



# FORWARDERS

## 810D Eco III

CUT-TO-LENGTH SYSTEM

HARVESTERS

FORWARDERS





The new PowerTech Plus engines introduced in Eco III forwarders conform to the Tier III emission regulations.



The software feature that optimises the engine's RPMs helps to lower fuel consumption and reduce noise levels. The new Eco III forwarders help machine operators to run their machines even more economically than before.



## REVOLUTIONARY JOHN DEERE 810D ECO III. EFFICIENT AND AGILE PARTNER.

MORE POWER AND BETTER FUEL ECONOMY WITH 810D ECO III.  
RELIABILITY AND STRENGTH.  
EFFICIENCY ON THE ENVIRONMENT'S TERMS.

The Eco III forwarders come with a hardwearing John Deere PowerTech Plus™ engine, which is even more powerful than before, generates an even higher torque and conforms to Tier III emission regulations. The forwarders also feature the new Eco mode as well as a software application that optimises the engine's RPMs.

Thanks to the new Eco mode, the machines can get up to the same speeds as before but with even lower RPMs, thus saving fuel. Eco mode optimises the diesel engine's RPMs with a hydrostatic transmission ratio to achieve the desired vehicle speed at the lowest possible RPMs.

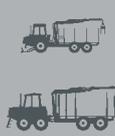
By engaging Eco mode, operators can reduce noise levels and lower fuel consumption. Eco mode can be used in both slow and fast driving conditions.

### CUT-TO-LENGTH SYSTEM

#### HARVESTERS



#### FORWARDERS



# Eco III



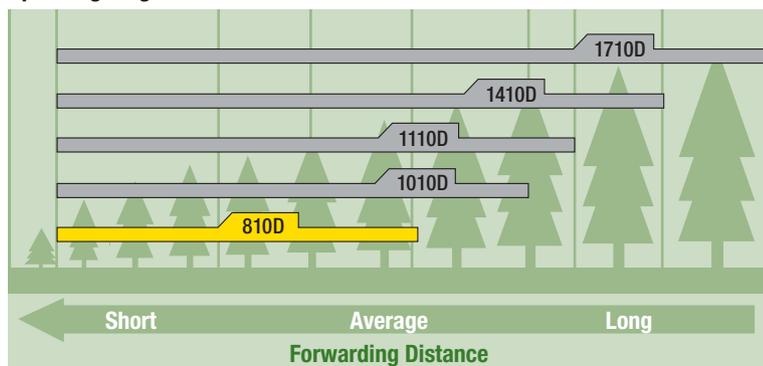
The new John Deere 4045 PowerTech Plus engine conforms to the strict Tier III emission regulations. Even more efficient than the previous model, the engine offers best-in-class fuel economy and improves the forwarder's productivity.

The new engine offers 6% more power and its super-high torque can be used across an even wider spectrum of RPMs. Compared to the old model, it also responds more quickly to changes in the load. New properties include a cooled exhaust gas recirculation system (EGR), a variable geometry turbocharger (VGT), a four-valve cylinder head and an electrically controlled viscous fan clutch. In addition, the hydraulics and engine cooling system has been improved by introducing a larger cooling unit.

The software feature that optimises RPMs in the new Eco III forwarders automatically lowers the engine's RPMs to idle if the forwarder boom is not used within a set time. The RPMs automatically increase when work is resumed. This improves the forwarder's fuel economy. The parameters of the software feature can be adjusted via the TMC™ control system.

The John Deere 810D is the lightest and most agile forwarder available for professional use. Its weight distribution is ideal, because the boom is positioned in the front part of the machine. Moreover, the wide tyres and the balanced bogie unit reduce ground impact and allow the machine to move effortlessly over soft terrain where other machines would fail.

#### Operating range of the 810D



# SMALL SIZE. HIGH UPTIME.

The efficient hydraulic system makes the boom easy to handle. Thanks to the large diameter of the hydraulic hoses and pipes, losses are minimal. The state-of-the-art filter system lengthens the life of the components.

The powerful CF1 boom is easy to control and its smooth motions give added efficiency to loading and unloading. The clever positioning of the boom improves the machine's weight distribution and makes the forwarder more versatile and therefore suitable for different kinds of sites. The ASF (Active Slew Floating) feature controls slewing motions during use. Optional hydraulic dampening for slewing and lifting is also available.

The low centre of gravity of the load space keeps the machine steady in all conditions. Two different frame lengths and two load space widths are available. The machine also has a fixed or hydraulically operated strong headboard.

The machine is equipped with a reversing alarm as standard. A rear-view camera and a reversing light are also available.

The machine has a strong frame structure and middle joint. The result is a well-balanced whole with a powerful frame brake. The positioning of the middle joint, the steering angle of  $\pm 44$  degrees and the generous ground clearance together give the forwarder agility and a small turning circle.

The machine features a balanced bogie unit with the same axles both at the front and at the back. Several tyre options are available, as are matching chains and tracks.

The cab conforms to safety regulations and provides excellent visibility in all directions. The cab has efficient air-conditioning and soundproofing. A CD player/radio is provided. The large windows are made from tinted polycarbonate safety glass and blinds that provide shade from sunlight are also available. The sturdy air-suspended seat has various adjustments. The cab is equipped with halogen/xenon lights and a connection for a mobile telephone.

The TMC™ control system governs all the functions of the machine. The versatile and easy-to-use Windows-based Timbermatic™ 700 system supplied with a fast PC is offered as an alternative. Eco mode, which helps machine operators achieve better fuel economy, and the software feature that optimises the engine's RPMs are included as standard in both systems.

The engine hood is light to lift. Servicing the engine is easy and safe, and components that require daily or scheduled servicing are easily accessible. Accessories include, for example, an engine heater.

The John Deere 4045 PowerTech Plus is a Tier III compatible engine, specifically designed for forest machines. It is hardwearing and responds quickly to changes in the load. Furthermore, the engine offers excellent fuel economy and gives super-high torque even at low RPMs. The cooling system for the engine and hydraulics offers excellent performance whatever the conditions.

The strong belly pan can be lowered and raised using a winch. Access to all wearing parts is easy, fast and safe.

The machine offers excellent ground clearance. Thanks to the high tractive force, the machine overcomes even the most extreme of conditions.

Gaining access to wearing parts that are located underneath the cab is easy, as the cab moves aside hydraulically. Service lights are provided in the space underneath the cab. Optional accessories include electric refill pumps for fuel and hydraulic oil, and a vacuum pump.

## Eco III

# TORQUE. POWER. PRODUCTIVITY. LOW OPERATING COSTS.

Thanks to modern innovative product development and the experience and expertise that John Deere have gained through the company's long history, you can rely on our forest machines to produce the best possible results with minimal damage to the environment. The resilience and reliability of the 810D is world-renowned.



The 810D is a productive partner for a John Deere harvester. The strong frame withstands all conditions.

The ideal weight distribution of the machine and the efficient frame brake work together to make loading and unloading easy. The strong CF1 boom and the advanced control system add the finishing touches to the composition. Thanks to the powerful hydrostatic transmission, the forwarder moves effortlessly in any kind of terrain.

John Deere engines are specifically designed for forest machines. They produce very low emissions and conform to

the latest emission regulations. In addition, they offer excellent fuel economy. The engines yield high torque values even at low RPMs and respond quickly to changes in the load, making the 810D efficient and easy to operate even in demanding conditions. The new properties of the engine help to lower fuel consumption and reduce noise levels, and lengthen the life of the components.

Long service intervals make the machine yet more economical. For example, the interval for changing oil and filters has escalated from 250 hours to up to 500 hours.

# REACH. HANDLING. QUALITY. ACCURACY.

The booms of John Deere forwarders are the most efficient on the market. Handling is straightforward, thanks to the easy-to-use control levers and the TMC system or the comprehensive Timbermatic 700. The boom's operating speed can be adjusted quickly to suit different conditions.



The hardwearing and long-reaching CF1 boom is located in the front part of the machine, close to the cab. This means that the operator can control the boom's movements smoothly and naturally in any direction. This in turn allows the operator to work with high precision on thinning sites, in particular. The boom comes with three different reach lengths.

The ASF feature, which is available as an optional extra, controls the boom and makes it copy the machine's movements, keeping the boom steady inside the load space or on top of the load. Hydraulic dampening of the lifting and slewing motions is also available as an optional accessory.

The boom features an intelligent quick-launch button that adjusts all of the boom's speed settings simultaneously in proportion to each other. This means that the handling of the boom is not affected.

There are various options for the frame length and the cross-sectional area of the load space. This means that you can always find a combination that is just right for optimising your forwarding capacity.

John Deere harvesters turn tightly with the rear wheels almost matching the front wheels' tracks.

## Grapple options and boom reach lengths

	Grapple 0.25 m <sup>2</sup>	Grapple 0.35 m <sup>2</sup>
810D / CF1	7.2 / 8.7 / 9.8 m	7.2 / 8.7 m

# ENJOYABLE WORKING ENVIRONMENT. GOOD VISIBILITY.

EFFICIENCY IN A NEW LIGHT.



Like all John Deere forwarders, the 810D is designed with the needs of machine operators in mind. The numerous details inside the spacious cab make the operator's life easier, bringing more efficiency and comfort to their work. The roomy cab offers good visibility in all directions. The xenon lights, which are available as an optional accessory, are many times more powerful than the conventional halogen lights.

The sturdy seat and the ergonomically designed controls give the operator a comfortable working position. The operator's working environment also benefits from an efficient air-conditioning and heating system, an air filter that keeps the air inside the cab fresh and clean, and

blinds that can be fitted in the cab to provide shade from sunlight.

The 810D Eco III also comes with Eco mode and a software feature that optimises the engine's RPMs, therefore adding comfort to the operator's working conditions and increasing the forwarder's overall productivity.

The John Deere engine responds quickly to changes in the load and keeps the RPMs low both during loading and forwarding. This reduces noise levels and increases fuel economy. The parameters of Eco mode and the software feature can be adjusted via the TMC control system or the Timbermatic 700.



Instead of the TMC, you can opt for the Timbermatic 700 information system. The system features a data link that can be used to send information between the harvester and the forwarder – informing the latter of the location of the harvested timber, for example. The PC-based Timbermatic 700 and the large colour display give the operator access to all the tools included in a normal Windows environment – from e-mail to maps and GPS software.



The Timbermatic 700 and the TMC improve overall productivity and allow for easy use of the latest monitoring tools, such as the loader scales and the rear-view camera. The sensors and software of the optional loader scales measure the weight of the load and the logs. In addition to optimising the use of the load space, the scales help to keep the load the right size, making forwarding safe and fast. The self-learning calibration function of the scales increases the system's reliability.



The software features a versatile fault diagnostic function and issues reminders for scheduled maintenance. The reports can also be printed out.



The generous storage space and well-positioned shelves make even the shortest breaks relaxing, and the operator can listen to his own music on the CD player. The cab's detachable lunch compartment is a handy way of transporting and storing packed lunches.

# TECHNICAL DATA 810D Eco III

## LOAD RATING

9 000 kg

## ENGINE

Max. power output  
Torque  
Fuel tank capacity

John Deere 4045 PowerTech Plus turbocharger, intercooler, diesel, 4 cylinders, 4.5-litre cylinder capacity  
91 kW @ 1 900 RPM  
498 Nm @ 1 400 RPM  
110 litres

## TRANSMISSION

Tractive power  
Speed range, low  
high

Hydrostatic-mechanical 2-speed gearbox; Eco mode  
110 kN  
0 - 8 km/h  
0 - 23 km/h

## STEERING

Steering angle

Proportional frame steering with mini levers  
 $\pm 44^\circ$

## BRAKES

The service brakes are hydraulically actuated, oil-immersed multi-disc brakes.  
The parking and emergency brakes are spring-actuated. ISO 11169The frame brake is automated.

## AXLES / BOGIE UNIT

Balanced gear bogie axles. Hydro-mechanical differential lock at the front and rear.

## ELECTRICS

Voltage  
Batteries  
Alternator  
Lights

24 V  
2 x 115 Ah  
100 A (28 V)  
8 x 140 W Twin Power; xenon lights also available

## HYDRAULICS

Pump capacity  
Operating pressure  
Hydraulic tank

Load-sensing, power-adjustable  
74 cm<sup>3</sup>  
24 MPa  
78 litres

## BOOM

Max. reach lengths  
Gross lifting torque  
Slewing torque  
Slewing angle

CF1  
7.2 m / 8.7 m / 9.8 m  
76 kNm  
19 kNm  
380°

## CAB

Safe and in conformity with ISO standards

## CONTROL SYSTEM

TMC™ or PC/Windows-based Timbermatic™ 700

## MEASUREMENTS (mm)\*

A Length	
- Standard wheelbase	8 090
- Long wheelbase	8 755
B Bogie boss – middle joint	1 850
C Middle joint – bogie boss	2 393 (2 693)
D Headboard – bogie boss	2 417 (2 717)
E Bogie boss – rear	
- Standard wheelbase	1 379
- Long wheelbase	1 744
F Width	2 300 (500 series tyres)
	2 530 (600 series tyres)
	2 670 (700 series tyres)
G Min. load height	3 780
H Ground clearance	595

## WEIGHT

Depending on the accessories, from 11 500 kg

## LOAD SPACE OPTIONS (mm)\*

	Narrow	Standard	Wide
I Overall length, mm			
- Standard wheelbase	3 840	3 840	3 840
- Long wheelbase	4 490	4 490	–
J External width	2 280	2 450	2 590
Cross-sectional area, m <sup>2</sup>	3.3	3.4	3.9

\* Please note: the measurements are guidelines only and may vary depending on the production tolerances. (Measurements relating to the long wheelbase are given in brackets.)

### Standard Accessories

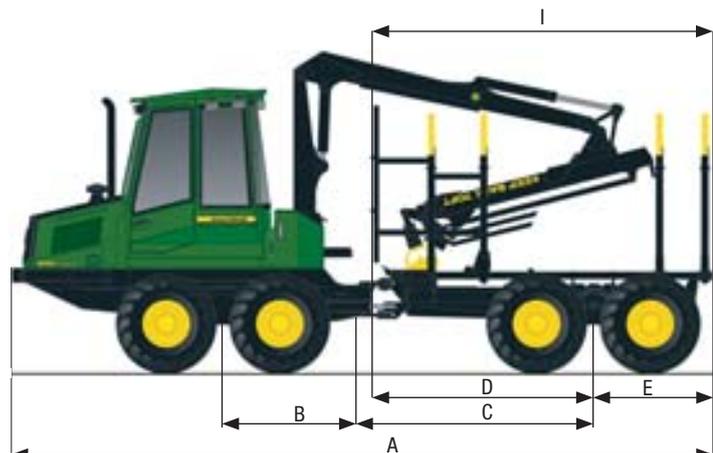
- TMC™ (Total Machine Control)
- Air suspended seat
- Halogen lights
- Mineral oils

### Optional Accessories

- Various tyre options
- Various boom reach lengths
- Various pendants and rotators
- Boom dampening kit
- AFS
- Various grapple options
- Various load space options
- Pre-heater for the engine and the cab
- Hydraulic stepladder
- Seat options
- CD changer (5 CDs)
- Windscreen wiper for the side windows
- Blinds
- Timbermatic™ 700
- Printer
- Memory card
- Rear-view camera
- GPS device and software
- Xenon lights
- Xenon/halogen lights for the boom
- Electric fuel refill pump
- Electric hydraulics refill pump
- Bypass filter for the hydraulic system
- Biological hydraulic oils
- Hydraulic vacuum pump
- Automatic fire extinguishing system
- Environmental spill kit
- Dozer blade
- Toolkits
- Spare tyre
- Tracks and chains

For more information on the accessories, please contact our resellers.

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FORWARDERS

810D Eco III



## NOTHING RUNS LIKE A DEERE.

MAYBE THOSE WORDS ARE THE REASON WHY ALMOST EVERY OTHER PROFESSIONAL LOGGER IS A JOHN DEERE CUSTOMER.

They're just five simple words. Yet they have a profound impact on your company. Because at their heart they mean equipment that is built forest tough, with greater productivity, more uptime and lower daily operating costs. They mean a dealer network over 380 locations strong, with immediate access to parts and experts that understand your industry.

They mean a dedicated lender in John Deere Credit, committed to helping loggers succeed with competitive financing to enhance cash flow. And they mean a global forestry equipment leader that invests more in R & D than any other manufacturer. But most of all, these words represent the confidence that comes with over 170 years of heavy equipment experience.

Your world is logging. So is ours. John Deere Forestry. Leading the way, worldwide.

FULL TREE SYSTEM

CUT-TO-LENGTH SYSTEM

PRODUCTIVITY | UPTIME | LOW OPERATING COSTS

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