1070E / 1170E Harvesters





The new John Deere 1070E and 1170E Harvesters combine agility and enduring power for demanding thinning jobs. Typically for the E-Series, both come with highly durable frame structures, rotating and leveling E-cabin, new-generation automation system, new harvester heads, and repositioned boom-tilt cylinders.

The 1070E, configured either as a four- or six-wheel version, is designed for early to late thinnings that require agility and small machine-turning radius. The 1170E introduces a new harvester size class, providing thinning agility and regeneration harvesting power. New 1170E features include a

CH6 parallel boom, axles, and 24.5 in.tire size.

Excellent machine weight balance, new powertrain components, long boom reach, and new tire size ensure that the 1070E and 1170E leave the smallest possible footprint on the forest floor.



Quick specs

	1070E	1170E
DIESEL ENGINE	6 cylinders,	6 cylinders,
Max. engine power	displacement 6.8 liters 136 kW (1900 rpm) / 182 SAE hp	displacement 6.8 liters 145 kW (1900 rpm) / 194 SAE hp
TRACTIVE FORCE	130 kN / 29,200 lb.	150 kN / 33,700 lb.
BOOM Max. reach	180S 8.6/10/10.8 m / 28.2/32.8/35.5 ft.	CH6 10/11.3 m / 32.8/37.1 ft.
BEST MODEL APPLICATION	Early to late thinnings	Thinnings and regeneration harvesting

E-cabin

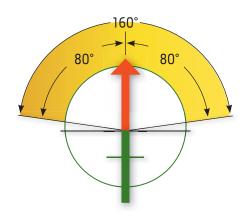


The new E-cabin is equipped with 160-degree rotation and automatic boom follow-up, keeping your focus on the boom and harvester head and providing an unrivaled ergonomic work environment. The cabin-leveling system quickly and smoothly absorbs relief changes. Sideways leveling is up to 17 degrees, which is a 70% improvement compared to the previous D-Series cabin. Additionally the E-cabin has up to 10-degree front/back leveling.

The E-cabin features low noise and vibration levels, automatic air conditioning, food heater/cooler, lots of storage space, and a roomy ambience due to large preformed windows.

The E-cabin enables more comfortable and productive working hours every day.

Cabin-Rotating Angle





PowerTech™ Plus engine

The 1070E and 1170E are powered by a 6.8-liter John Deere PowerTech Plus engine, fulfilling low emission standards. The engine has high torque at low rpm. This lowers fuel consumption even at high engine loads. The engine responds quickly to workload changes, enabling more fluent and productive harvesting operations.

Eco mode

With the Eco mode, you can easily control the travel speed, both in low and high gear. Eco mode yields to the lowest possible diesel engine rpm by optimizing the engine rpm with a hydrostatic transmission ratio. This ingenious feature lowers the engine fuel-consumption and noise levels even further.



Hydraulic reversing fan

The new hydraulic fan is a standard factory-installed feature. The fan reverses automatically, cleaning dust and debris out of the engine cooler, thus lowering noise and fuel consumption.

Engine air pre-filtering

Engine air filter includes pre-filtering, which multiplies the filter lifetime and results in lower operating costs and higher uptime.

E-Series commonality

E-Series reliable and flexibly interchangeable electronic components reduce machine downtime. Similar control panels ease operator changeover and boost productivity.

New frame structures and axles and more sturdy axle mountings improve the productivity and reliability of the 1070E and 1170E.



CH6 and 180S Booms

The 1170E is equipped with the new CH6 parallel harvester boom. It combines easy handling with enormous lift and slew power ratings in this size class. The CH6 together with the new-generation H412 harvester head is one of the most productive thinning configurations on the market, whereas the CH6/H414 harvester-head configuration provides a great all-round utility from late thinnings to regeneration harvesting. Depending on the application, the CH6 is available in 10-m, or 11.3-m reach options.

The 1070E 180S boom is known for its reliability and easy-to-handle geometry. The 180S is available in 8.6-m, 10-m, or 10.8-m reach options to match different operating conditions and harvester heads.

New and common to all E-Series Harvesters is the boom-tilt cylinders placed in the front of the boom for higher cylinder efficiency and lifetime. The boom-valve position has been changed to a more protected area just below the cabin front end, offering easier service access.

The new TimberMatic H-09 control system in combination with fine-tuned precise hydraulics provides more precise and quicker boom movements, resulting in higher productivity.



Harvester heads

A wide range of John Deere harvester heads makes it possible to customize the machines for various applications. The H412 and H414 are new-generation harvester heads featuring compact size, superior power/weight ratio, slip-free four-wheel feeding, and excellent delimbing quality.

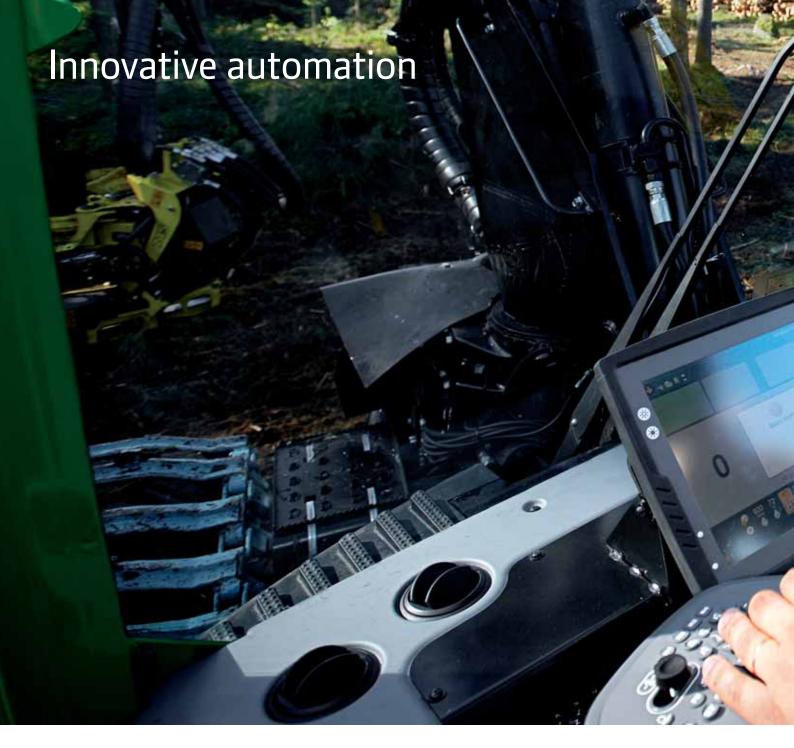
Equipped with the optional multi-treehandling (MHT) device, John Deere harvester heads raise productivity to even higher levels, especially in early thinnings with energy wood collection.

Boom reach / harvester heads

4 feed rollers	H754	H412	H414
1070E 4W / 180S	8.6/10 m	8.6/10/10.8 m	8.6 m
1070E 6W / 180S	8.6/10 m	8.6/10/10.8 m	8.6 m
1170E / CH6	10/11.3 m	10/11.3 m	10 m

2 feed rollers	H752HD
1070E 4W / 180S	8.6 m
1070E 6W / 180S	8.6 m
1170E/CH6	10 m

Consult your dealer — some harvester head options may lead to boom-reach limitations.



TimberMatic™ H-09 control system

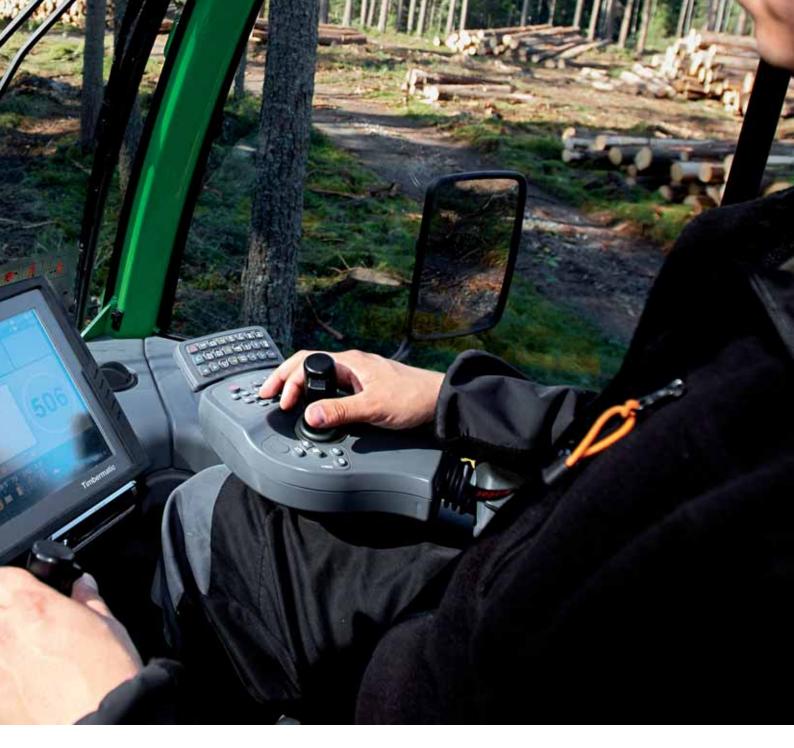
User-friendliness has been has been the John Deere design standard for the new control system.

The TimberMatic H-09 control system now features reliable, user-friendly software for bucking and controlling the machine. You only need one program to adjust settings. The software now also benefits from a number of shortcut keys.

The highly accurate measuring system and straightforward user interface ensure efficiency and reliability. All machine and harvester-head settings can be fine-tuned more precisely than ever before.



Operating mode of the TimberMatic H-09 control system.



TimberLink™ monitoring system

TimberLink is a forest machine performance and condition monitoring system which helps forestry contractors, machine operators, and maintenance staff to maintain and improve machine productivity, fuel efficiency, and utilization rate. This unique system constantly monitors the technical performance of the machine.

TimberLink provides information on fuel consumption, productivity, and time management in different stages of the harvesting process. The system supports monitoring component condition and ensures full-capacity utilization at optimum fuel consumption.

TimberLink is an unbeatable tool for training both newly qualified and more experienced machine operators to improve their technique and productivity.



TimberLink overview is standard in every harvester PC.

1070E / 1170E technical data

	1070E	1170E	
DIESEL ENGINE Max. Power Torque Fuel Tank Capacity TRANSMISSION Tractive Force Travel Speed, Gear 1 Travel Speed, Gear 2 STEERING	John Deere 6068 PowerTech™ Plus turbocharged, charge air cooled, 6 cylinders, 6.8 I-displacement 136 kW (1900 rpm) / 182 SAE hp 780 Nm @ 1400 rpm / 575 lbft. 320 I / 85 gal. U.S. Hydrostatic-mechanical, 2-speed gearbox 130 kN / 29,200 lb. 0-7,5 km/h / 0-4.7 mph 0-24 km/h / 0-15 mph Proportional frame steering with mini levers	John Deere 6068 PowerTech™ Plus turbocharged, charge air cooled, 6 cylinders, 6.8 l-displacement 145 kW (1900 rpm) / 194 SAE hp 935 Nm @ 1400 rpm / 690 lbft. 320 l / 85 gal. U.S. Hydrostatic-mechanical, 2-speed gearbox 150 kN / 33,700 lbs 0–7,5 km/h / 0–4.7 mph 0–24 km/h / 0–15 mph Proportional frame steering with mini levers	
Turning Angle BRAKES	±44° Service and work brakes are hydraulically actuated, oil-immersed, multi-disc brakes. The parking and emergency brakes are spring actuated. The frame oscillation brake is automated.		
AXLES/BOGIES Front Axle Rear Axle	Hydromechanical differential lock at the front and rear Balanced bogie axles; rigid axle (1070E 4W) Rigid axle		
ELECTRIC SYSTEM Voltage Batteries Alternator Lights	24 V 2x140 Ah 140 A (28 V) Halogen: 10 work lights, 4 boom lights, and 6 thinning lights; xenon lights optional	24 V 2x140 Ah 140 A (28 V) Halogen: 10 work lights, 4 boom lights, and 6 thinning lights; xenon lights optional	
HYDRAULICS Pump Capacity Operating Pressure Hydraulic Tank	Load sensing, power adjustable 145 cm ³ / 8.8 cu. in. 24/28 MPa / 3480/4060 psi 170 I / 44.9 gal. U.S.	Load sensing, power adjustable 160 cm ³ / 9.7 cu. in. 24/28 MPa / 3480/4060 psi 170 I / 44.9 gal. U.S.	
BOOM Max. Reach Lengths Gross Lifting Torque Slewing Torque Slewing Angle Tilt Angle, Forward/Back	180S 8.6/10/10.8 m / 28.2/32.8/35.5 ft. 143 kNm / 105,500 lbft. 38 kNm / 28,000 lbft. 220° +28 / -14°	CH6 10/11.3 m / 32.8/37.1 ft. 165 kNm / 121,700 lbft. 45 kNm / 33,200 lbft. 220° +28 / -14°	
CABIN Rotating Angle Sideways Tilt Forward and Backward Tilt	Leveling and rotating, or fixed cabin 160° 17° 10°	Leveling and rotating, or fixed cabin 160° 17° 10°	
MEASURING AND CONTROL SYSTEM	PC / Windows®-based TimberMatic™ H-09	PC / Windows®-based TimberMatic™ H-09	
HARVESTER HEADS	H752HD, H754, H412, and H414	H752HD, H754, H412, and H414	

^{*}Please note: Measurements are guidelines only and may vary depending on production tolerances. The manufacturer reserves the right to make changes. All product names featured in this brochure are registered trademarks of John Deere Forestry Oy.

MEASUREMENTS*	1070E 4-wheel	1070E 6-wheel	1170E
Length [A]	6335 mm / 249 in.	6820 mm / 269 in.	7080 mm / 279 in.
Front Axle – Middle Joint [B]	1850 mm / 73 in.	1850 mm / 73 in.	1950 mm / 77 in.
Rear Axle – Middle Joint [C]	1750 mm / 69 in.	1750 mm / 69 in.	1750 mm / 69 in.
Wheelbase [B+C]	3600 mm / 142 in.	3600 mm / 142 in.	3700 mm / 146 in.
Tires, Front	34–14 / 26,5–12 (20)	22,5–16	24,5–20
Tires, Rear	34–14 / 26,5–12 (20)	34–14 / 26,5–12 (20)	34–14
Width – 600 Series Tires [D]	2600 mm / 103 in.	2660 mm / 104 in.	_
Width – 650 Series Tires [D]	2710 mm / 107 in.	_	2720 mm / 107 in.
Width – 710 Series Tires [D]	_	2960 mm / 117 in.	2820 mm / 111 in.
Outer Turning Radius – 650 Tires	5815 mm / 229 in.	_	_
Outer Turning Radius – 710 Tires	_	5950 mm / 233 in.	6065 mm / 239 in.
Inner Turning Radius – 650 Tires	3080 mm / 121 in.	_	_
Inner Turning Radius – 710 Tires	_	3020 mm / 119 in.	3130 mm / 123 in.
Transport Height	3600–3700 mm / 142–145 in.	3630 mm / 143 in.	3655 mm / 144 in.
Ground Clearance, Middle Joint [E]	550–655 mm / 21–26 in.	555 mm / 21 in.	600 mm / 24 in.
Min. machine Weight [with harvester head model]	14 850 kg / 32,745 lb. [H412]	15 500 kg / 34,180 lb. [H412]	17 900 kg / 39,460 lb. [H754]

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

Examples of Standard Equipment (depending on country specifications)

Leveling and rotating cabin

TimberMatic™ H-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 with pre-cleaner element

Examples of Optional Equipment (depending on country specifications)

Fixed cabin

GPS device and software

 $Timber Link^{\scriptscriptstyle\mathsf{TM}}\ software\ license$

Rearview camera

Xenon lights

Preheater for the engine and cabin

Electric fuel-refill pump

Electric hydraulics-refill pump

Biodegradeable hydraulic oil

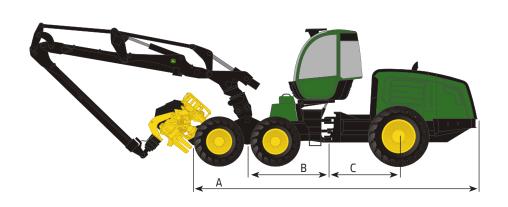
Hydraulic vacuum pump

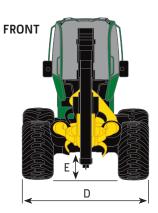
Automatic fire-extinguishing system

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.

