## 748L-II GRAPPLE SKIDDER







#### All about uptime

Simplified routing of the electrical and hydraulic systems helps boost reliability and ease maintenance. Improved protection of wiring and hoses minimizes wear and bending. Electrical components are durably constructed to withstand tough forestry applications and extend wear life.

#### Stable and capable

Combining impressive horsepower and power-to-weight ratio with a constant engine speed, the 748L-II delivers superb responsiveness with maximum efficiency. Rock-solid stability provides excellent pulling power, especially when climbing hills, navigating adverse terrain, or hauling bigger payloads.

#### Best of both worlds

Continuously Variable Transmission (CVT) combines the efficiency of direct drive with the smoothness and operating ease of hydrostatic drive. Automatically sensing the load, CVT delivers torque and tractive effort as needed to maintain the maximum speed the operator sets, reducing engine wear, optimizing fluid economy, and eliminating manual shifting.



#### Comfortable cushioning

Steering sensors control articulation speed when nearing frame-to-frame contact, cushioning impact during full articulation and enhancing operator comfort.

## Independent axle-diff lock

Engage the front and rear axles, or just the front or rear as needed, to maneuver over tough terrain.

## Get ready for rugged

Optional Outboard-Extreme™ axles are designed with larger components to deliver maximum jobsite durability, along with a heavier weight to boost machine stability. Higher-ply tire options from the factory increase tire strength for carrying heavier loads.

## Large and in charge

Optional 1.77-square-meter (19.1 square foot) grapple on the 748L-II helps you deliver more wood to the landing with fewer skids. Grapple squeeze provides a constant pressure, so operators are less likely to lose a log, even if a load gets jarred.





#### FEATURES

## Core intelligence

Your John Deere Forestry machine arrives from the factory equipped with a powerful set of technologies and capabilities already built in. Each plays an important role in managing the health and performance of your overall equipment fleet:

- JDLink™ connectivity and the John Deere Operations Center™ let you track
  your equipment, see which machines are working, and know if they're being
  utilized properly and at maximum productivity and efficiency.
- John Deere Connected Support™ leverages a suite of dealer and factory tools designed to deliver increased uptime and productivity, and lower daily operating costs.
- Remote Diagnostics and Programming Capability within John Deere
  Connected Support helps your dealer warn you of any issue with your
  machine often before you know of the problem yourself and initiate
  solutions without charging you for a technician's visit to your jobsite.
- Our advanced dual approach to **Machine Health** combines the expertise of the technology specialists at our dealerships with the data specialists at our central Machine Health Monitoring Center (MHMC). As part of John Deere Connected Support, information from thousands of connected machines flows through the MHMC, enabling our specialists to identify trends and develop new and improved preventative-maintenance and repair protocols.

#### **Precision Forestry**

Take the guesswork out of planning, implementing, and monitoring your logging operation. The tools of our production-planning and -tracking system expand on the core technology features that come standard in every John Deere Forestry machine to unleash a powerful new array of possibilities:

- TimberMatic™ Maps is an innovative onboard software solution that helps you reimagine your jobsites. Real-time production views, optimized routes, and shared wireless connections between machines make it easier than ever before to take your forestry operation to the next level.
- TimberManager™ is a web-based solution for PCs, tablets, and mobile phones that allows you to follow jobsite progress. Combined with TimberMatic Maps, this software provides complete visibility of your operation — from land harvested to specific machines — so you can streamline communication, analyze tasks, and increase productivity:
  - Remote Monitoring keeps tabs on the health and performance of your fleet from wherever you are.
  - Precise Progress Tracking lets you set goals for your team to meet throughout the day.
  - Live Production View displays progress including tree count, area harvested, and estimated tonnage.
  - Simplified Mapping of machine data and GPS-based location tracking shows precise stem and log counts.
  - Real-Time Updates let you adjust course or eliminate tasks if needed to maintain steady workflow.
  - **Fleet Optimization** goes beyond machine management to help improve the efficiency of your business.

# 748L-II GRAPPLE SKIDDER SPECIFICATIONS

Engine	748L-II	
Manufacturer / Model	John Deere PowerTech™ PSS 6.8L	John Deere PowerTech™ 6.8L
Off-Road Emission Standards	EPA Final Tier 4/EU Stage V	EPA Tier 2/EU Stage II
Gross Power	196 kW (263 hp) at 1,800 rpm	172 kW (231 hp) at 1,800 rpm
Gross Torque	1141 Nm (841 ftlb.) at 1,600 rpm	1020 Nm (752 ftlb.) at 1,400 rpm
Number of Cylinders	6	6
Valves per Cylinder	4	4
Engine Displacement	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)
Engine Bore and Stroke	106 x 127 mm (4.17 X 5.00 in.)	106 x 127 mm (4.17 X 5.00 in.)
Fuel System	High-pressure common rail	High-pressure common rail
Aspiration	Turbocharged and charge-air cooled	Turbocharged and charge-air cooled
Air Cleaner	Dual stage with safety element	Dual stage with safety element
	Glow plugs	Glow plugs
Engine Cold-Start System	Glow plugs	Glow plugs
Cooling	Harman data and intermediate and income	
Cooling System	Heavy-duty radiator with continuous deaeration	tank and recovery reservoir
Fan Drive	Hydraulic, variable speed, reversing	
Powertrain	C ::	
Transmission	Continuously Variable Transmission (CVT)	
Speed Ranges, Forward and Reverse	6	
Maximum Travel Speed With 30.5-32 Tires	0–24.74 km/h (0–15.37 mph) — 6 speed-range configurations available	
Axles		
Front Axle Oscillation, Stop to Stop	30 deg.	
Options	1425 Super-Wide Extreme-Duty (SWEDA™) and 1700 Outboard-Extreme™	
Differential (front and rear)	Hydraulic-locking, operated-on-the-go, closed-center differential lock	
Steering	Fully hydraulic, joystick	
Articulation Angle	45-deg. each direction	
Service Brakes	Inboard-mounted, wet-disc, oil-cooled, self-adjusting and self-equalizing front and rear axles	
Parking Brake	Automatically spring-applied, hydraulically releas	ed, sealed and lubricated, wet multi-disc
Hydraulics		
Main Pump	Open circuit, axial piston, variable displacement	
Maximum Displacement	85 cc/rev (5.19 ci/rev)	
Electrical System		
Voltage	24 volt	
Number of Batteries (12 volt)	2	
Battery Capacity (each)	950 CCA	
Alternator Rating	150 amp	
Lights (optional)	11	
Dual-Function Grapples		
Standard		
Opening	3251 mm (128 in.)	
Area	1.48 m² (15.9 sq. ft.)	
Optional		
-	3886 mm (153 in.)	
Openina		
Opening Area		
Area	1.63 m <sup>2</sup> (17.5 sq. ft.)	
Area Optional	1.63 m² (17.5 sq. ft.)	
Area Optional Opening	1.63 m² (17.5 sq. ft.) 3785 mm (149 in.)	
Area Optional Opening Area	1.63 m² (17.5 sq. ft.) 3785 mm (149 in.) 1.77 m² (19.1 sq. ft.)	
Area Optional Opening Area Grapple Control	1.63 m² (17.5 sq. ft.) 3785 mm (149 in.)	
Area Optional Opening Area Grapple Control Refill Capacities	1.63 m² (17.5 sq. ft.) 3785 mm (149 in.) 1.77 m² (19.1 sq. ft.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank	1.63 m² (17.5 sq. ft.) 3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 457.7 L (120.9 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 4577 L (120.9 gal.) 123.6 L (32.6 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir Diesel Exhaust Fluid (DEF) Tank	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 457.7 L (120.9 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir Diesel Exhaust Fluid (DEF) Tank Operating Weight	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.)  1.77 m² (19.1 sq. ft.)  Joystick  391.8 L (103.5 gal.)  457.7 L (120.9 gal.)  123.6 L (32.6 gal.)  19.9 L (5.2 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir Diesel Exhaust Fluid (DEF) Tank Operating Weight Machine Weight	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 4577 L (120.9 gal.) 123.6 L (32.6 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir Diesel Exhaust Fluid (DEF) Tank Operating Weight Machine Weight Dozer Blade	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 457.7 L (120.9 gal.) 123.6 L (32.6 gal.) 19.9 L (5.2 gal.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir Diesel Exhaust Fluid (DEF) Tank Operating Weight Machine Weight Dozer Blade Width	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 457.7 L (120.9 gal.) 123.6 L (32.6 gal.) 19.9 L (5.2 gal.) 19 713 kg (43,610 lb.)  2962.4 mm (116.6 in.)	
Area Optional Opening Area Grapple Control Refill Capacities Fuel Tank Standard Optional Hydraulic Reservoir Diesel Exhaust Fluid (DEF) Tank Operating Weight Machine Weight Dozer Blade	1.63 m² (17.5 sq. ft.)  3785 mm (149 in.) 1.77 m² (19.1 sq. ft.) Joystick  391.8 L (103.5 gal.) 457.7 L (120.9 gal.) 123.6 L (32.6 gal.) 19.9 L (5.2 gal.)	

Boom Options	748L-II	
Size	2.6-m (8.5 ft.) standard / 3.0-m (9.8 ft.) optional	
Winch		
Winch Control	Joystick control, hydraulically driven	
Cable Capacity	2-Speed 6000 Winch With 279.5-mm (11 in.) Drum	2-Speed 4000 Winch With 204-mm (8 in.) Drum
15.8 mm (5/8 in.)	119.0 m (390 ft.)	77.4 m (252 ft.)
19.1 mm (3/4 in.)	81.4 m (267 ft.)	54.6 m (177 ft.)
22.2 mm (7/8 in.)	60.3 m (197 ft.)	39.3 m (128 ft.)
25.4 mm (1 in.)	46.0 m (150 ft.)	30.7 m (100 ft.)
Line Pull – 15.8-mm (5/8 in.) Cable	Bare Drum at Stall With 2-Speed 6000 Winch	Bare Drum at Stall With 2-Speed 4000 Winch
Low Speed	221.0 kN (49,696 lb.)	213.5 kN (47,997 lb.)
High Speed	147.3 kN (33,131 lb.)	142.3 kN (31,990 lb.)
Line Speed – 15.8-mm (5/8 in.) Cable	Bare Drum at 1,800 rpm With 2-Speed 6000 or 4000 Winch	
Low Speed	13.4 m/min. (44 fpm)	
High Speed	20.1 m/min. (66 fpm)	
Machine Dimensions		
	Dual Function	
Tire Size	30.5-32	
A Overall Height	3365 mm (132.5 in.)	
<b>B</b> Overall Width	3239 mm (127.5 in.)	
C Maximum Blade Lift Above Ground	1517 mm (59.7 in.)	
<b>D</b> Maximum Blade Dig Below Ground	359 mm (14.1 in.)	
E Dozer Blade Width	2962.4 mm (116.6 in.)	
Optional Dozer Blade Width	N/A	
F Wheelbase	3925 mm (154.5 in.)	
<b>G</b> Ground Clearance	557 mm (21.9 in.)	
H Overall Length	8384 mm (330.0 in.)*	
*Length based on 2.6-m (8.5 ft.) boom.		

## 748L-II Grapple Skidder With Dual-Function Grapple





