Swing Radius		2.89 m (9 ft. 6 in.)	2.89 m (9 ft. 6 in.)
D Distance Between Idler/Sprocket Centerline		3.35 m (11 ft. 0 in.)	3.67 m (12 ft. 0 in.)
E Undercarriage Length		4.17 m (13 ft. 8 in.)	4.46 m (14 ft. 8 in.)
F Counterweight Clearance		1030 mm (3 ft. 5 in.)	1030 mm (3 ft. 5 in.)
G Upperstructure Width		2.71 m (8 ft. 11 in.)	2.71 m (8 ft. 11 in.)
H Cab Height		2.95 m (9 ft. 8 in.)	2.95 m (9 ft. 8 in.)
I Track Width		600 mm (24 in.) / 700 mm (28 in.) / 800 mm (32 in.)	600 mm (24 in.) / 700 mm (28 in.) / 800 mm (32 in.)
J Gauge Width		2.22 m (7 ft. 3 in.)	2.39 m (7 ft. 10 in.)
K Ground Clearance		450 mm (17.72 in.)	450 mm (17.72 in.)
L Overall Width with Triple Semi-Grouser Shoes	600 mm (24 in.)	2.82 m (9 ft. 3 in.)	2.99 m (9 ft. 10 in.)
	700 mm (28 in.)	2.92 m (9 ft. 7 in.)	3.09 m (10 ft. 2 in.)
	800 mm (32 in.)	3.02 m (9 ft. 11 in.)	3.19 m (10 ft. 6 in.)



210G Lift Capacities

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2.91-m (9 ft. 7 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							4700 (10,300)	4450 (9,500)		
4.5 m (15 ft.)					6150 (13,250)	6150 (13,250)	5250 (11,450)	4300 (9,250)	4500 (9,600)	2850 (6,150)
3.0 m (10 ft.)					8050 (17,350)	6400 (13,800)	6150 (13,350)	4050 (8,750)	4400 (9,450)	2800 (5,950)
1.5 m (5 ft.)					9800 (21,100)	5950 (12,800)	6150 (13,200)	3850 (8,250)	4300 (9,200)	2700 (5,750)
Ground Line			4150 (9,650)	4150 (9,650)	9500 (20,400)	5650 (12,200)	5950 (12,800)	3700 (7,900)	4200 (9,000)	2600 (5,600)
-1.5 m (-5 ft.)	4800 (10,750)	4800 (10,750)	8400 (19,100)	8400 (19,100)	9400 (20,200)	5600 (12,050)	5850 (12,650)	3600 (7,750)	4150 (8,950)	2550 (5,550)
-3.0 m (-10 ft.)	9250 (20,850)	9250 (20,850)	13 950 (30,250)	11 150 (23,950)	9500 (20,350)	5650 (12,150)	5900 (12,750)	3650 (7,850)		
-4.5 m (-15 ft.)			10 850 (23,150)	10 850 (23,150)	7650 (16,250)	5850 (12,650)				



*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.

210G Lift Capacities (continued)

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.91-m (9 ft. 7 in.) arm and 800-mm (32 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							4700 (10,300)	4500 (9,650)		
4.5 m (15 ft.)					6150 (13,250)	6150 (13,250)	5250 (11,450)	4350 (9,400)	4600 (9,800)	2950 (6,250)
3.0 m (10 ft.)					8050 (17,350)	6500 (14,050)	6150 (13,350)	4150 (8,950)	4500 (9,650)	2850 (6,100)
1.5 m (5 ft.)					9800 (21,100)	6050 (13,000)	6250 (13,450)	3900 (8,450)	4350 (9,400)	2750 (5,850)
Ground Line			4150 (9,650)	4150 (9,650)	9700 (20,800)	5750 (12,450)	6050 (13,050)	3750 (8,050)	4300 (9,200)	2650 (5,700)
-1.5 m (-5 ft.)	4800 (10,750)	4800 (10,750)	8400 (19,100)	8400 (19,100)	9600 (20,600)	5700 (12,250)	6000 (12,900)	3700 (7,900)	4250 (9,150)	2650 (5,650)
-3.0 m (-10 ft.)	9250 (20,850)	9250 (20,850)	13 950 (30,250)	11 350 (24,350)	9650 (20,750)	5750 (12,400)	6050 (13,000)	3700 (8,000)		
-4.5 m (-15 ft.)			10 850 (23,150)	10 850 (23,150)	7650 (16,250)	5950 (12,850)				

210G LC Lift Capacities

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.42-m (7 ft. 11 in.) arm and 800-mm (32 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							5200 (11,450)	4950 (10,600)		
4.5 m (15 ft.)					6850 (14,800)	6850 (14,800)	5750 (12,450)	4850 (10,400)		
3.0 m (10 ft.)					8750 (18,800)	7200 (15,550)	6550 (14,150)	4600 (9,950)	5150 (11,000)	3200 (6,850)
1.5 m (5 ft.)					10 250 (22,100)	6750 (14,550)	7200 (15,450)	4400 (9,500)	5050 (10,800)	3100 (6,700)
Ground Line					10 750 (23,300)	6550 (14,150)	7050 (15,100)	4250 (9,200)	4950 (10,650)	3050 (6,550)
-1.5 m (-5 ft.)			9150 (21,050)	9150 (21,050)	10 450 (22,600)	6550 (14,100)	7000 (15,050)	4250 (9,100)		
-3.0 m (-10 ft.)			12 800 (27,750)	12 800 (27,750)	9250 (20,000)	6650 (14,300)	6650 (14,200)	4300 (9,300)		
-4.5 m (-15 ft.)					6400 (13,250)	6400 (13,250)				
<i>With 2.91-m (9 ft. 7 in.) arm and 600-mm (24 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							4700 (10,300)	4700 (10,300)		
4.5 m (15 ft.)					6150 (13,250)	6150 (13,250)	5250 (11,450)	4700 (10,150)	4850 (10,650)	3150 (6,750)
3.0 m (10 ft.)					8050 (17,350)	7100 (15,250)	6150 (13,350)	4500 (9,650)	4950 (10,600)	3100 (6,600)
1.5 m (5 ft.)					9800 (21,100)	6600 (14,200)	6900 (14,900)	4250 (9,150)	4800 (10,350)	2950 (6,400)
Ground Line			4150 (9,650)	4150 (9,650)	10 650 (23,050)	6300 (13,600)	6750 (14,500)	4100 (8,800)	4700 (10,150)	2900 (6,200)
-1.5 m (-5 ft.)	4800 (10,750)	4800 (10,750)	8400 (19,100)	8400 (19,100)	10 600 (23,000)	6250 (13,400)	6650 (14,300)	4000 (8,600)	4700 (10,100)	2850 (6,150)
-3.0 m (-10 ft.)	9250 (20,850)	9250 (20,850)	13 950 (30,250)	12 700 (27,150)	9750 (21,050)	6300 (13,550)	6700 (14,400)	4050 (8,700)		
-4.5 m (-15 ft.)			10 850 (23,150)	10 850 (23,150)	7650 (16,250)	6500 (14,050)				

210G LC Lift Capacities *(continued)*

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.91-m (9 ft. 7 in.) arm and 700-mm (28 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							4700 (10,300)	4700 (10,300)		
4.5 m (15 ft.)					6150 (13,250)	6150 (13,250)	5250 (11,450)	4800 (10,350)	4850 (10,650)	3250 (6,950)
3.0 m (10 ft.)					8050 (17,350)	7250 (15,600)	6150 (13,350)	4600 (9,850)	5050 (10,850)	3150 (6,750)
1.5 m (5 ft.)					9800 (21,100)	6750 (14,500)	7050 (15,200)	4350 (9,350)	4950 (10,600)	3050 (6,550)
Ground Line			4150 (9,650)	4150 (9,650)	10 650 (23,050)	6450 (13,900)	6900 (14,850)	4200 (9,000)	4850 (10,400)	2950 (6,350)
–1.5 m (–5 ft.)	4800 (10,750)	4800 (10,750)	8400 (19,100)	8400 (19,100)	10 600 (23,000)	6400 (13,750)	6800 (14,650)	4100 (8,850)	4800 (10,350)	2950 (6,350)
–3.0 m (–10 ft.)	9250 (20,850)	9250 (20,850)	13 950 (30,250)	12 950 (27,750)	9750 (21,050)	6450 (13,900)	6850 (14,750)	4150 (8,950)		
–4.5 m (–15 ft.)			10 850 (23,150)	10 850 (23,150)	7650 (16,250)	6650 (14,350)				

With 2.91-m (9 ft. 7 in.) arm and 800-mm (32 in.) triple semi-grouser shoes

6.0 m (20 ft.)							4700 (10,300)	4700 (10,300)		
4.5 m (15 ft.)					6150 (13,250)	6150 (13,250)	5250 (11,450)	4900 (10,500)	4850 (10,650)	3300 (7,050)
3.0 m (10 ft.)					8050 (17,350)	7350 (15,850)	6150 (13,350)	4650 (10,050)	5150 (11,050)	3200 (6,900)
1.5 m (5 ft.)					9800 (21,100)	6850 (14,750)	7050 (15,200)	4450 (9,550)	5050 (10,800)	3100 (6,700)
Ground Line			4150 (9,650)	4150 (9,650)	10 650 (23,050)	6600 (14,150)	7050 (15,100)	4250 (9,150)	4950 (10,650)	3000 (6,500)
–1.5 m (–5 ft.)	4800 (10,750)	4800 (10,750)	8400 (19,100)	8400 (19,100)	10 600 (23,000)	6500 (14,000)	6950 (14,950)	4200 (9,000)	4900 (10,600)	3000 (6,450)
–3.0 m (–10 ft.)	9250 (20,850)	9250 (20,850)	13 950 (30,250)	13 200 (28,200)	9750 (21,050)	6550 (14,150)	7000 (15,050)	4200 (9,100)		
–4.5 m (–15 ft.)			10 850 (23,150)	10 850 (23,150)	7650 (16,250)	6800 (14,600)				

Buckets

210G / 210G LC

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere Fanggs™ or ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force		Arm Dig Force 2.42 m (7 ft. 11 in.)		Arm Dig Force 2.91 m (9 ft. 7 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	915	36	0.69	0.90	708	1,559	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	5
	1065	42	0.83	1.09	786	1,731	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	5
	1220	48	0.99	1.29	872	1,921	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	6
Heavy Duty High Capacity	610	24	0.43	0.56	646	1,424	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.00	4
	760	30	0.58	0.76	723	1,593	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.00	4
	915	36	0.74	0.97	809	1,782	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.00	5
	1065	42	0.91	1.19	886	1,951	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.00	5

Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

210G / 210G LC	Engine
●	Auto-idle system
●	Automatic belt-tension device
●	Batteries (2 – 12 volt)
●	Coolant recovery tank
●	Dual-element dry-type air filter
●	Electronic engine control
●	Enclosed fan guard (conforms to SAE J1308)
●	Engine coolant to –37 deg. C (–34 deg. F)
●	Fuel filter with water separator
●	Full-flow oil filter
●	Turbocharger with charge air cooler
●	Cool-on-demand hydraulic-driven fan
●	500-hour engine-oil-change interval
●	70% (35 deg.) off-level capability
●	Engine-oil-sampling valve
●	Programmable auto shutdown
▲	Chrome exhaust stack
▲	Severe-duty fuel filter
▲	Hydraulic fan reverser
▲	Engine coolant heater
	Hydraulic System
●	Reduced-drift valve for boom down, arm in
●	Auxiliary hydraulic valve section
●	Spring-applied, hydraulically released automatic swing brake
●	Auxiliary hydraulic-flow adjustments through monitor
●	Auto power lift
●	5,000-hour hydraulic-oil-change interval
●	Hydraulic-oil-sampling valve
▲	Auxiliary hydraulic lines
▲	Auxiliary pilot and electric controls
▲	Hydraulic filter restriction indicator kit
▲	Load-lowering control device
▲	Single-pedal propel control
▲	Control pattern-change valve
	Undercarriage
●	Planetary drive with axial piston motors
●	Propel motor shields
●	Spring-applied, hydraulically released automatic propel brake
●	Track guides, front idler and center
●	2-speed propel with automatic shift
●	Upper carrier rollers (2)
●	Sealed and lubricated track chain
▲	Triple semi-grouser shoes, 600 mm (24 in.)
▲	Triple semi-grouser shoes, 700 mm (28 in.)
▲	Triple semi-grouser shoes, 800 mm (32 in.)

210G / 210G LC	Upperstructure
●	Right-hand, left-hand, and counterweight mirrors
●	Vandal locks with ignition key: Cab door / Service doors / Toolbox
●	Debris screen in side panel
●	Remote-mounted engine oil and fuel filters
	Front Attachments
●	Centralized lubrication system
●	Dirt seals on all bucket pins
●	Less boom and arm
●	Oil-impregnated bushings
●	Reinforced resin thrust plates
●	Tungsten carbide thermal coating on arm-to-bucket joint
▲	Arm, 2.42 m (7 ft. 11 in.)
▲	Arm, 2.91 m (9 ft. 7 in.)
▲	Attachment quick-couplers
▲	Boom cylinder with plumbing to mainframe for less boom and arm
▲	Buckets: Ditching / Heavy duty / Heavy-duty high capacity / Side cutters and teeth
▲	Material clamps
▲	Super-long fronts
	Operator's Station
●	Meets ISO 12117-2 for ROPS
●	Adjustable independent-control positions (levers-to-seat, seat-to-pedals)
●	AM/FM radio
●	Auto climate control/air conditioner/heater/pressurizer
●	Built-in Operator's Manual storage compartment and manual
●	Cell-phone power outlet, 12 volt, 60 watt, 5 amp
●	Coat hook
●	Deluxe suspension cloth seat with 100-mm (4 in.) adjustable armrests
●	Floor mat
●	Front windshield wiper with intermittent speeds
●	Gauges (illuminated): Engine coolant / Fuel
●	Horn, electric
●	Hour meter, electric
●	Hydraulic shutoff lever, all controls
●	Hydraulic warm-up control
●	Interior light
●	Large cup holder
●	Machine Information Center (MIC)

210G / 210G LC	Operator's Station (continued)
●	Mode selectors (illuminated): Power modes (3) / Travel modes (2 with automatic shift) / Work mode (1)
●	Multifunction, color LCD monitor with: Diagnostic capability / Multiple-language capabilities / Maintenance tracking / Clock / System monitoring with alarm features: Auto-idle indicator, engine air cleaner restriction indicator light, engine check, engine coolant temperature indicator light with audible alarm, engine oil pressure indicator light with audible alarm, low-alternator-charge indicator light, low-fuel indicator light, fault code alert indicator, fuel-rate display, wiper-mode indicator, work-lights-on indicator, and work-mode indicator
●	Motion alarm with cancel switch (conforms to SAE J994)
●	Power-boost switch on right console lever
●	Auxiliary hydraulic control switches in right console lever
●	SAE 2-lever control pattern
●	Seat belt, 51 mm (2 in.), retractable
●	Tinted glass
●	Transparent tinted overhead hatch
●	Hot/cold beverage compartment
▲	Air-suspension heated seat
▲	24- to 12-volt D.C. radio convertors, 10 amp
▲	Hydraulic oil filter restriction indicator light
▲	Protection screens for cab front, rear, and side
▲	Seat belt, 76 mm (3 in.), non-retractable
▲	Window vandal-protection covers
	Electrical
●	100-amp alternator
●	Blade-type multi-fused circuits
●	Positive-terminal battery covers
●	JDLINK™ wireless communication system (available in specific countries; see your dealer for details)
▲	Rearview camera
▲	Cab extension wiring harness
	Lights
●	Work lights: Halogen / One mounted on boom / One mounted on frame
▲	2 lights mounted on cab / One mounted on right side of boom

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at test conditions specified per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with 1065-mm (42 in.), 0.91-m³ (1.19 cu. yd.), 886-kg (1,951 lb.) general-purpose buckets; 2.91-m (9 ft. 7 in.) arms; 4250-kg (9,370 lb.) counterweights; 800-mm (32 in.) triple semi-grouser shoes; full fuel tanks; and 79-kg (175 lb.) operators.



Service & Repair Guide

John Deere 210g 210glc Excavator Service Manual



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