

# 304K Loader

48 kW (64 net hp)



JOHN DEERE

## FEATURES

2469-mm (8 ft. 1 in.) overall height and 1905-mm (75 in.) width enable the 304K to navigate low and narrow entryways.

Standard canopy or optional air-conditioned/heated cab lets you choose the right operator environment for the job.

3.3-L naturally aspirated 48-kW (64 hp) diesel meets IT4 emission regulations without after-treatment devices.

Hydrostatic transmission's low and high ranges provide travel speeds to 20 km/h (12 mph).

Oscillating front loader frame reduces operator station tilt for a more comfortable ride.

Limited-slip front and rear axles help improve traction when a tire starts to spin.

Standard skid-style quick coupler and auxiliary hydraulics accommodate numerous attachments.



<b>Engine</b>	<b>304K</b>	
Manufacturer and Model	Yanmar 4TNV98	
Non-Road Emission Standard	EPA Interim Tier 4/EU Stage IIIA	
Cylinders	4	
Displacement	3.3 L (203 cu. in.)	
Net Rated Power (ISO 9249)	48 kW (64 hp) at 2,400 rpm	
Maximum Net Torque (ISO 9249)	239 Nm (176 lb.-ft.) at 1,600 rpm	
Electrical System	12-volt with 80-amp alternator	
<b>Powertrain</b>		
Hydrostatic (HST) with infinitely variable speed control over full range of operating speeds; 2 speed ranges; joystick-mounted F-N-R; acceleration pedal; HST inching pedal, which allows infinitely reduced travel speeds while maintaining full engine rpm and hydraulic flow		
2 Travel Speeds In Forward and Reverse; Equipped with 405/70R18 Tires		
Gear 1	6.0 km/h (3.7 mph)	
Gear 2	20.0 km/h (12.0 mph)	
<b>Axles/Brakes</b>		
<b>Axles</b>	Rigid-mount front and rear axles with 10-deg. frame oscillation	
Rear Axle Oscillation Versus Front Axle	20 deg. total, stop to stop	
<b>Differentials</b>	45% locking front and rear differentials	
<b>Final Drive</b>	Heavy-duty outboard planetary	
<b>Brakes</b>		
Service Brakes	Hydraulically actuated, self-adjusting internal wet-disc brake and driveline drum brake	
Parking Brake	Automatically spring-applied, hydraulically released, internal wet disc	
<b>Tires/Wheels</b>		
	<i>Tread Width</i>	<i>Width Over Tires</i>
<b>Standard Size, 405/70R18 Dunlop® SPT9 on Single-Piece Rims</b>	1417 mm (55.8 in.)	1780 mm (70.1 in.)
<b>Serviceability</b>		
<b>Refill Capacities</b>		
Fuel Tank	50.0 L (13.2 gal.)	
Cooling System (engine and radiator)	12.0 L (12.7 qt.)	
Engine Oil with Filter	10.0 L (10.8 qt.)	
Differential and Planetary Axle, Front	6.0 L (6.4 qt.)	
Differential and Planetary Axle, Rear	6.0 L (6.4 qt.)	

**Serviceability (continued)**
**304K**
**Refill Capacities (continued)**

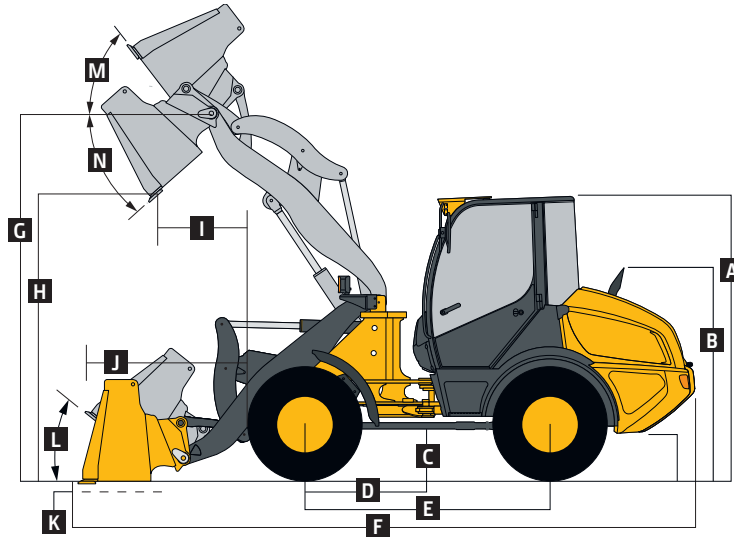
Hydraulic/Hydrostatic Reservoir with Filter	90.0 L (23.8 gal.)
Hydrostatic Motor Gearbox	1.0 L (1.1 qt.)

**Hydraulic System/Steering**

<b>Main Pump (loader and steering)</b>	Fixed-displacement gear pump; open-center system
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,400 rpm	77 L/m (20 gpm)
System Relief Pressure (loader)	23 000 kPa (3,335 psi)
System Relief Pressure (steering)	18 002 kPa (2,611 psi)
<b>Steering (conforms to ISO 5010)</b>	Hydraulic power steering (SAE J1511); 40-deg. articulation, left and right
Articulation Angle	80-deg. arc (40 deg. each direction)

**Hydraulic Cycle Time**

Raise	6.6 sec.
Dump	1.6 sec.
Lower (float down)	5.7 sec.
Lower (power down)	5.3 sec.
Total	13.5 sec.

**Dimensions and Specifications with Quick-Coupler and Bucket**

**304K LOADER WITH QUICK-COUPLER AND BUCKET**

Dimensions with Quick-Coupler and Bucket	0.8-m <sup>3</sup> (1.0 cu. yd.) stock-piling/general purpose with bolt-on edge	1.1-m <sup>3</sup> (1.4 cu. yd.) stock-piling/general purpose with bolt-on edge	1.6-m <sup>3</sup> (2.1 cu. yd.) light-material with bolt-on edge
A Height to Top of Cab	2.47 m (8 ft. 0 in.)	2.47 m (8 ft. 0 in.)	2.47 m (8 ft. 0 in.)
B Height to Top of Exhaust	1.82 m (5 ft. 11 in.)	1.82 m (5 ft. 11 in.)	1.82 m (5 ft. 11 in.)
C Ground Clearance	330 mm (13 in.)	330 mm (13 in.)	330 mm (13 in.)
D Length from Centerline to Front Axle	1067 mm (3 ft. 6 in.)	1067 mm (3 ft. 6 in.)	1067 mm (3 ft. 6 in.)
E Wheelbase	2.15 m (7 ft. 1 in.)	2.15 m (7 ft. 1 in.)	2.15 m (7 ft. 1 in.)
F Overall Length, Bucket on Ground	5.52 m (18 ft. 1 in.)	5.62 m (18 ft. 5 in.)	5.75 m (18 ft. 10 in.)
G Height to Hinge Pin, Fully Raised	3.37 m (11 ft. 1 in.)	3.37 m (11 ft. 1 in.)	3.37 m (11 ft. 1 in.)
H Dump Clearance, 40-deg. Full Height	2.62 m (8 ft. 7 in.)	2.57 m (8 ft. 5 in.)	2.49 m (8 ft. 2 in.)
I Reach, 40-deg. Dump, Full Height	930 mm (3 ft. 1 in.)	975 mm (3 ft. 2 in.)	1055 mm (3 ft. 5 in.)
J Reach, 42-deg. Dump, 2.13-m (7 ft.) Clearance	1.60 m (5 ft. 4 in.)	1.65 m (5 ft. 6 in.)	1.69 m (5 ft. 7 in.)
K Maximum Digging Depth	70 mm (2.8 in.)	70 mm (2.8 in.)	70 mm (2.8 in.)
L Maximum Rollback at Ground Level	37 deg.	37 deg.	37 deg.
M Maximum Rollback, Boom Fully Raised	65 deg.	65 deg.	65 deg.
N Maximum Bucket Dump Angle, Fully Raised	40 deg.	40 deg.	40 deg.
Loader Clearance Circle, Bucket Carry Position	8.93 m (29 ft. 4 in.)	9.06 m (29 ft. 8 in.)	9.11 m (29 ft. 11 in.)
<b>Specifications with Quick-Coupler and Bucket</b>			
Capacity, Heaped	0.8 m <sup>3</sup> (1.0 cu. yd.)	1.1 m <sup>3</sup> (1.4 cu. yd.)	1.6 m <sup>3</sup> (2.1 cu. yd.)
Capacity, Struck	0.66 m <sup>3</sup> (0.86 cu. yd.)	0.90 m <sup>3</sup> (1.18 cu. yd.)	1.40 m <sup>3</sup> (1.80 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	535 kg (1,179 lb.)	645 kg (1,421 lb.)	730 kg (1,609 lb.)
Bucket Width	1.90 m (6 ft. 3 in.)	2.20 m (7 ft. 3 in.)	2.40 m (7 ft. 10 in.)
Breakout Force	5370 kg (11,839 lb.)	4790 kg (10,560 lb.)	4120 kg (9,083 lb.)
Tipping Load, Straight	4000 kg (8,818 lb.)	4000 kg (8,818 lb.)	3800 kg (8,378 lb.)
Tipping Load, Full Turn	3670 kg (8,091 lb.)	3600 kg (7,937 lb.)	3350 kg (7,385 lb.)
Rated Operating Load, 50% of Full-Turn Tipping Load (conforms to ISO 14397-1)*	1835 kg (4,046 lb.)	1800 kg (3,969 lb.)	1675 kg (3,693 lb.)
Operating Weight	5796 kg (12,778 lb.)	5906 kg (13,021 lb.)	5991 kg (13,208 lb.)

\*Rated operating capacity based on Deere attachments only.

