300D Series II

Water Wagon Chassis





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 lbft. (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

Speeds

Push-button gear select with gear-noid button and retarder aggressiveness setti

Reverse

Reverse

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

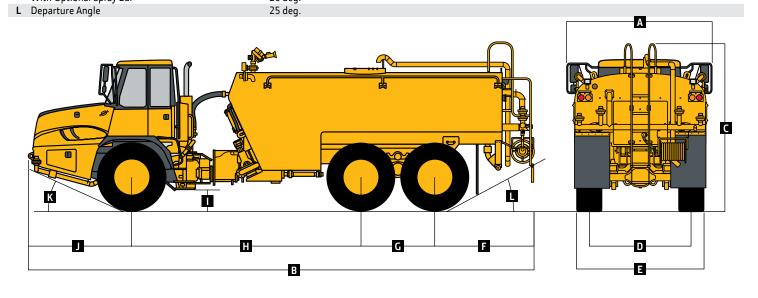
Front Maintenance-free, rubber-mounted leading arm links and transverse link, supported by nitrogen/oil-

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 CHA	ZIZZ	
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			
	Empty	Loaded	
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.		
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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, airconditioner 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 enginemounted 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 differ ontial
- Planetary interaxle locking differential with 33percent/67-percent nominal output torque split
- Transfer case sight gauge
- Limited-slip differentials
- Hydraulically actuated dry-disc brakes, all wheels, with debris quards
- 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, highback 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-qpm 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.

