



**JOHN DEERE**

CONSTRUCTION EQUIPMENT

EXCAVATOR



MODEL NO.

**120C**



**C-Series**

## PERFORMANCE




A small excavator with big enough reach:  
The 120C has a maximum digging depth  
of 19 feet, 6 inches (8-foot, 3-inch arm).

A large yellow excavator bucket is shown in the process of dumping a large amount of dark brown soil. The soil is falling from the bucket and forming a large pile. The background is a hazy, greyish-brown color, suggesting a construction site or a quarry. The excavator's arm and bucket are the primary focus of the image.

# EXPECT BIG

Whether you're adding an agile, niche machine that's just the right size, or building your business by graduating from a backhoe to your first excavator, John Deere's 12-metric ton 120C deserves a real close look. It's a small machine with big machine feel and productivity. This dynamo comes with the same goodies as machines at the heavier end of the C-Series line, like a rugged and reliable John Deere PowerTech™ engine, heavy-duty cooling system, reinforced boom, and an operator station that verges on self-indulgent. Every day your customers expect big things from you in the way of productivity and versatility. The only way to deliver for them is to work with a machine that will do the same for you. Call your John Deere dealer today for a demo.



Like all C-Series Excavators, the 120C features welded bulkheads inside the boom and arm to resist torsion stress. It also has thickened plates — three in the boom and one in the arm — to add strength and durability.

This way to profits. It's easy to take the 120C from job to job; all you need is a dump truck and a tagalong trailer.

# THINGS

Deere's exclusive Powerwize™ II engine/hydraulic management system balances hydraulic pressure and flow, maximizing engine output, saving fuel, and enabling smooth multifunction operation.

# Bring on the heat.

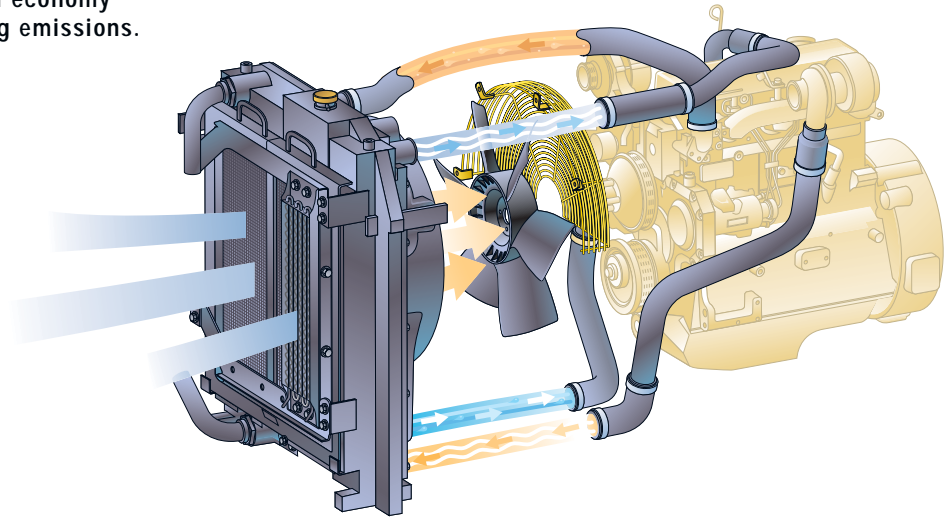


This excavator is very smart. A diagnostic display unit gives technicians the ability to read diagnostic codes and engine operating parameters such as fuel pressure, coolant temperature, and manifold temperature.



## ENGINE & SYSTEMS

The John Deere PowerTech engine in the 120C is charge-air cooled to improve fuel economy and engine durability while reducing emissions.




The top and bottom tanks of the heavy-duty cooling system are heavy wall extrusions that are TIG welded to the core for maximum durability.

Wide fin spacing in the cooling system allows trash to pass through the cores, while a removable trash screen helps eliminate plugging.

Remember the old adage, “If you can’t take the heat, get out of the kitchen”? Well, this excavator will stay in the kitchen longer than a chef at a four-star restaurant. That’s due largely to the heavy-duty cooling system.

It features an aluminum bar-plate design with high-temp liquid-braze process for superior strength. There’s also the hybrid steel-and-plastic fan with an airfoil-blade design that results in more cooling performance while using less horsepower. Plus the fan runs much quieter, which may help you think about your next big project.

The John Deere 4.5-liter PowerTech turbocharged and charge-air-cooled engine provides steady power and meets the EPA and CARB emission non-road regulations. It’s just one more confidence-building feature that will help you cook up more business and higher profits.



The operator station floats on six silicon fluid-filled elastic mounts that take the shock out of the cab and make for very smooth operators.

Sit back and relax. With our adjustable lumbar support, you'll think you're cruising in a luxury car or SUV.

**DEERE**

There's plenty of glass in the operator station, giving you outstanding sight lines. Adjustable vents are everywhere. That makes it even easier for the "blend-air" climate control system to keep your working environment constantly comfortable.

**OPERATOR STATION**

# Productivity place.

Smoke-tinted sunroof hatch helps you keep an eye on overhead obstructions. Comes with a retractable shade to reduce glare.

We've thought of the little things, too: A 12-volt cellular phone jack, beverage cooler, and oversized cup holder are all standard equipment.



Operators need to be comfortable to do their best work. The C-Series cab really takes this philosophy to heart with a list of comfort features that goes from the retractable shade on the tinted sunroof right down to the self-cleaning floor mats.

The automatic, high-capacity “blend-air” climate control system keeps cab temperature right where you want it at all times. Plus, all the vents make it easy to “set it and forget it.” Next, take in what can only be described as “panoramic visibility.” That’s because C-Series Excavators have 28 percent more glass and a wiper blade that cleans 25 percent more of your viewing area before it tucks away out of sight. The sunroof also dramatically improves overhead visibility.

Now, sit a spell in the deluxe, cloth-covered seat and adjust it until it fits you like a glove. Feel the adjustable lumbar support massage your lower back and enjoy the wide armrests. Notice how all the controls are within easy reach? It’s time to kiss fatigue goodbye.

**SERVICE**

# No worries.

You've taken some risks to get where you are today: financing, bonding, acquiring that second piece of equipment, and bidding bigger jobs. With a John Deere extended warranty, we're going to give you one less thing to worry about — unbudgeted repair bills. Not only does Deere let you select the exact coverage you need, but also there's the peace of mind that comes from working under a manufacturer's warranty — not one that's backed by some insurance company. What's more, a John Deere warranty follows your machine wherever your work takes you. That makes warranty work hassle-free when done by a non-selling dealer.

We know daily service prevents downtime, too. You'll find our lube points, filters, and dipsticks in convenient locations. Large, easy-to-open service doors ensure you won't struggle to reach the components you need to check. Bolted-on skid plates help you keep your footing while stepping or standing on the machine. We've also extended some key service intervals so you can spend more time in the cab making money than outside the cab marking time.

Take it personally: With John Deere's Customer Personal Service (CPS), you can customize programs and tools such as extended warranties, maintenance programs, parts availability programs, and more. It's customer service taken to a higher level.



Powdered-metal, oil-impregnated bushing in the front structure increases the greasing interval from 250 to 500 hours.



Service intervals have been extended. The first hydraulic oil change is at 4,000 hours and then every 2,000 hours thereafter.



Log-on to CPS-Online and you can e-mail your dealer and order parts, tech manual CDs, and training materials on a 24/7 basis.

Service doors with large handles help make service a snap.

We've arranged and grouped daily service points so that your daily walk-around is fast and easy.

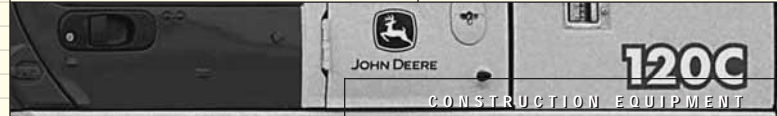
120C

JOHN

# 120C

EXCAVATOR

SPECIFICATIONS



## Engine

### 120C

Type .....	John Deere 4045H with turbocharger and air-to-air charge air cooler
Non-road emission standards .....	certified to EPA Tier 2 emissions
Net power (ISO9249) .....	89 hp (66 kW) @ 2,200 rpm
Cylinders .....	4
Displacement .....	276 cu. in. (4.5 L)
Cooling fan .....	suction-type
Electrical system .....	24 volt with 45-amp alternator
Batteries (two 12 volt) .....	reserve capacity: 180 min.
Off-level capacity .....	100% (45 deg.)

## Hydraulic System

Main pumps .....	two variable-displacement axial-piston
Maximum rated flow .....	2 x 27.7 gpm (2 x 105 L/min.)
Pilot pump .....	one gear
Maximum rated flow .....	8.7 gpm (32.9 L/min.)
Pressure setting .....	570 psi (3930 kPa)
System operating pressure	
Implement circuits .....	4,980 psi (34 336 kPa)
Travel circuits .....	4,980 psi (34 336 kPa)
Swing circuits .....	4,690 psi (32 337 kPa)
Oil filtration .....	one 10-micron full-flow return filter with by-pass / one pilot oil filter / one suction filter

## Cylinders

Boom (2)	
Bore .....	4.13 in. (105 mm)
Rod diameter .....	2.76 in. (70 mm)
Stroke .....	37.0 in. (941 mm)
Arm (1)	
Bore .....	4.53 in. (115 mm)
Rod diameter .....	3.15 in. (80 mm)
Stroke .....	44.7 in. (1135 mm)
Bucket (1)	
Bore .....	3.94 in. (100 mm)
Rod diameter .....	2.76 in. (70 mm)
Stroke .....	34.40 in. (875 mm)

## Swing Mechanism

Swing speed .....	0-13.7 rpm
Swing torque .....	24,387 lb.-ft. (33 089 Nm)

## Undercarriage

Carrier rollers (per side) .....	1
Track rollers (per side) .....	7
Shoes (per side) .....	44
Track guides .....	front
Track adjustment .....	hydraulic
Travel speed	
Low .....	0-2.1 mph (0-3.4 km/h)
High .....	0-3.4 mph (0-5.5 km/h)
Drawbar pull .....	22,930 lb. (10 401 kg)

## Ground Pressure Data

Average ground pressure	<i>Without Blade</i>	<i>With Blade</i>
24-in. (600 mm) triple semi-grouser shoes .....	4.89 psi (33.7 kPa)	5.24 psi (36.1 kPa); recommended for rocky terrain, hard ground, and stumps
28-in. (700 mm) triple semi-grouser shoes .....	4.25 psi (29.3 kPa)	4.55 psi (31.4 kPa); recommended for general conditions and soft terrain
24-in. (600 mm) rubber crawler pad .....	5.17 psi (35.7 kPa)	5.87 psi (40.5 kPa)

## Capacities

Fuel tank .....	66 gal. (250 L)
Cooling system .....	28 qt. (26.5 L)
Engine lubrication, including filter .....	15 qt. (14 L)
Hydraulic tank .....	20 gal. (76 L)
Hydraulic system .....	35 gal. (134 L)
Propel gearbox (each) .....	3.4 qt. (3.2 L)
Swing drive .....	2.6 qt. (2.8 L)

## Operating Weights

With 42-in. (1067 mm), 0.79-cu.-yd. (0.60 m <sup>3</sup> ), 925-lb. (420 kg) bucket; 9-ft. 11-in. (3.01 m) arm; 5,400-lb. (2450 kg) counterweight; 11-ft. 9-in. (3.58 m) undercarriage length; full fuel tank; and 175-lb. (79 kg) operator		
	<i>Without Blade</i>	<i>With Blade</i>
24-in. (600 mm) triple semi-grouser shoes .....	28,840 lb. (13 082 kg)	30,880 lb. (14 007 kg)
28-in. (700 mm) triple semi-grouser shoes .....	29,250 lb. (13 268 kg)	31,290 lb. (14 193 kg)
24-in. (600 mm) rubber crawler pad .....	30,500 lb. (13 839 kg)	32,540 lb. (14 764 kg)

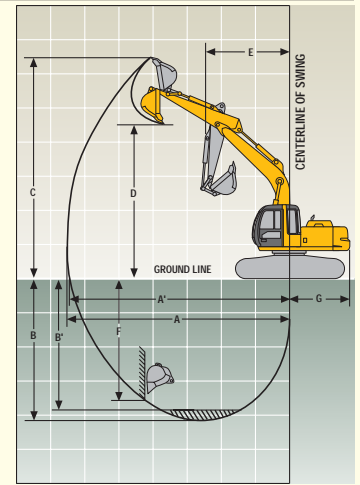
## Component Weights

## 120C

	Without Blade	With Blade
Undercarriage		
24-in. (600 mm) triple semi-grouser shoes	9,525 lb. (4320 kg)	11,563 lb. (5245 kg)
28-in. (700 mm) triple semi-grouser shoes	9,935 lb. (4506 kg)	11,973 lb. (5431 kg)
24-in. (600 mm) rubber crawler pad	11,190 lb. (5077 kg)	13,228 lb. (6002 kg)
Upperstructure with full fuel tank (less front attachments and counterweight)	8,790 lb. (3986 kg)	
One-piece boom (with arm cylinder)	2,105 lb. (955 kg)	
Arm with bucket cylinder and linkage		
8 ft. 3 in. (2.52 m)	1,243 lb. (564 kg)	
9 ft. 11 in. (3.01 m)	1,440 lb. (654 kg)	
Boom lift cylinders (2) total weight	480 lb. (218 kg)	
42-in. (1067 mm), 0.79-cu.-yd. (0.60 m <sup>3</sup> ) bucket	925 lb. (420 kg)	
Counterweight	5,400 lb. (2450 kg)	

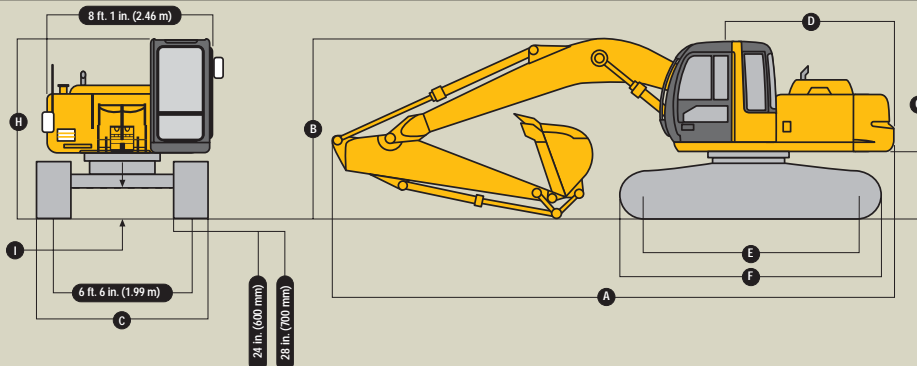
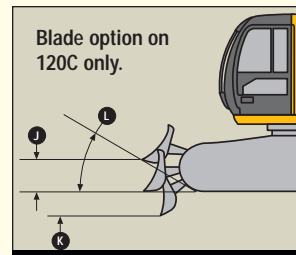
## Operating Information

	Arm Length 8 ft. 3 in. (2.52 m)	Arm Length 9 ft. 11 in. (3.01 m)
Arm force with 42-in. (1067 mm), 0.79-cu. yd. (0.60 m <sup>3</sup> ) general-purpose bucket	14,620 lb. (65.0 kN)	13,172 lb. (58.6 kN)
Bucket digging force with 42-in. (1067 mm), 0.79-cu. yd. (0.60 m <sup>3</sup> ) general-purpose bucket	21,643 lb. (92.3 kN)	21,643 lb. (92.3 kN)
Lifting capacity over front @ ground level 20-ft. (6.1 m) reach, without blade	5,742 lb. (2605 kg)	5,734 lb. (2601 kg)
<b>A</b> Maximum reach	26 ft. 9 in. (8.145 m)	28 ft. 3 in. (8.615 m)
<b>A</b> <sup>1</sup> Maximum reach @ ground level	26 ft. 4 in. (8.015 m)	27 ft. 10 in. (8.495 m)
<b>B</b> Maximum digging depth	17 ft. 10 in. (5.445 m)	19 ft. 6 in. (5.935 m)
<b>B</b> <sup>1</sup> Maximum digging depth @ 8-ft. (2.44 m) flat bottom	17 ft. 2 in. (5.225 m)	18 ft. 10 in. (5.745 m)
<b>C</b> Maximum cutting height	27 ft. 8 in. (8.445 m)	28 ft. 9 in. (8.775 m)
<b>D</b> Maximum dumping height	20 ft. 7 in. (6.285 m)	21 ft. 8 in. (6.615 m)
<b>E</b> Minimum swing radius	7 ft. 8 in. (2.34 m)	8 ft. 6 in. (2.59 m)
<b>F</b> Maximum vertical wall	16 ft. 1 in. (4.895 m)	17 ft. 7 in. (5.375 m)
<b>G</b> Tail swing radius	7 ft. 0 in. (2.13 m)	7 ft. 0 in. (2.13 m)



## Dimensions

<b>A</b> With 8-ft. 3-in. (2.52 m) arm	25 ft. 0 in. (7.61 m)
With 9-ft. 11-in. (3.01 m) arm	25 ft. 0 in. (7.62 m)
<b>B</b> With 8-ft. 3-in. (2.52 m) arm	8 ft. 10 in. (2.68 m)
With 9-ft. 11-in. (3.01 m) arm*	8 ft. 10 in. (2.68 m)
<b>C</b> With 24-in. (600 mm) triple semi-grouser shoes	8 ft. 6 in. (2.59 m)
With 28-in. (700 mm) triple semi-grouser shoes	8 ft. 10 in. (2.69 m)
With 24-in. (600 mm) rubber crawler pad	8 ft. 6 in. (2.59 m)
<b>D</b> Rear-end length/swing radius	7 ft. 0 in. (2.13 m)
<b>E</b> Distance between idler/sprocket centerline	9 ft. 5 in. (2.88 m)
<b>F</b> Undercarriage length	11 ft. 9 in. (3.58 m)
<b>G</b> Counterweight clearance	2 ft. 11 in. (890 mm)
<b>H</b> Overall height of cab	9 ft. 0 in. (2740 mm)
<b>I</b> Minimum ground clearance	17 in. (440 mm)
<b>J</b> Blade lift height	15 in. (380 mm)
<b>K</b> Blade cut below grade	23 in. (580 mm)
<b>L</b> Blade lift angle	17 degrees
Blade length	8 ft. 2 in. (2.48 m)
Blade height	25 in. (640 mm)
Blade width	
With 24-in. (600 mm) triple semi-grouser shoes/rubber crawler pad	8 ft. 6 in. (2.59 m)
With 28-in. (700 mm) triple semi-grouser shoes	8 ft. 10 in. (2.69 m)



## Lift Capacities

## 120C

***Boldface italic*** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.79-cu. yd. (0.60 m<sup>3</sup>), 42-in. (1067 mm) wide, 925-lb. (420 kg) bucket; and situated on firm, 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. Ratings are based on SAE J1097.

Load Point Height	5 ft. (1.52 m)		10 ft. (3.05 m)		15 ft. (4.57 m)		20 ft. (6.10 m)		25 ft. (7.62 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 8-ft. 3-in. (2.52 m) arm and 24-in. (600 mm) shoes, without blade</i>										
20 ft. (6.10 m)					<b>5,717 (2593)</b>	<b>5,717 (2593)</b>				
15 ft. (4.57 m)					<b>5,738 (2603)</b>	<b>5,738 (2603)</b>	<b>5,700 (2585)</b>	4,187 (1899)		
10 ft. (3.05 m)					<b>7,220 (3275)</b>	6,739 (3057)	6,120 (2776)	4,067 (1845)		
5 ft. (1.52 m)					<b>9,476 (4298)</b>	6,177 (2802)	5,876 (2665)	3,840 (1742)		
Ground Line			<b>10,024 (4547)</b>	<b>10,024 (4547)</b>	8,970 (4069)	5,721 (2595)	5,647 (2561)	3,628 (1646)		
-5 ft. (-1.52 m)	<b>6,914 (3136)</b>	<b>6,914 (3136)</b>	<b>17,858 (8100)</b>	10,632 (4823)	8,747 (3968)	5,522 (2505)	5,525 (2506)	3,515 (1594)		
-10 ft. (-3.05 m)	<b>13,809 (6264)</b>	<b>13,809 (6264)</b>	<b>15,529 (7044)</b>	10,802 (4900)	8,777 (3981)	5,549 (2517)	5,589 (2535)	3,574 (1621)		
-15 ft. (-4.57 m)			<b>10,539 (4780)</b>	<b>10,539 (4780)</b>						
<i>With 9-ft. 11-in. (3.01 m) arm and 24-in. (600 mm) shoes, without blade</i>										
15 ft. (4.57 m)							<b>5,224 (2370)</b>	4,276 (1940)		
10 ft. (3.05 m)					<b>6,240 (2830)</b>	<b>6,240 (2830)</b>	<b>5,792 (2627)</b>	4,122 (1870)	<b>3,326 (1509)</b>	2,603 (1181)
5 ft. (1.52 m)					<b>8,599 (3900)</b>	6,291 (2854)	<b>5,912 (2682)</b>	3,867 (1754)	3,979 (1805)	2,519 (1143)
Ground Line			<b>12,637 (5732)</b>	10,797 (4897)	9,013 (4088)	5,750 (2608)	5,640 (2558)	3,614 (1639)	3,870 (1755)	2,416 (1096)
-5 ft. (-1.52 m)	<b>6,513 (2954)</b>	<b>6,513 (2954)</b>	<b>16,617 (7537)</b>	10,490 (4758)	8,693 (3943)	5,464 (2478)	5,467 (2480)	3,455 (1567)		
-10 ft. (-3.05 m)	<b>14,186 (6435)</b>	<b>14,186 (6435)</b>	<b>16,606 (7532)</b>	10,571 (4795)	8,645 (3921)	5,421 (2459)	5,451 (2473)	3,440 (1560)		
-15 ft. (-4.57 m)			<b>12,654 (5740)</b>	10,941 (4963)	<b>8,492 (3852)</b>	5,624 (2551)				
<i>With 8-ft. 3-in. (2.52 m) arm and 28-in. (700 mm) shoes or 24-in. (600 mm) rubber crawler pad, without blade</i>										
20 ft. (6.10 m)					<b>5,717 (2593)</b>	<b>5,717 (2593)</b>				
15 ft. (4.57 m)					<b>5,738 (2603)</b>	<b>5,738 (2603)</b>	<b>5,700 (2585)</b>	4,252 (1929)		
10 ft. (3.05 m)					<b>7,220 (3275)</b>	6,832 (3099)	6,215 (2819)	4,132 (1874)		
5 ft. (1.52 m)					<b>9,476 (4298)</b>	6,270 (2844)	5,971 (2708)	3,906 (1772)		
Ground Line			<b>10,024 (4547)</b>	<b>10,024 (4547)</b>	9,110 (4132)	5,815 (2638)	5,742 (2605)	3,693 (1675)		
-5 ft. (-1.52 m)	<b>6,914 (3136)</b>	<b>6,914 (3136)</b>	<b>17,858 (8100)</b>	10,797 (4897)	8,888 (4032)	5,616 (2547)	5,620 (2549)	3,580 (1624)		
-10 ft. (-3.05 m)	<b>13,809 (6264)</b>	<b>13,809 (6264)</b>	<b>15,529 (7044)</b>	10,968 (4975)	8,918 (4045)	5,642 (2559)	5,683 (2578)	3,639 (1651)		
-15 ft. (-4.57 m)			<b>10,539 (4780)</b>	<b>10,539 (4780)</b>						
<i>With 9-ft. 11-in. (3.01 m) arm and 28-in. (700 mm) shoes or 24-in. (600 mm) rubber crawler pad, without blade</i>										
15 ft. (4.57 m)							<b>5,224 (2370)</b>	4,342 (1969)		
10 ft. (3.05 m)					<b>6,240 (2830)</b>	<b>6,240 (2830)</b>	<b>5,792 (2627)</b>	4,188 (1900)	<b>3,326 (1509)</b>	2,653 (1203)
5 ft. (1.52 m)					<b>8,599 (3900)</b>	6,384 (2896)	6,007 (2725)	3,932 (1784)	4,051 (1837)	2,569 (1165)
Ground Line			<b>12,637 (5732)</b>	10,692 (4850)	9,154 (4152)	5,843 (2650)	5,734 (2601)	3,680 (1669)	3,941 (1788)	2,466 (1119)
-5 ft. (-1.52 m)	<b>6,513 (2954)</b>	<b>6,513 (2954)</b>	<b>16,617 (7537)</b>	10,655 (4833)	8,834 (4007)	5,557 (2521)	5,562 (2523)	3,520 (1597)		
-10 ft. (-3.05 m)	<b>14,186 (6435)</b>	<b>14,186 (6435)</b>	<b>16,606 (7532)</b>	10,737 (4870)	8,786 (3985)	5,515 (2502)	5,546 (2516)	3,505 (1590)		
-15 ft. (-4.57 m)			<b>12,654 (5740)</b>	11,107 (5038)	<b>8,492 (3852)</b>	5,718 (2594)				
<i>With 8-ft. 3-in. (2.52 m) arm and 24-in. (600 mm) shoes, blade on ground</i>										
20 ft. (6.10 m)					<b>5,717 (2593)</b>	<b>5,717 (2593)</b>				
15 ft. (4.57 m)					<b>5,738 (2603)</b>	<b>5,738 (2603)</b>	<b>5,700 (2585)</b>	4,514 (2048)		
10 ft. (3.05 m)					<b>7,220 (3275)</b>	7,209 (3270)	<b>6,428 (2916)</b>	4,394 (1993)		
5 ft. (1.52 m)					<b>9,476 (4298)</b>	6,647 (3015)	<b>7,338 (3328)</b>	4,168 (1891)		
Ground Line			<b>10,024 (4547)</b>	<b>10,024 (4547)</b>	<b>11,241 (5099)</b>	6,191 (2808)	<b>8,157 (3700)</b>	3,956 (1794)		
-5 ft. (-1.52 m)	<b>6,914 (3136)</b>	<b>6,914 (3136)</b>	<b>17,858 (8100)</b>	11,463 (5200)	<b>11,702 (5308)</b>	5,992 (2718)	<b>8,368 (3796)</b>	3,843 (1743)		
-10 ft. (-3.05 m)	<b>13,809 (6264)</b>	<b>13,809 (6264)</b>	<b>15,529 (7044)</b>	11,634 (5277)	<b>10,657 (4834)</b>	6,019 (2730)	<b>6,949 (3152)</b>	3,902 (1770)		
-15 ft. (-4.57 m)			<b>10,539 (4780)</b>	<b>10,539 (4780)</b>						
<i>With 9-ft. 11-in. (3.01 m) arm and 24-in. (600 mm) shoes, blade on ground</i>										
15 ft. (4.57 m)							<b>5,224 (2370)</b>	4,604 (2088)		
10 ft. (3.05 m)					<b>6,240 (2830)</b>	<b>6,240 (2830)</b>	<b>5,792 (2627)</b>	4,450 (2018)	<b>3,326 (1509)</b>	2,854 (1295)
5 ft. (1.52 m)					<b>8,599 (3900)</b>	6,761 (3067)	<b>6,814 (3091)</b>	4,194 (1902)	<b>5,038 (2285)</b>	2,771 (1257)
Ground Line			<b>12,637 (5732)</b>	11,628 (5274)	<b>10,690 (4849)</b>	6,220 (2821)	<b>7,806 (3541)</b>	3,942 (1788)	<b>5,359 (2431)</b>	2,668 (1210)
-5 ft. (-1.52 m)	<b>6,513 (2954)</b>	<b>6,513 (2954)</b>	<b>16,617 (7537)</b>	11,321 (5135)	<b>11,594 (5259)</b>	5,934 (2692)	<b>8,296 (3763)</b>	3,782 (1715)		
-10 ft. (-3.05 m)	<b>14,186 (6435)</b>	<b>14,186 (6435)</b>	<b>16,606 (7532)</b>	11,403 (5172)	<b>11,080 (5026)</b>	5,891 (2672)	<b>7,772 (3525)</b>	3,768 (1709)		
-15 ft. (-4.57 m)			<b>12,654 (5740)</b>	11,773 (5340)	<b>8,492 (3852)</b>	6,094 (2764)				
<i>With 8-ft. 3-in. (2.52 m) arm and 28-in. (700 mm) shoes or 24-in. (600 mm) rubber crawler pad, blade on ground</i>										
20 ft. (6.10 m)					<b>5,717 (2593)</b>	<b>5,717 (2593)</b>				
15 ft. (4.57 m)					<b>5,738 (2603)</b>	<b>5,738 (2603)</b>	<b>5,700 (2585)</b>	4,579 (2077)		
10 ft. (3.05 m)					<b>7,220 (3275)</b>	<b>7,220 (3275)</b>	<b>6,428 (2916)</b>	4,459 (2023)		
5 ft. (1.52 m)					<b>9,476 (4298)</b>	6,740 (3057)	<b>7,338 (3328)</b>	4,233 (1920)		
Ground Line			<b>10,024 (4547)</b>	<b>10,024 (4547)</b>	<b>11,241 (5099)</b>	6,285 (2851)	<b>8,157 (3700)</b>	4,021 (1824)		
-5 ft. (-1.52 m)	<b>6,914 (3136)</b>	<b>6,914 (3136)</b>	<b>17,858 (8100)</b>	11,628 (5274)	<b>11,702 (5308)</b>	6,086 (2761)	<b>8,368 (3796)</b>	3,908 (1773)		
-10 ft. (-3.05 m)	<b>13,809 (6264)</b>	<b>13,809 (6264)</b>	<b>15,529 (7044)</b>	11,799 (5352)	<b>10,657 (4834)</b>	6,112 (2772)	<b>6,949 (3152)</b>	3,967 (1799)		
-15 ft. (-4.57 m)			<b>10,539 (4780)</b>	<b>10,539 (4780)</b>						

## Lift Capacities (continued)

## 120C

**Italic** type indicates hydraulic-limited capacities; **lightface** type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook, machine equipped with 0.79-cu. yd. (0.60 m<sup>3</sup>), 42-in. (1067 mm) wide, 925-lb. (420 kg) bucket; and situated on firm, 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. Ratings are based on SAE J1097.

Load Point Height	5 ft. (1.52 m)		10 ft. (3.05 m)		15 ft. (4.57 m)		20 ft. (6.10 m)		25 ft. (7.62 m)		
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	
<i>With 9-ft. 11-in. (3.01 m) arm and 28-in. (700 mm) shoes or 24-in. (600 mm) rubber crawler pad, blade on ground</i>											
15 ft. (4.57 m)								5,224 (2370)	4,669 (2118)		
10 ft. (3.05 m)					6,240 (2830)	6,240 (2830)	5,792 (2627)	4,515 (2048)	3,326 (1509)	2,904 (1317)	
5 ft. (1.52 m)					8,599 (3900)	6,354 (3109)	6,814 (3091)	4,259 (1932)	5,038 (2285)	2,821 (1280)	
Ground Line			12,637 (5732)	11,793 (5349)	10,690 (4849)	6,313 (2864)	7,806 (3541)	4,007 (1818)	5,359 (2431)	2,718 (1233)	
-5 ft. (-1.52 m)	6,513 (2954)	6,513 (2954)	16,617 (7537)	11,487 (5210)	11,594 (5259)	6,027 (2734)	8,296 (3763)	3,847 (1745)			
-10 ft. (-3.05 m)	14,186 (6435)	14,186 (6435)	16,606 (7532)	11,568 (5247)	11,080 (5026)	5,984 (2714)	7,772 (3525)	3,833 (1739)			
-15 ft. (-4.57 m)			12,654 (5740)	11,938 (5415)	8,492 (3852)	6,188 (2807)					

## Buckets

A full line of buckets is offered to meet a wide variety of applications. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

Type Bucket	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 8 ft. 3 in. (2.52 m)		Arm Dig Force 9 ft. 11 in. (3.01 m)		Bucket Tip Radius		No. Teeth
	in.	mm	cu. yd.	m <sup>3</sup>	lb.	kg	lb.	kN	lb.	kN	lb.	kN	in.	mm	
General-Purpose	18	460	0.34	0.26	723	328	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	3
Plate Lip	24	610	0.50	0.38	893	405	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	4
	30	760	0.64	0.49	1,066	484	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	4
	36	915	0.78	0.60	1,081	490	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	5
	42	1065	0.79	0.60	926	420	21,463	92.3	14,620	65.0	13,172	58.6	43.5	1105	6
	42	1065	0.92	0.70	1,000	453	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	6
	48	1220	1.06	0.81	1,441	654	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	7
Heavy-Duty	18	460	0.34	0.26	869	394	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	3
Plate Lip	24	610	0.50	0.38	938	425	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	4
	30	760	0.64	0.49	1,122	509	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	4
	36	915	0.78	0.60	1,298	589	18,675	83.1	13,639	60.7	12,644	56.3	50.0	1270	5
Ditching	48	1220	0.67	0.51	841	381	25,230	112.2	14,948	66.5	13,722	61.0	37.0	940	0
	60	1525	0.90	0.69	937	425	25,230	112.2	14,948	66.5	13,722	61.0	37.0	940	0

\*All capacities are SAE heaped ratings.

## Bucket Selection Guide

Recommended Bucket Size*	General-Purpose Bucket	Heavy-Duty Bucket
Material (loose weight)		
Wood chips - 700 lb./cu. yd. (420 kg/m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )	—
Peat, dry - 750 lb./cu. yd. (440 kg/m <sup>3</sup> )	2.75 cu. yd. (2.1 m <sup>3</sup> )	—
Cinders - 950 lb./cu. yd. (560 kg/m <sup>3</sup> )	2.00 cu. yd. (1.5 m <sup>3</sup> )	—
Peat, wet - 1,170 lb./cu. yd. (690 kg/m <sup>3</sup> )	1.75 cu. yd. (1.3 m <sup>3</sup> )	—
Topsoil - 1,600 lb./cu. yd. (950 kg/m <sup>3</sup> )	1.38 cu. yd. (1.1 m <sup>3</sup> )	—
Coal - 1,780 lb./cu. yd. (1050 kg/m <sup>3</sup> )	1.25 cu. yd. (1.0 m <sup>3</sup> )	—
Caliche - 2,100 lb./cu. yd. (1250 kg/m <sup>3</sup> )	0.63-0.88 cu. yd. (0.5-0.7 m <sup>3</sup> )	0.50-0.75 cu. yd. (0.4-0.6 m <sup>3</sup> )
Earth, loam - 2,100 lb./cu. yd. (1250 kg/m <sup>3</sup> )	0.88 cu. yd. (0.7 m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )
Shale - 2,250 lb./cu. yd. (1330 kg/m <sup>3</sup> )	0.88 cu. yd. (0.7 m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )
Sand, dry - 2,400 lb./cu. yd. (1420 kg/m <sup>3</sup> )	0.88 cu. yd. (0.7 m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )
Clay, dry - 2,500 lb./cu. yd. (1480 kg/m <sup>3</sup> )	0.63-0.88 cu. yd. (0.5-0.7 m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )
Earth, dry - 2,550 lb./cu. yd. (1510 kg/m <sup>3</sup> )	0.63-0.75 cu. yd. (0.5-0.6 m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )
Limestone, broken or crushed - 2,600 lb./cu. yd. (1540 kg/m <sup>3</sup> )	0.50-0.75 cu. yd. (0.4-0.6 m <sup>3</sup> )	0.50-0.63 cu. yd. (0.4-0.5 m <sup>3</sup> )
Earth, wet - 2,700 lb./cu. yd. (1600 kg/m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )
Clay, wet - 2,800 lb./cu. yd. (1660 kg/m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )
Rock, granite, blasted and broken - 2,800 lb./cu. yd. (1660 kg/m <sup>3</sup> )	0.63-0.88 cu. yd. (0.5-0.7 m <sup>3</sup> )	0.50-0.75 cu. yd. (0.4-0.6 m <sup>3</sup> )
Sand, moist - 2,850 lb./cu. yd. (1690 kg/m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )
Sand and gravel, dry - 2,900 lb./cu. yd. (1720 kg/m <sup>3</sup> )	0.75 cu. yd. (0.6 m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )
Sand, wet - 3,100 lb./cu. yd. (1840 kg/m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )	0.50 cu. yd. (0.4 m <sup>3</sup> )
Sand and gravel, wet - 3,400 lb./cu. yd. (2020 kg/m <sup>3</sup> )	0.63 cu. yd. (0.5 m <sup>3</sup> )	0.50 cu. yd. (0.4 m <sup>3</sup> )

\*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Larger buckets may be possible when using light buckets; and for flat and level operations, less compacted materials, and volume loading applications such as mass excavation in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications and uneven surfaces. Bucket capacity indicated is SAE heaped.

## 120C Excavator

Key: ● Standard equipment ▲ Optional or special equipment

\*See your John Deere dealer for further information.

### 120C Engine

- Certified to EPA Tier 2 emissions
- Auto-idle system
- Automatic belt tension device
- Batteries (two 12 volt), 180-min. (1,250 CCA) reserve capacity
- Charge air cooler
- Dual element dry-type air filter
- Enclosed fan guard (conforms to SAE J1308)
- Engine coolant to -34°F (-37°C)
- Fuel filter with water separator
- Full-flow oil filter
- Radiator trash screen
- Turbocharger
- Underhood muffler with vertical curved end exhaust stack
- ▲ Electric ether starting aid
- ▲ Engine coolant heater

### Hydraulic System

- Auxiliary valve section
- Hydraulic pilot controls
- Reduced-drift valve for boom down, arm in
- Spring-applied, hydraulically released automatic swing brake
- ▲ Auxiliary hydraulic and electric pilot controls
- ▲ Hydraulic filter restriction indicator kit
- ▲ Load-lowering control device
- ▲ Single pedal propel control

### Undercarriage

- Planetary final drive with axial piston motors
- Propel motor shields
- Track guides, front idler
- Triple semi-grouser shoes, 24 in. (600 mm)
- ▲ Triple semi-grouser shoes, 28 in. (700 mm)
- ▲ Rubber crawler pad, 24 in. (600 mm)
- Two-speed propel with automatic shift
- Upper carrier roller (1)
- ▲ Undercarriage with blade

### 120C Upperstructure

- Counterweight, 5,400 lb. (2450 kg)
- Right- and left-hand mirrors
- Toolbox
- Vandal locks with ignition key: Cab door / Engine hood / Fuel cap / Service doors / Toolbox

### Front Attachments

- Centralized lubrication system
- Dirt seals on all bucket pins
- No-boom-arm
- ▲ Arm, 8 ft. 3 in. (2.52 m)
- ▲ Arm, 9 ft. 11 in. (3.01 m)
- ▲ Attachment quick couplers
- ▲ Auxiliary hydraulic lines with shutoff valve
- ▲ Boom cylinder with plumbing to mainframe
- ▲ Buckets: Ditching / General purpose / General-purpose high capacity / Heavy duty / Heavy-duty high capacity / Side cutters and teeth
- ▲ Heavy-duty grapple
- ▲ Hydraulic bucket material clamps
- ▲ Hydraulic coupler

### Operator's Station

- Adjustable seat with independent control positions (levers-to-seat, seat-to-pedals)
- AM/FM stereo
- Auto climate control/air conditioner, 20,000 Btu/hr. (5.9 kW), heater and pressurizer
- Cell-phone power outlet, 12 volt, 60 watt, 5 amp
- Coat hook
- Deluxe suspension cloth seat with 4-in. (100 mm) adjustable armrests and lumbar support
- Front windshield wiper with intermittent speed
- Gauges (illuminated): Engine coolant / Fuel
- Horn, electric on left control lever
- Hot/cool-box compartment
- Hour meter, electric
- Hydraulic shutoff lever, all controls

### 120C Operator's Station (continued)

- Interior light
- Large cup holder
- Machine Information Center (MIC)
- Mode selectors (illuminated): Power modes – three / Travel modes – two with automatic shift / Work modes – two
- Monitor system with alarm features: Auto-idle/auto-acceleration indicator light / Engine air cleaner restriction indicator light / Engine coolant temperature indicator light with audible alarm / Engine check light / Engine oil pressure indicator light with audible alarm / Low alternator charge indicator light / Low fuel indicator light / Wiper-mode indicator / Work-lights-on indicator / Work-mode indicator
- Motion alarm with cancel switch (conforms to SAE J994)
- Propel pedals and levers
- Seat belt, 2 in. (51 mm), retractable
- ▲ Seat belt, 3 in. (76 mm), non-retractable
- Tinted glass
- Transparent tinted overhead hatch
- ▲ Control pattern change valve
- ▲ Circulation fan
- ▲ Protection screens for cab front, rear, and side
- ▲ Window vandal protection covers
- ▲ 24- to 12-volt D.C. radio convertors, 10 amp

### Electrical

- 45-amp alternator
  - Blade-type multi-fused circuits
  - By-pass start safety cover on starter
  - Positive terminal battery covers
  - ▲ Cab extension wiring harness
- ### Lights
- Halogen work lights: One mounted on boom / One mounted on frame

## Control Owning and Operating Costs

Customer Personal Service (CPS) is part of John Deere's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

**Fluid analysis program** – tells you what's going on inside *all* of your machine's major components so you'll know if there's a problem *before* you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

**Component life-cycle data** – gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission, or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

**Preventive Maintenance (PM) agreements** – give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that

critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

**Extended coverage** – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And an extended coverage contract also travels well because it's backed by John Deere and is honored by *all* Deere construction dealers.

**Customer Support Advisors (CSAs)** – Deere believes the CSA program lends a *personal* quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for *your* business and take the burden of machine maintenance off your shoulders.



JOHN DEERE

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO9249. No derating is required up to 10,000-ft. (3050 m) 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 a unit with 42-in. (1067 mm) bucket, 28-in. (700 mm) track shoes, 5,400-lb. (2450 kg) counterweight, full fuel tank, and 175-lb. (79 kg) operator.

