

300D Series II

Water Wagon Chassis



JOHN DEERE



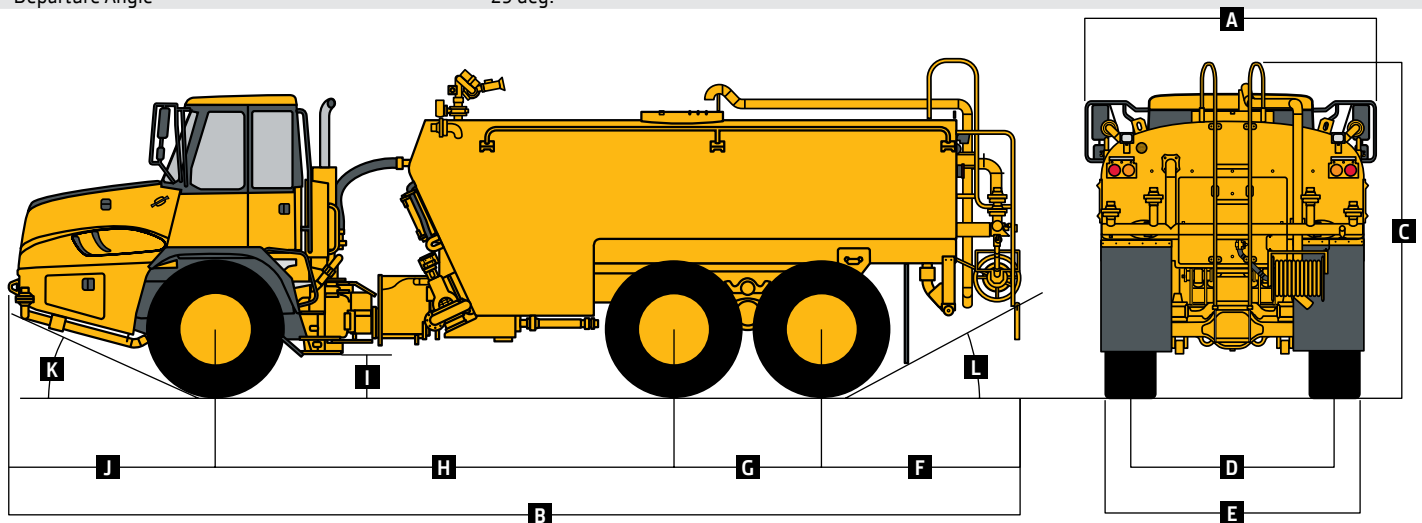
300D



Engine		300D WATER WAGON CHASSIS	
Manufacturer and Model	John Deere PowerTech™ Plus 6090		
Non-Road Emission Standards	Certified to EPA Tier 3 emissions		
Cylinders	6 inline		
Valves per Cylinder	4		
Displacement	549 cu. in. (9.0 L)		
Net Peak Power at 2,000 rpm (ISO 9249)	285 hp (212 kW)		
Rated Power with Full Fan Engagement	279 hp (208 kW)		
Net Peak Torque at 1,200–1,400 rpm (ISO 9249)	789 lb.-ft. (1070 Nm)		
Engine Bore and Stroke	4.66 x 5.35 in. (118.4 x 136.0 mm)		
Aspiration	Turbocharged and intercooled		
Lubrication	Pressure system with full-flow spin-on filter and oil-to-water cooler		
Fuel System	High-pressure common rail, 10/2-micron filtration, with water separator		
Cooling			
Fan Drive	Air-sensing viscous, direct drive		
Engine Cooling	Liquid cooled with single-pass radiator, remote pressurized coolant tank, and charge air cooler		
Powertrain			
Transmission	ZF 6HP592C Ecomat 2+ fully automatic engine-mounted planetary, with lockup torque converter, integral input retarder, and adaptive shift control		
Controls	Push-button gear select with gear-hold button and retarder aggressiveness setting		
Stall Torque Ratio	2.4 to 1		
Speeds	<i>Forward</i>	<i>Reverse</i>	
Gear 1	4 mph (7 km/h)	5 mph (8 km/h)	
Gear 2	7 mph (11 km/h)	—	
Gear 3	12 mph (19 km/h)	—	
Gear 4	16 mph (26 km/h)	—	
Gear 5	23 mph (37 km/h)	—	
Gear 6	31 mph (50 km/h)	—	
Axles			
Input	Spiral bevel		
Differential	Limited slip		
Final Drive	Outboard planetary		
Transfer Case	Single-speed inline helical with output differential		
Output Differential	Planetary, torque proportioning, pneumatically lockable		
Nominal Output Torque Split	33 front / 67 rear		
Brake System			
Service Brake	Dual-circuit hydraulically actuated dry-disc calipers on all axles with mudguards		
Park and Secondary Brake	Spring-applied, air-released, driveline-mounted, dry disc		
Auxiliary Brake	Automatic hydraulic transmission retarder		
Total Retarding Capacity (not including service brakes)	574 hp (428 kW)		
Hydraulics			
Type	Closed-center, load-sensing system		
Main Pump	Axial piston, variable displacement		
Pump Flow at High Idle	48.6 gpm (184 L/m)		
Pressure	3,625 psi (24 993 kPa)		
Electrical			
Voltage	24 volt		
Number of Batteries	2		
Battery Capacity	950 CCA		
Alternator	28 volt / 80 amp		
Steering System			
Type	2 hydrostatically actuated, double-acting hydraulic cylinders; ground-driven secondary steering pump		
Angle	42 deg. side to side		
Lock-to-Lock Turns	4.7		
Pneumatic System			
Type	Engine-mounted compressor, air drier with heater, and integral unloader valve		
System Pressure	117 psi (810 kPa)		
Suspension			
Front	Maintenance-free, rubber-mounted leading arm links and transverse link, supported by nitrogen/oil-filled struts		
Rear	Load-equalizing, pivoting walking beams with laminated rubber suspension blocks; each axle coupled to chassis by 4 interchangeable rubber-bushed links		



Water Tank System		300D WATER WAGON CHASSIS	
Tank Capacity		7,000 gal. (26 498 L)	
Water Pump Flow at 100 psi (689 kPa)		1,500 gpm (5678 Lm)	
Tires/Wheels			
Type and Size		Radial earthmovers 23.5R25	
Maximum Ground Pressure (loaded, middle axle)		23.6 psi (162.7 kPa)	
Serviceability			
Refill Capacities			
Fuel Tank		90.0 gal. (340.0 L)	
Engine Oil with Filter		6.7 gal. (25.5 L)	
Engine Coolant		8.7 gal. (32.9 L)	
Transmission Fluid (refill)		5.8 gal. (21.8 L)	
Transfer Case Oil		5.0 qt. (4.7 L)	
Hydraulic Reservoir		20.8 gal. (79.0 L)	
Axle Oil (per axle)		5.8 gal. (22.0 L)	
Final Drive		4.2 qt. (4.0 L)	
Operating Weights			
		<i>Empty</i>	<i>Loaded</i>
Front		23,080 lb. (10 478 kg)	31,130 lb. (14 133 kg)
Rear		26,045 lb. (11 824 kg)	77,085 lb. (34 997 kg)
Total		49,125 lb. (22 303 kg)	108,215 lb. (49 130 kg)
Maximum Water Load		59,090 lb. (26 827 kg)	
Optional Components			
Tank Water-Level Gauge		30 lb. (14 kg)	
Foam-Agent Injection		150 lb. (68 kg)	
Conical Fill Port		150 lb (58 kg)	
Suction Loading		750 lb. (341 kg)	
Machine Dimensions			
A Width		11 ft. 0 in. (3.35 m)	
B Length		31 ft. 10 in. (9.70 m)	
C Height			
With Monitor at Maximum Height		13 ft. 11 in. (4.25 m)	
To Top of Ladder Extension		12 ft. 7 in. (3.84 m)	
With Monitor, Ladder Extension, and Fill Pipe Removed		11 ft. 5 in. (3.48 m)	
D Track Width		7 ft. 9 in. (2.36 m)	
E Width Over Tires		9 ft. 8 in. (2.95 m)	
F Rear Axle Centerline to Rear of Machine		7 ft. 9 in. (2.36 m)	
G Mid Axle to Rear Axle Centerline		7 ft. 9 in. (2.36 m)	
H Front Axle to Mid Axle Centerline		7 ft. 9 in. (2.36 m)	
I Ground Clearance		7 ft. 9 in. (2.36 m)	
J Front Axle Centerline to Front of Machine		7 ft. 9 in. (2.36 m)	
K Approach Angle		30 deg.	
With Optional Spray Bar		26 deg.	
L Departure Angle		25 deg.	



Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

300 Engine

- Certified to EPA Tier 3 emissions
- John Deere PowerTech™ Plus 6090 — 9L inline 6
- Wet-sleeve cylinder liners
- Variable-geometry turbocharger
- External cooled EGR
- Dual-element air cleaner with dust-ejector valve
- Precleaner
- High-pressure common-rail fuel injection
- Fuel/water separator
- Ground-level fueling with provision for fast fill
- Serpentine drive belt with automatic tensioner
- ▲ Ether start aid (recommended below 30 deg. F)[§]
- ▲ Block heater (recommended below -10 deg. F)[§]
- Programmable auto shutdown
- Automatic turbo cool-down/shutdown timer

Cooling

- Crankshaft-mounted, direct-drive, air-sensing, viscous-drive fan
- Front-mount radiator, charge air cooler, air-conditioner condenser, and pneumatic system cooling coil
- Front-mount transmission cooler
- Integral engine oil cooler
- Remote pressurized coolant reservoir
- John Deere COOL-GARD™ II long-life engine coolant
- Fan guard

Powertrain

- ZF 6HP592C Ecomat 2+ fully automatic engine-mounted planetary transmission
- Lock-up torque converter
- Adaptive shift control
- Gear-hold switch
- Integral transmission input retarder
- Automatic retarding
- Selectable retarder aggressiveness
- Single-speed transfer case with interaxle differential
- Planetary interaxle locking differential with 33-percent/67-percent nominal output torque split
- Transfer case sight gauge
- Limited-slip differentials
- Hydraulically actuated dry-disc brakes, all wheels, with debris guards
- Spring-applied, pneumatically released, dry-disc park brake

300 Pneumatic System

- Engine-mounted compressor
- Air drier with heater
- Integral unloader valve
- Air horn

Electrical System

- 24-volt system voltage
- 80-amp alternator
- Solid-state electrical distribution system
- Battery disconnect
- Batteries, 2 x 950 CCA
- Drive lights
- ▲ Deluxe work lights[§]
- LED rear turn signals/brake lights
- Electric horn in addition to air horn
- Reverse alarm
- ▲ Beacon wiring kit[§]
- ▲ 24-volt to 12-volt 15-amp converter
- ▲ 24-volt to 12-volt 25-amp converter

Hydraulic System

- Closed-center, load-sensing system
- Axial-piston, variable-displacement main pump

Steering System

- Ground-driven secondary steering pump

Operator Station

- ROPS/FOPS certification
- Keyless start with programmable security codes
- Tilt cab
- Air conditioner
- Heater
- AM/FM radio/CD player
- Rear window guard
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Fully adjustable, air-suspension, heated, high-back cloth and leather seat
- ▲ Air-suspension, low-back, cloth seat
- 3-in. retractable operator seat belt
- Foldaway trainer seat with retractable seat belt
- 12-volt power outlet
- Cup holder
- Cooled/heated lunch box
- Ashtray and 12-volt cigarette lighter
- ▲ Electric adjustable and heated mirrors
- Deluxe monitor: Speedometer / Fuel gauge / Transmission oil temperature gauge / Engine coolant temperature gauge / Gear indicator / Tachometer / Battery voltage / Hour meter / Odometer / Fuel consumption / Trip counter / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics / LED indicator lights and audible alarm / Multi-language capability / Tire-pressure-monitoring system warning

300 Operator Station (continued)

- Backlit sealed-switch module functions: Keyless start/stop with security modes / Park brake / Transmission controls drive, neutral, reverse, gear select, upshift, and downshift / Transmission gear hold / Wiper control / Park lights and headlights / Work lights / Hazard lights / Beacon / Heated mirrors / Retarding aggressiveness / Operator-adjustable speed-limit controls / Traction controls for transfer case / Air-conditioner/heater controls

Other

- 23.5R25 radial earthmover tires
- Engine-service platform
- Remote grease banks
- Articulation lock
- JDLink™ Ultimate wireless communication system with 3-year subscription (available only in the U.S. and Canada)
- Tire-pressure-monitoring system

[†]Factory option.

[§]Field option.

Water Tank System [Mega-supplied equipment ordered through your John Deere dealer]

- 7,000-gal. water tank*
- 1,500-gal. pump*
- Anti-surge stabilization system*
- Spray heads, rear (4) and side (2), manually adjustable*
- In-cab spray head, monitor, dump-bar controls*
- In-cab water-level indicator gauge*
- Pump protection for low water level*
- Hydraulic monitor with in-cab joystick control**
- Anti-siphon ground-level fill**
- Gravity dump bar**
- Hose reel with 50 ft. of 1-in. hose and nozzle**
- Hose reel with 100 ft. of 1.5-in. hose and nozzle
- Intermittent-spray package
- Front spray bar
- Swivel couplings on front spray bar
- Tank sight tube
- 550-gpm suction loading system (4 in.)
- Foam-injection system with separate-agent tank
- Epoxy-coated interior
- Conical manhole fill tube

*Mega standard equipment.

**Mega recommended equipment.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ISO standards. Except where otherwise noted, these specifications are based on a unit with standard equipment, 23.5R25 radial earthmover tires, ROPS cab, full fuel tank, and 175-lb. (79 kg) operator. Capacity and loaded weights are based on 2,800-lb./cu.-yd. (1,660 kg/m³) material.

