810E / 1010E Forwarders

JOHN DEERE

With the new E-Series Forwarders, John Deere provides unique new technology that improves productivity of thinning jobs.

The 810E is the smallest machine in the John Deere forwarder range. Due to its slim dimensions, the 810E is a superior machine on tight skid roads in early to late thinnings. With the CF1 boom located on the front chassis, the machine is perfectly balanced, even with an up-to-nine-ton payload. Equipped with optional tracks, the 810E manages demanding forwarding on soft soils with low impact. A strong middle joint with a 45-degree turning angle adds to outstanding machine agility.

The compact 1010E is a highly versatile thinning machine with extra engine power and tractive force. The 1010E features an 11-ton load capacity and a stronger CF5 boom. The 1010E is available with three different load space lengths.

Quick specs

	810E
DIESEL ENGINE Max. engine power	4 cylinders, displacement 4.5 liters 100 kW (1900 rpm) / 134 hp SAE
TRACTIVE FORCE	110 kN / 24,728 lb.
LOAD RATING	9 metric tons / 9.9 short tons
BEST MODEL APPLICATION	Early to late thinnings, soft soil conditions, optimum forwarding distance (500 m and under)

The new, highly ergonomic rotating cabin with boom follow-up feature is common for all E-Series Forwarders. And where others slow down, the E-Series machines drive even faster, thanks to the cabin-leveling function and optimized powertrain components.

Due to the John Deere exclusive TimberLink™ machine monitoring system, forwarder performance and condition can be easily tracked and maintained on the highest possible productivity levels.

While the 810E is available as an eight-wheel machine, the 1010E may be ordered as either the six- or eight-wheel version.

Quick specs

	1010E
DIESEL ENGINE Max. engine power	4 cylinders, displacement 4.5 liters 115.5 kW (1900 rpm) / 155 hp SAE
TRACTIVE FORCE	150 kN / 33,721 lb.
LOAD RATING	11 metric tons / 12.1 short tons
BEST MODEL APPLICATION	Early to late thinnings, soft soil conditions, optimum forwarding distance (500 m and under)

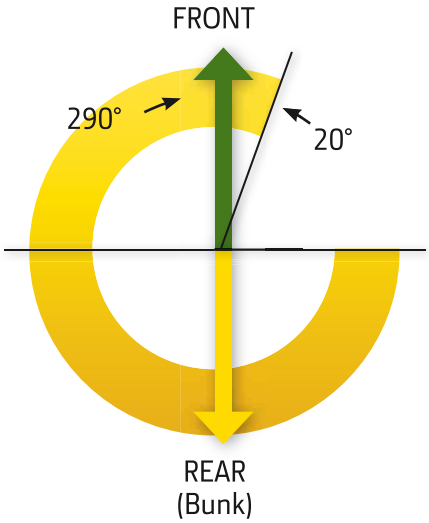
Top of the line ergonomics

The E-Series operating environment offers high-quality comfort and ergonomics. Swift but smooth rotating and leveling cabin directly enhances operator performance. Cabin door remote control and approach light function are standards in E-Series Forwarders. Other standard features like automatic air conditioning, high-quality upholstery, low noise and vibration levels, and various comfort options provide a highly pleasant and ergonomic operating experience.

A 360-degree visibility of your surroundings enhances workflow and safety. With boom follow-up, the cabin follows boom-slew movements smoothly. Boom and grapple are always in sight for better control and faster loading cycles.

Food heater and cooler options for cabin.

Cabin-rotating angle



Intuitive machine control

John Deere has made every effort to achieve best-in-class machine controllability. Armrests, hand-operated controls, and base machine switchboard have been designed with the active involvement of machine operators to achieve the best possible productivity and ergonomics. The TimberMatic™ F-09 control system enables operator-specific settings and easy-to-learn intuitive system navigation.

With the exclusive TimberLink™ machine performance and condition monitoring system, a drop in performance is easily noted and can be corrected immediately.

The system automatically detects and collects all major machine data. Work-cycle information such as loading time serves to improve boom settings and operator work techniques.

Right-hand control panel.

PowerTech™ Plus engine

John Deere engines are specifically designed for forestry machines and conform to the latest emission regulations. The 810E and 1010E are powered by 4.5-liter, four-cylinder John Deere PowerTech engines characterized by high torque at low rpm and low fuel consumption.

Quick engine response to load changes brings the 810E and 1010E to efficient operating levels even in demanding conditions. Low engine noise levels raise operator comfort and decrease impact on the environment.

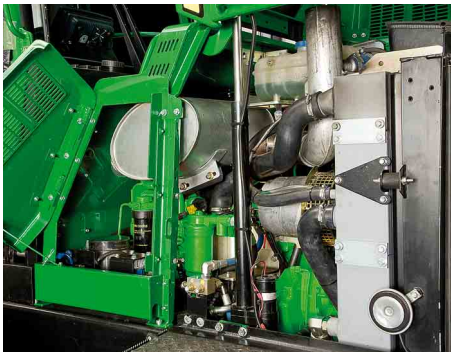
A standard factory-installed hydraulic fan reverses automatically and blows debris out of the engine cooler. The engine air filter features pre-filtering, which maximizes filter life. Extended service intervals ensure engine reliability and lower operating costs.

Easy maintenance

E-Series machine maintenance and component checks are easier than ever before. Newly designed engine hood and service hatches provide easy service access. Centralized checkpoints and optional central lubrication system further reduce time spent on maintenance.

The cabin can be tilted hydraulically for easy service access to powertrain components located under the cabin. Electronic manuals and parts catalogs are integrated as onboard help in the machine's PC.

Due to less time spent on maintenance, daily operating costs are lowered and efficiency increased.



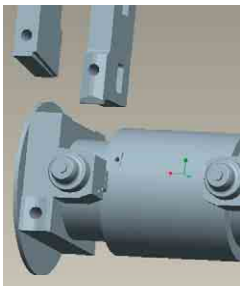
Engine hood open.

Powertrain

E-Series forestry machines provide higher uptime value throughout the entire lifetime of the machine.

All E-Series Forwarders are equipped with new bogie axles and sturdier frames. Ideal machine weight distribution, combined with a solid-frame brake, make loading and unloading easy and fast. The powerful hydrostatic transmission moves the machine effortlessly in any kind of terrain.

Durable John Deere bogie axles are designed to carry high loads, in tough terrain, and over long distances. And the new V-groove axle mounts to the frame to bear up to 20-percent higher dynamic side loads.



The new V-groove axle mounts bear up to 20-percent higher dynamic side loads.

Versatile load space

The 810E and 1010E are equipped with versatile load spaces with a new functional design. The benefits are obvious: high durability, easy grapple access, and quick bunk adjustments. With four movable bunks and eight adjustable load stakes, the load space is easy to configure for different log lengths and load heights.

Load spaces can easily be customized with a variety of options. The 810E is available with either long or short load-space lengths and narrow or wide widths. An optional hydraulic, horizontally movable headboard adds load-space flexibility and optimizes the gravity of the load at different log lengths. Due to load-space options, the machine can be modified to answer the demands of even the toughest working surroundings.

The 1010E provides three different load-space length options — extra short, medium, and long. Additional options include a hydraulic headboard and a frame extension, enhancing load-space flexibility (for example, temporary transporting of 2- x 3-m logs).

New flat bunk mount.

CF forwarder booms

John Deere CF forwarder booms perform highly productive log handling. For seamless boom controllability, the new TimberMatic F-09 control system provides easy adjustments and operator-specific settings. Active Slew Floating (ASF) is a standard 810E Forwarder feature that controls boom slew and aligns it to the machine's movements, keeping the boom steady inside the load space or on top of the load. With boom follow-up function, the cabin is set to follow the boom slew movements smoothly, enabling an optimum view to the boom and grapple for better control and quick loading cycles. Efficient boom control and boom follow-up raise E-Series productivity.

The 810E is equipped with the CF1 boom. Easy control and smooth movements add efficiency to loading and unloading. The CF1 is positioned at the front chassis close to the cabin, providing excellent machine weight distribution, and enabling the machine for soft soil applications. The boom position also allows the operator to work precisely in any direction in dense thinning sites.

The 1010E has the CF5 boom for additional power reserves to handle large

logs. As an option, the CF5 10-m reach version is also available with hidden hoses, for improved uptime in especially dense thinnings.

Both booms, CF1 and CF5, are characterized by superior geometry, lift and slew power, and reach.

Optional hydraulic damping further improves slew and lift controllability and component lifetime. And for efficient energy wood transport, an optional wireless boom weight scale is available.

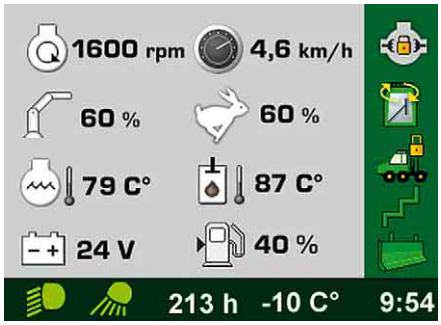
	810E	1010E
BOOM	CF1	CF5
MAX. REACH LENGTHS	7.2/8.7/9.8 m / 23.6/28.5/32.2 ft.	7.2/8.5/10 m / 23.6/27.9/32.8 ft.
GROSS LIFTING TORQUE	76 kNm / 56,055 lb.-ft.	102 kNm / 75,235 lb.-ft.
SLEWING TORQUE	19 kNm / 14,014 lb.-ft.	24 kNm / 17,700 lb.-ft.
SLEWING ANGLE	380 °	380 °

Innovative automation

Control system

E-Series Forwarders feature the innovative TimberMatic F-09 control system for efficient control of all machine functions. The new software focuses on user-friendliness, easy-to-learn patterns, and operator-specific settings that improve machine operation over several shifts and with different drivers.

The alternative control system for your E-Series machine is a CommandCenter™ control display.

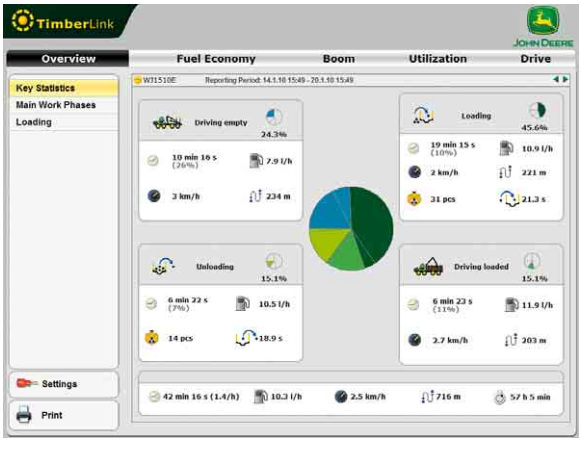


CommandCenter is an alternative forwarder control system, which includes the most important adjustments. CommandCenter is a solid option if circumstances do not require a PC-based, highly versatile control system.

Performance monitoring system

The exclusive TimberLink machine performance and condition monitoring system is now also available for forwarders! TimberLink F is especially designed to keep an eye on the operating costs of your E-Series Forwarder. The system automatically and continuously measures the productivity and technical condition of your machine. The system collects work-cycle information like loading and driving times, which can be used to improve operator work techniques and skills.

John Deere is the only forest machinery manufacturer that also produces systems for machine performance and condition monitoring.



TimberLink F monitoring is based on time span and fuel consumption during four different work phases.

810E / 1010E technical data

1010E with 6 and 8 wheels. 810E with 8 wheels only.

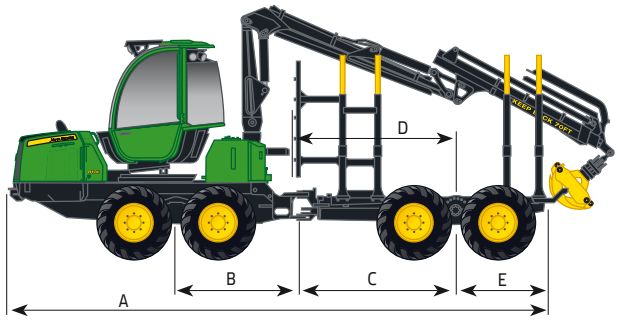
	810E	1010E
LOAD RATING	9 metric tons / 9.9 short tons	11 metric tons /12.1 short tons
DIESEL ENGINE	John Deere 4045 PowerTech™ Plus turbocharged, charge air cooled, 4 cylinders, displacement 4.5 l	John Deere 4045 PowerTech™ Plus turbocharged, charge air cooled, 4 cylinders, displacement 4.5 l
Max. Power	100 kW (1900 rpm) / 134 SAE hp	115.5 kW (1900 rpm) / 155 SAE hp
Torque	535 Nm @ 1400 rpm / 394 lb.-ft.	645 Nm @ 1400 rpm / 476 lb.-ft.
Fuel Tank Capacity	110 l / 29 gal. U.S.	150 l / 40 gal. U.S.
TRANSMISSION	Hydrostatic-mechanical, 2-speed gearbox	Hydrostatic-mechanical, 2-speed gearbox
Tractive Force	110 kN / 24,728 lb.	150 kN / 33,721 lb.
Travel Speed, Gear 1	0–7,5 km/h / 0–4.7 mph	0–7,5 km/h / 0–4.7 mph
Travel Speed, Gear 2	0–23 km/h / 0–14.3 mph	0–23 km/h / 0–14.3 mph
STEERING	Proportional frame steering with mini levers	Proportional frame steering with mini levers
Turning Angle	±45°	±44°
BRAKES	The service brakes are hydraulically actuated, oil immersed, multi disc. The parking and emergency brakes are spring actuated. The frame brake is automated.	
AXLES/BOGIES	Gear bogie axles at the front and the rear. Hydromechanical differential lock at the front and the rear.	Gear bogie axles at the front and the rear. Hydro-mechanical differential lock at the front and the rear. 6-wheel models have rigid axles at the front.
ELECTRIC SYSTEM		
Voltage	24 V	24 V
Batteries	2x115 Ah	2x115 Ah
Alternator	140 A (28 V)	140 A (28 V)
Lights	Halogen: 8 work, 2 waist, 1 rear, and 2 boom lights; xenon lights optional	Halogen: 8 work, 2 waist, 1 rear, and 2 boom lights; xenon lights optional
HYDRAULICS	Load sensing, power adjustable	Load sensing, power adjustable
Pump Capacity	90 cm^3 / 5.49 cu. in.	140 cm^3 / 8.5 cu. in.
Operating Pressure	24 MPa / 3481 psi	24 MPa / 3481 psi
Hydraulic Tank	78 liters / 21 gal. U.S.	150 liters / 40 gal. U.S.
BOOM	CF1	CF5
Max. Reach Lengths	7.2/8.7/9.8 m / 23.6/28.5/32.2 ft.	7.2/8.5/10 m / 23.6/27.9/32.8 ft.
Gross Lifting Torque	76 kNm / 56,055 lb.-ft.	102 kNm / 75,235 lb.-ft.
Slewing Torque	19 kNm / 14,014 lb.-ft.	24 kNm / 17,700 lb.-ft.
Slewing Angle	380°	380°
CABIN	Rotating, or rotating and leveling	Rotating, or rotating and leveling
Rotating Angle	290°	290°
Sideways Tilt	10°	10°
Forward and Backward Tilt	6°	6°
CONTROL SYSTEM	PC / Windows®-based TimberMatic™ F-09 or CommandCenter™	PC / Windows®-based TimberMatic™ F-09 or CommandCenter™

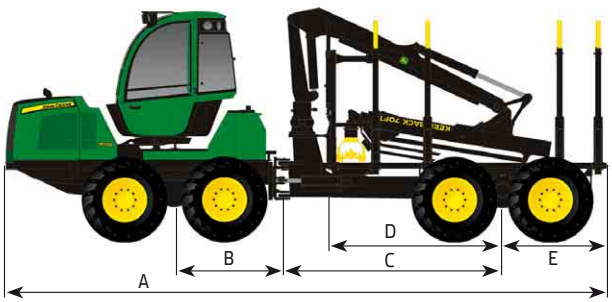
*Please note: Measurements are guidelines only and may vary depending on production tolerances. The manufacturer reserves the right to make changes.

MEASUREMENTS*	810E 8W	Long wheelbase	1010E 6W and 8W	Long wheelbase	Extra-short wheelbase
Length [A] mm / in.	8240 / 324	8905 / 351	9290 / 366	10290 / 405	8890 / 350
Wheelbase [B+C] mm / in.	4340 / 171	4640 / 183	5500 / 217	5500 / 217	4550 / 179
Bogie Center – Middle Joint [B] mm / in.	1950 / 77	1950 / 77	1700 / 67	1700 / 67	1700 / 67
Middle Joint – Bogie Center [C] mm / in.	2390 / 94	2690 / 106	3400 / 134	3800 / 150	2850 / 112
Headboard – Bogie Center [D] mm / in.	2420 / 95	2665 / 105	2600 / 102	3000 / 118	2050 / 81
Bogie Center – Rear [E] mm / in.	1380 / 54	1750 / 69	1900 / 75	2500 / 98	2050 / 81
Width – 600 Series Tires [F] mm / in.	2530 / 100		2720 / 106		
Width – 700 Series Tires [F] mm / in.	2680 / 106		2820 / 111		
Turning Angle	45°		44°		
Outer Turning Radius – 700 Tires, mm / in.	6820 / 269		8060 / 317		
Inner Turning Radius – 700 Tires, mm / in.	3820 / 150		4420 / 174		
Transport Height, mm / in.	3780 / 149		3600 / 142		
Ground Clearance 6W / 8W [G] mm / in.	595 / 23		600 / 24		
Tires, Front, 6W / 8W	22,5 – 16		34–14 / 24,5–20		
Tires, Rear	22,5 – 16		24,5 – 20		
Machine Weight 6W, kg / lb.	—		14 700 / 32,408		
Machine Weight 8W, kg / lb.	12 950 / 28,550		16 500 / 36,376		
Approach Angle 6W / 8W	— / 32°		28° / 37°		

*Note: Measurements are nominal and may vary depending on manufacturing tolerances.

LOAD-SPACE OPTIONS	810E 8W	1010E 6W and 8W
D + E Total Length	Narrow and wide	Standard
• Extra Short	—	3950 mm / 156 in.
• Short ("medium" 1010E)	3711 mm / 146 in.	4500 mm / 177 in.
• Long (narrow only)	4376 mm / 172 in.	5500 mm / 216 in.
J Load-Space Width	Narrow / wide	Standard
• Standard Wheelbase	2451 mm / 97 in. / 2591 mm / 102 in.	2700 mm / 106 in.
• Long Wheelbase	2451 mm / 97 in. / 2591 mm / 102 in.	2700 mm / 106 in.
• Extra-Short Wheelbase	—	2700 mm / 106 in.
Cross-Sectional Area	Narrow / wide 3.4/3.9 m²	Standard 4.0 m²





Examples of Standard Equipment (depending on country specifications)

Rotating cabin
TimberMatic™ F-09 control system with printer
TimberLink™ overview window
Hydraulic reversing cooling fan
Hydraulic stairs
Air suspended seat
Halogen lights
Frame brake
Hydraulic system bypass filter
Engine air filter with pre-cleaner element

Examples of Optional Equipment (depending on country specifications)

Rotating and leveling cabin
CommandCenter™
GPS device and software
Rearview camera
Various load-space options
Rear frame extension (1010E only)
Boom scales
Xenon lights
Preheater for engine and cabin
Electric fuel-refill pump
Electric hydraulic-refill pump
Biodegradeable hydraulic oil
Hydraulic vacuum pump
Automatic fire-extinguishing system
Central lubrication system
Dozer blade
Tool kits
Tracks and chains

For more information, please contact your nearest dealer.

Nothing runs like a Deere

The cornerstones of E-Series forest machinery design are productivity, uptime, and low daily operating costs. Every year John Deere makes significant investments in product development in order to design and manufacture advanced forest machinery.

John Deere is your partner. We want to offer overall solutions to support your business by making everyday work more productive. In addition to high-quality forestry machines, we provide a wide range of services and tools to make your machine even more efficient. Our ambition is to help you to get the job done faster, safer, and more comfortably!

John Deere Forestry designs and manufactures cut-to-length forestry machinery in Finland.

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www.JohnDeere.com