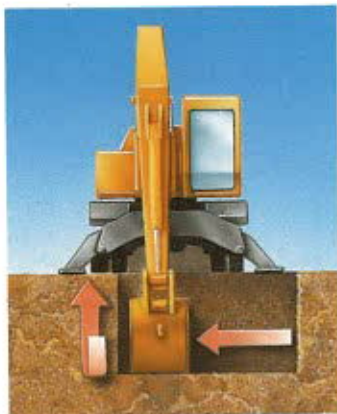


E X C A V A T O R

595D





The sophisticated hydraulic system is the brains behind combined-hydraulic-function-capability (C-H-F-C) – its automatic load-sensing system. C-H-F-C lets the 595D propel and swing the boom simultaneously without stuttering or mistracking.



The open-center hydraulic system automatically adjusts to meet job demands. Mode selector also lets you fine-tune performance to save fuel.



Easy to get to. Large, reinforced doors swing wide for easy access to all components and fill-points. Easy-to-read sight gauges let you check hydraulic fluid and fuel levels from the ground. Lock cab and service areas with ignition key.



The 595D roads like no other excavator. The two-speed hydrostatic system provides all-wheel drive in low and a top speed of 18.6 mph (30 km/h) in high. The air-over-hydraulic brake system features expanding shoes at all corners to assure smooth confident stops in all kinds of terrain.

Choose from two all-welded, stress relieved undercarriages. One has independent front and rear stabilizers – the other comes with front stabilizers and a rear blade.

The right rubber for every job. Choose dual 10.00x20.0 tires for working on hard surfaces. Single 18.00x19.5 tires give better floatation, traction, and mobility in rough terrain.





Convenient, low-effort controls give you precise, smooth operation. To save fuel, engine speed is reduced to 1,400 rpm when a hydraulic function is not used for four seconds.



Quiet comfort. The roomy, well-ventilated operator station lets you concentrate on the job at hand. Fatiguing vibration is reduced because the cab is isolation-mounted. Both cab and engine compartments are also lined with sound-deadening insulation. The cloth-covered seat is fully adjustable. Visibility is excellent – especially to the trench. Dual rear-view mirrors are standard. Vital machine functions are monitored electronically with both visual and electronic alarms. A large 13,500 Btu/hr (4.1 kW) heater is standard.



The standard auxiliary valve and circuit let you install attachments fast.



Choose from 16 John Deere general-purpose, heavy-duty, and ditching buckets. They feature heavy-duty reinforced beams, T-1 steel sidecutters, two-piece moldboard, and heavy-duty wear strips.

Fanggs® teeth are featured on every bucket. Due to their unique profile, Fanggs teeth dig with 23 percent less effort for faster bucket fill and better bucket control.

Front axle oscillates 12 degrees for smooth moves in rough terrain. A hydraulic lock secures the axle for solid footing when digging.

SPECIFICATIONS

ENGINE

595D

Type	John Deere 4276T with altitude-compensating turbocharger
Rated power	
Dig mode	95 SAE net hp (71 kW) / 100 SAE gross hp (75 kW) @ 2,100 rpm
Travel mode	100 SAE net hp (75 kW) / 105 SAE gross hp (78 kW) @ 2,300 rpm
Cylinders	4
Displacement	276 cu. in. (4.524 L)
Maximum net torque	284 lb.-ft. (385 Nm) @ 1,300 rpm
Fuel consumption, typical	2 to 3 gal./hr. (7.5 to 11.5 L/h)
Cooling fan	suction type
Electrical system	24 volt with 42-amp alternator
Batteries (two 12 volt)	reserve capacity: 180 min.

HYDRAULIC SYSTEM

Main pumps	2 variable-displacement axial-piston open center
Maximum rated flow	2 x 44.1 gpm (2 x 167 L/min.)
Pressure setting	4,620 psi (31 860 kPa)
Pilot pump	one gear
Maximum rated flow	6.6 gpm (25 L/min.)
Pressure setting	570 psi (3930 kPa)
Steering pump	one gear
Maximum rated flow	7.93 gpm (30.0 L/min.)
Pressure setting	1,778 psi (12 260 kPa)
System operating pressure	
Travel circuits	4,620 psi (31 860 kPa)
Front-end circuits	4,050 psi (27 920 kPa)
Circuit relief valves	
Boom circuits	4,270 psi (29 440 kPa)
Arm circuits	4,270 psi (29 440 kPa)
Bucket circuits	4,270 psi (29 440 kPa)
Stabilizer circuits	4,050 psi (27 920 kPa)
Cross-over relief valves	
Travel circuits	4,690 psi (32 340 kPa)
Swing circuits	3,560 psi (24 540 kPa)

STEERING

Minimum turning radius with 10 ft. 2 in. (3.1 m) arm	23 ft. 7 in. (7.14 m)
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SWING MECHANISM

Swing speed	0-14.5 rpm
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UNDERCARRIAGE

Drive system	
Low-speed range	all-wheel drive
High-speed range	rear-wheel drive
Transmission	constant mesh with low- and high-speed range
Front axle oscillation	12.4 deg.
Travel speed	
Low	0-5.6 mph (0-9.0 km/h)
High	0-18.6 mph (0-30.0 km/h)
Maximum traction force	
Low	19,800 lb. (88.1 kN) (9000 kg)
High	5,950 lb. (26.5 kN) (2700 kg)
Tractive gradability	65% (33 deg.)

CAPACITIES

Fuel tank	66.1 gal. (250 L)
Cooling system	5.5 gal. (21 L)
Engine lubrication, including filter	3.5 gal. (13 L)
Transmission	1.7 gal. (6.3 L)
Axle case	
Front	1.85 gal. (7 L)
Rear	2.9 gal. (11 L)
Wheel gear reduction (each)	0.61 gal. (2.3 L)
Hydraulic system	52.9 gal. (200 L)
Hydraulic tank	34.4 gal. (130 L)
Swing drive	1.3 gal. (5 L)

OPERATING WEIGHTS

With full fuel tank; 175-lb. (79 kg) operator; 10.00-20.0, 14 PR dual tires; 10 ft. 2 in. (3.1 m) arm; 0.75-cu. yd. (0.57 m ³) bucket; and fenders	
With blade and two stabilizers	36,222 lb. (16 430 kg)
Front axle	16,469 lb. (7470 kg)
Rear axle	19,754 lb. (8960 kg)
With four stabilizers	36,575 lb. (16 590 kg)
Front axle	16,888 lb. (7660 kg)
Rear axle	19,688 lb. (8930 kg)

COMPONENT WEIGHTS

5950

Upperstructure with full fuel tank and	5,510-lb. (2500 kg)
main counterweight (less front attachments)	15,543 lb. (7050 kg)
Undercarriage equipped with	
Blade, two stabilizers, and tires	14,440 lb. (6550 kg)
Four stabilizers and tires	14,795 lb. (6710 kg)
Tires	
10.00-20.0, 14 PR dual (8)	1,733 lb. (786 kg)
18.00-19.5, 18 PR single (4)	1,420 (644 kg)
One-piece boom (with arm and boom cylinders)	3,485 lb. (1581 kg)
Arm with bucket cylinder and linkage	
10 ft. 2 in. (3.1 m)	1,808 lb. (820 kg)
Boom lift cylinders (2) total weight with linkage	705 lb. (320 kg)
Main counterweight	5,510 lb. (2500 kg)

OPERATING INFORMATION

	Arm Length	10 ft. 2 in. (3.1 m)
A	Maximum reach	31 ft. 4 in. (9.56 m)
A'	Maximum reach @ ground level	30 ft. 8 in. (9.35 m)
B	Maximum digging depth	20 ft. 8 in. (6.3 m)
B'	Maximum digging depth @ 8-ft. (2.44 m) flat bottom	20 ft. 0 in. (6.09 m)
C	Maximum cutting height	29 ft. 8 in. (9.03 m)
D	Maximum dumping height	20 ft. 7 in. (6.28 m)
E	Minimum swing radius	10 ft. 3 in. (3.13 m)
F	Maximum vertical wall	17 ft. 11 in. (5.46 m)
G	Tail swing radius	8 ft. 1 in. (2.45 m)

