



690D/690D-LC

John Deere 690 Excavator... Building a reputation for production and reliability since 1969

The year was 1969. John Deere introduced its revolutionary 690 all hydraulic excavator. With its two-lever controls, superior power and excellent visibility, the 690 was an instant success. It quickly became the industry standard.

Today the 690 continues to have a firm grasp on that position. It's now evolved to the 690D. Continually updated and refined over the years, the 690D and 690D-LC (with long undercarriage) are now the standard by which others in the 10 to 19 metric ton class are judged.

The 690D, and all of the other excavators in the John Deere line, have and always will deliver the best performance, the best reliability and have the best dealer backup.

Performance features such as pilot controls let the operator work faster, maintain peak efficiency longer.

Hydraulics are quick, responsive and precise. Have a feel that lets you operate with confidence from your first time behind the controls.

Reliability is designed in. O-ring face seal hydraulic fittings on high pressure lines eliminate leaks.

Heavy-duty John Deere engines provide a dependable power source.

And an electronic monitoring system constantly keeps tabs on operating systems, providing visible and audible warnings if there's a malfunction.

Dealer backup. No excavator manufacturer has better after-the-sale backup. More than 400 dealerships provide sales, service and parts support.

There are a dozen parts depots, right here in North America, computer-linked to each dealership. That kind of backup means peace of mind. And with each 690D Excavator comes one of the best warranties available anywhere.

Read the following pages carefully. You'll learn quickly why contractors across North America continue to rate the John Deere 690D at the top of its class.





690D-LC Performance data

Lift over front at ground level with 7500 lb. (3400 kg) counterweight. Horizontal distance from centerline of rotation.

Arm length	Digging depth	Reach at ground level	Arm force	10 ft. (3.05 m)	15 ft. (4.57 m)	20 ft. (6.10 m)	25 ft. (7.62 m)	30 ft. (9.14 m)
7 ft. 3 in. (2.20 m)	19 ft. 6 in. (5.94 m)	30 ft. (9.14 m)	25,050 lb. (111 kN)		20,050 lb. (9100 kg)	14,350 lb. (6510 kg)	8980 lb. (4070 kg)	
9 ft. 6 in. (2.90 m)	21 ft. 10 in. (6.65 m)	32 ft. 3 in. (9.83 m)	19,350 lb. (86 kN)	7570 lb. (3430 kg)	19,650 lb. (8910 kg)	13,820 lb. (6270 kg)	8850 lb. (4010 kg)	5720 lb. (2590 kg)

690D Performance data

7 ft. 3 in. (2.20 m)	19 ft. 6 in. (5.94 m)	30 ft. (9.14 m)	25,050 lb. (111 kN)	15,840 lb. (7180 kg)	10,170 lb. (4610 kg)	7310 lb. (3310 kg)		
9 ft. 6 in. (2.90 m)	21 ft. 10 in. (6.65 m)	32 ft. 3 in. (9.83 m)	19,350 lb. (86 kN)	7570 lb. (3430 kg)	15,970 lb. (7240 kg)	10,160 lb. (4610 kg)	7180 lb. (3260 kg)	5720 lb. (2590 kg)

Built solid from the ground up

The 690D Excavator's undercarriage starts with a massive, stress-relieved, welded X-shaped center section. Sloped top plates on both the mainframe and track frames promote self-cleaning. Make any manual cleaning that's necessary a quick and easy job.

Track roller frames are rigid, fabricated box sections for strength. They are welded to the center X-section.

Rollers are permanently sealed and lubricated. There are two upper rollers. The long undercarriage 690D uses nine lower rollers and 53 track shoes per side. The 690Ds with the standard undercarriage use eight lower rollers and 48 shoes per side. Track shoes are induction hardened and rolled and are mounted to sealed and lubricated chain.

Heavy-duty front idlers and guides are made to withstand the most abusive job conditions. They feature a rugged, adjustable tension spring engineered for severe-duty applications. This eliminates sprocket jump, keeps the chain in line and prolongs component life.

The two-speed, hydraulic propel motors have triple planetary reduction gearing and deliver 36,000 lb. (160 kN) of drawbar pull. Top travel speed is 2.4 mph (3.9 km/h).

The swing bearing, with both upper and lower seals, is protected from contaminants and has a lube interval of 500 hours. Competitive machines, with only one seal, must be lubed every 40 hours, and this costly and vital component suffers from constant exposure to life-robbing contaminants.


The robotically welded upper frame has two massive beams that run the full length. Heavy-walled seamless tubing forms the substantial perimeter frame. It provides effective protection for the machine's sheet metal. A visual comparison of competitive excavators quickly confirms that this design is far superior to their channel and angle-iron designs.

You can order the 690D with any of three undercarriages.

For ease of hauling you may want to consider the narrow undercarriage. Transport width, when equipped with 24 in. (600 mm) pads is just 8 ft. 2 in. (2.49 m).

The wide undercarriage comes in standard length and long.

When you put a 690D on the job you can do so with confidence that it is built on a sound foundation, to stand up to the most abusive conditions.



Two-speed, axial piston propel motors are tucked inside the track width, out of harm's way.



690D Undercarriage options

	Length	Track shoe width	Average ground pressure	Operating width	Operating weight
LC (Long undercarriage)	14 ft. 3 in. (4.34 m)	30 in. (750 mm)	4.86 psi (33.5 kPa)	10 ft. 3 in. (3.13 m)	43,050 lb. (19,520 kg)
		24 in. (600 mm)	5.92 psi (40.8 kPa)	9 ft. 9 in. (2.98 m)	41,970 lb. (19,030 kg)
Standard undercarriage	12 ft. 10 in. (3.92 m)	30 in. (750 mm)	5.3 psi (36.6 kPa)	10 ft. 3 in. (3.13 m)	41,970 lb. (19,030 kg)
		24 in. (600 mm)	6.5 psi (44.8 kPa)	9 ft. 9 in. (2.98 m)	40,990 lb. (18,590 kg)
Narrow undercarriage (for 8½-ft. transport laws)	12 ft. 10 in. (3.92 m)	24 in. (600 mm)	6.5 psi (44.8 kPa)	8 ft. 2 in. (2.49 m)	40,690 lb. (18,450 kg)

Center struts give track links 40 percent more strength. Track chain is sealed for long life.

Sheet metal is set inside the strong perimeter frame to protect compartment access doors from damage.

Massive boom and arms have internal reinforcing plates and gussets with full-penetration welds for maximum strength.



Pleasant to operate, easy to care for

You'll like the operator's station from the minute you climb aboard. Attention to detail is evident everywhere you look. There's plenty of room, for even the bulkiest of operators. Controls and gauges are well placed. Visibility is excellent.

On hot days you'll appreciate how the cab opens for excellent ventilation. The entire front window is removable and stores overhead. The right and left windows slide open. The door can be locked in the open position. There's even a roof vent.

When the cold winds blow, close up the cab and turn on the heater. A 20,000 Btu (5.9 kW) unit is standard. You can also order a 40,000 Btu (11.7 kW) heater.

The two, low-effort, pilot controls are adjustable fore and aft to optimize operator comfort and enhance performance.

To reduce fatiguing noise and vibration, the cab and the engine are isolation mounted. And both the cab and engine compartment are lined with sound-deadening material.

Ease of service was another design priority that drove the engineers as they designed the 690D. Their success is obvious.

Huge side and top doors open to provide access to control valves, batteries, hydraulic pumps and engine.

Easy to read sight gauges allow the operator to check the hydraulic fluid and fuel levels from the ground.

Skid-resistant strips and convenient handholds make it easier and safer to service points on the top of the machine.

Pleasant to operate, easy to care for. Two reasons the 690D will be a profitable and productive member of your equipment lineup.

The orthopedic seat is fully adjustable and provides excellent support for day-long operation.



Monitoring system provides visible and audible warnings.

Controls are conveniently located to the operator's right.

Huge doors provide access to components for ease of servicing. All are locked with the ignition key.



Remote lube bank lets you easily grease difficult to reach pivot points.



Cab is roomy; visibility and ventilation are excellent. Controls are comfortably positioned.



An adjustable bushing maintains the proper fit between the arm and bucket for better control, longer pin life.





Attachments help your excavator work harder

With today's skyrocketing costs, it's the successful contractor who finds ways to cut costs without cutting corners.

Thanks to a number of creative attachment manufacturers, excavator versatility is constantly being increased with the introduction of a growing list of attachments.

Some increase the machine's efficiency in performing intended job functions. Others allow the excavator to perform jobs that it couldn't do otherwise. In either case, attachments are helping contractors get more work from their excavators... improving profitability and efficiency.

To learn more about the attachments you see here and the many others, see your John Deere dealer. He has access to more than 200 manufacturers of such equipment.



High capacity buckets increase production in light materials such as coal.



Ripper teeth on the back and the bottom of the bucket loosen frozen or hard ground or rock.



Stump and brush grapple/rake speeds land clearing.



Many buckets are available to handle special applications and soil conditions.



Vibratory compactor mounts in place of bucket, operates hydraulically.



Jaw buckets work in clamshell, grading, trenching and grapple applications.



Clamshell offers 360-degree rotation for precise load spotting. Excellent in runny materials.



Hydraulic breaker busts rock, concrete, other hard materials. Useful where blasting is prohibited.



Smooth-edge, wide, shallow buckets in many sizes speed ditch cleaning, light material handling.



V-bottom buckets aggressively rip through frost and rock.



Compaction wheel delivers low-cost compaction, yet lets you switch quickly to a bucket.



Thumb attachment holds bulky, oversized objects in the bucket.



Trapezoidal buckets shape both sides and bottom of irrigation ditches in one pass.



Heavy-duty grapple handles rock, scrap, demolition debris or places riprap.



Magnet handles ferrous scrap, separates from non-ferrous materials.

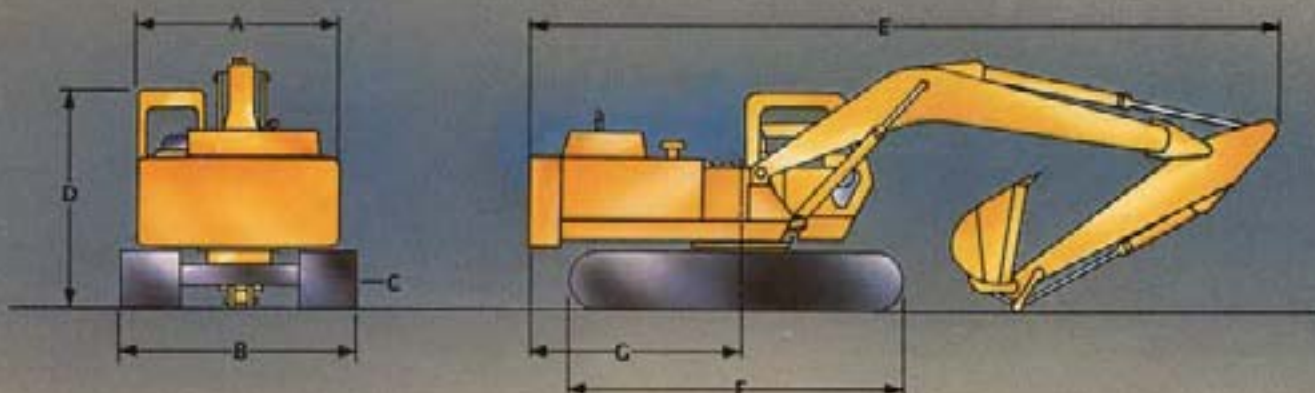


Grapples are available in different tine configurations for handling various materials.



Engine	
Horsepower, net	125 (95 kW)
Displacement	414 cu. in. (6.785 L)
Turbocharged	yes
Performance w/ 9 ft. 6 in. (2.9 m) arm	
Digging depth, max	21 ft. 10 in. (6.65 m)
Reach at ground level	52 ft. 3 in. (9.83 m)
Bucket digging force	20,190 lb. (90 kN)

Hydraulic system	
Type	Closed center
System pressure digging	4060 psi (28 000 kPa)
Flow	100 gpm (278 L/min)
Operating information	
Gradability	100%, 45 deg.
Drawbar pull	36,000 lb. (160 kN)
Operating weight, as typically equipped	43,050 lb. (19 520 kg)



A. Overall upper structure width	8 ft. 5 in. (2.57 m)
B. Track width	
w/wide undercarriage and 24 in. (600 mm) shoes	9 ft. 9 in. (2.98 m)
30 in. (750 mm) shoes	10 ft. 3 in. (3.15 m)
w/narrow undercarriage and 24 in. (600 mm) shoes	8 ft. 2 in. (2.49 m)
C. Ground clearance	1 ft. 7 in. (480 mm)

D. Shipping height w/9 ft. 6 in. arm	9 ft. 5 in. (2.87 m)
E. Length	
w/7 ft. 5 in. (2.2 m) arm	31 ft. 8 in. (9.65 m)
w/9 ft. 6 in. (2.9 m) arm	31 ft. 3 in. (9.54 m)
F. Track length	
w/standard undercarriage	12 ft. 10 in. (3.92 m)
w/long undercarriage	14 ft. 3 in. (4.34 m)
G. Rear swing clearance	9 ft. (2.75 m)

690D John Deere bucket selection guide						
	Width		Capacity		Weight	
	in.	mm	cu. yd.	m ³	lb.	kg
General purpose	24	600	.56	.43	1008	453
	30	750	.75	.57	1100	499
	36	900	.90	.75	1408	639
	42	1067	1.06	.88	1412	640
General purpose, high capacity	30	750	.90	.69	1408	639
	36	900	1.20	.92	1479	671
	42	1067	1.34	1.02	1618	734
	48	1220	1.5	1.15	1705	773
Heavy-duty	24	600	.60	.46	1373	623
	30	750	.74	.56	1481	672
	36	900	.90	.69	1573	714
	42	1067	1.06	.81	1699	771
	48	1220	1.20	.92	1793	813

690D John Deere bucket selection guide						
	Width		Capacity		Weight	
	in.	mm	cu. yd.	m ³	lb.	kg
Heavy-duty, high capacity	24	600	.74	.56	1425	646
	30	750	.90	.69	1531	694
	36	900	1.20	.92	1651	749
	42	1067	1.34	1.02	1728	784
Severe-duty, cast lip	24	600	.60	.46	1456	660
	30	750	.74	.56	1578	716
	36	900	.90	.69	1663	754
Severe-duty, plate lip	30	750	.74	.56	1760	798
	36	900	.90	.69	1859	843
Ditching	72	1824	1.06	.81	1244	564

