

# 437E KNUCKLEBOOM LOADER



JOHN DEERE





# READY TO RUN AND TAKE THE LEAD.

To stay ahead of the competition, you need to keep up at the landing. With powerful swing torque and lift force, streamlined hydraulics, reliable fluid economy, expansive visibility, and rugged components, the John Deere 437E Knuckleboom Loader is designed to withstand and take command of the most punishing logging environments. This proven performer sets the pace in the forest — and in its class — day after day.

## It's easy to see

Redesigned front window eliminates external guarding and improves visibility while meeting operator-protection requirements. Engine hood enables an expanded view behind the machine.

## Making the cut

Hydraulic options allow you to power a circle saw or self-propelled carrier, helping maximize uptime and productivity. Dedicated circle-saw pump increases cutting power and saw-recovery time, and it supports the requirements of all circle-saw sizes and applications.

## Maintenance made easy

A switch conveniently located inside the cab activates the optional battery-operated vacuum pump that helps avoid oil leakage from hydraulic components during service.

## Filter it out

A second hydraulic oil filter doubles change intervals to 2,000 hours. Inline diesel exhaust fluid (DEF) filter boosts system reliability and serviceability.

## In the swing of things

Dedicated swing circuit provides the continuous power needed for productive delimiting and loading.

## Simplified electrical system

The wiring harnesses of the electronic controller-based electrical system have been simplified to reduce the number of fuses, relays, and wires by approximately 30 percent compared to previous models. Diagnostic codes via the onboard display through JDLink™ ease fault detection.

## Take control

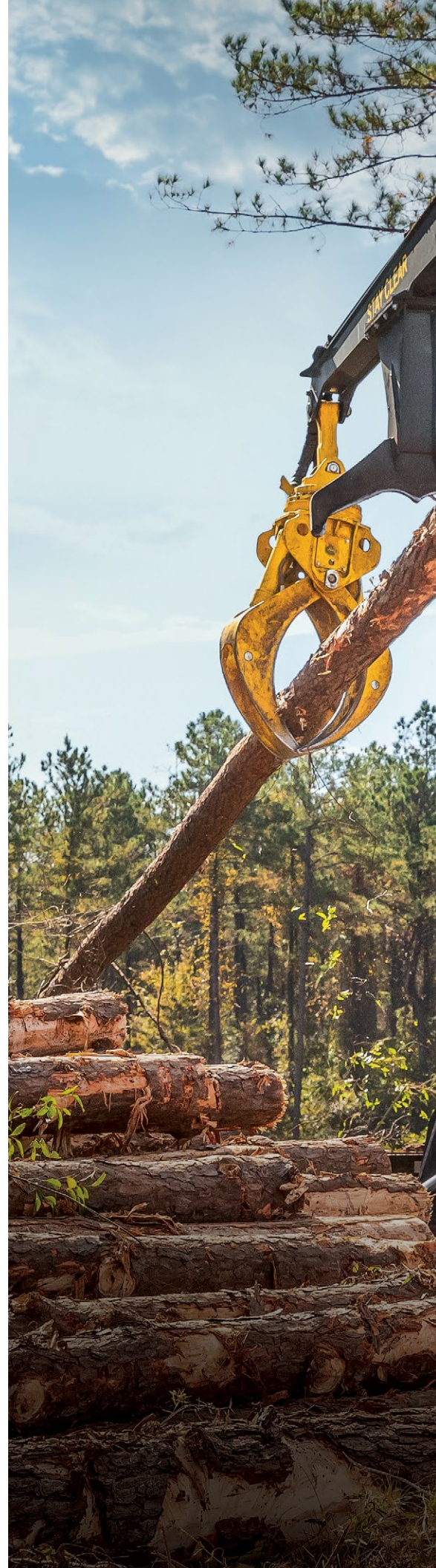
With a rotator designed for harsh pull-through delimiting applications, the Deere 52-inch grapple confidently grabs, lifts, and handles longer, heavier trees. Vehicle hydraulics are tuned to match the grapple to enable precise operator control.

## Fluid dynamics

John Deere EPA Final Tier 4 (FT4) engine maintains maximum engine performance while minimizing consumption of both diesel fuel and DEF. Operating rpm has been optimized to improve fuel efficiency by more than five percent, on average, without loss of machine performance.

## Cool and comfortable

Rear and left rear windows have been replaced with heat-deflecting sheet metal that keeps the sun's rays from scorching your back and neck while cooling the cab. Enhanced HVAC system stabilizes cab interior temperatures. Satellite-ready radio option can be activated to expand cab amenities.







**IMPROVED FORWARD &  
REARWARD VISIBILITY**

COMPARED TO PREVIOUS MODEL



437E KNUCKLEBOOM LOADER

**PUT TECHNOLOGY TO WORK IN  
THE WOODS AND AT THE OFFICE.**

Coordinate your operation and your team's productivity from wherever your work takes you with John Deere Precision Forestry and our core technology solutions.



## FEATURES

### Core intelligence

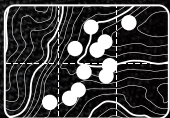
Your John Deere Forestry machine arrives from the factory equipped with a powerful set of technologies and capabilities already built in. Each plays an important role in managing the health and performance of your overall equipment fleet:

- **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 having to send a technician 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.



**JOHN DEERE  
PRECISION FORESTRY**

TOOLS ENABLE PRODUCTION  
PLANNING & TRACKING

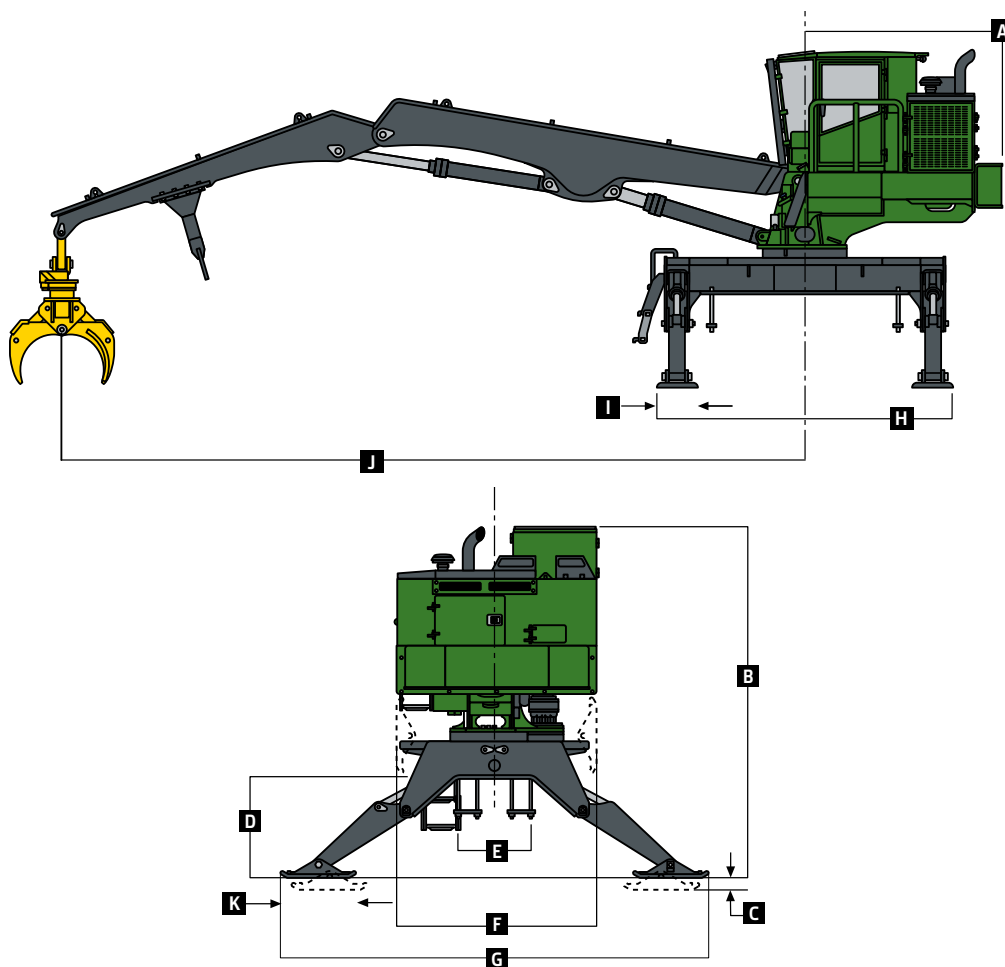
# 437E KNUCKLEBOOM LOADER SPECIFICATIONS

|   |   |             |
|---|---|-------------|
| <b>Engine</b>   |   | <b>437E</b> |
| Manufacturer and Model  | John Deere 6068 HTJ57 PowerTech™ PVS  |             |
| Non-Road Emission Standards   | EPA Final Tier 4/EU Stage V   |             |
| Cylinders   | 6   |             |
| Valves per Cylinder   | 4   |             |
| Displacement  | 6.8 L (415 cu. in.)   |             |
| Gross Rated Power   | 129 kW (173 hp) at 2,000 rpm  |             |
| Net Torque Rise   | 21%   |             |
| Net Peak Torque   | 750 Nm (553 lb.-ft.) at 1,500 rpm   |             |
| Aspiration  | Turbocharged, air-to-air aftercooled  |             |
| Air Cleaner   | Dry-type with safety element  |             |
| <b>Cooling</b>  |   |             |
| Fan Type  | Engine-driven ECU-controlled viscous clutch   |             |
| <b>Hydraulics</b>   |   |             |
| Main Pump   | Tandem variable-displacement, axial-piston, load-sensing system   |             |
| Controls  | Pilot levers, short stroke, low effort  |             |
| Fill System   | 12-volt electric-fill pump through return filter standard / vacuum pump optional  |             |
| <b>Cylinders</b>  |   |             |
| Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins   |   |             |
| <b>Boom (1)</b>   |   |             |
| Bore  | 180 mm (7.1 in.)  |             |
| Rod Diameter  | 95 mm (3.7 in.)   |             |
| <b>Jib (1)</b>  |   |             |
| Bore  | 160 mm (6.3 in.)  |             |
| Rod Diameter  | 95 mm (3.7 in.)   |             |
| <b>Stabilizers (4)</b>  |   |             |
| Bore  | 140 mm (5.5 in.)  |             |
| Rod Diameter  | 70 mm (2.8 in.)   |             |
| <b>Electrical</b>   |   |             |
| Voltage   | 12 volt   |             |
| Number of Batteries   | 2   |             |
| Battery Capacity  |   |             |
| At -17.8 deg. C (0 deg. F)  | 950 CCA   |             |
| At 0 deg. C (32 deg. F)   | 1,110 CCA   |             |
| Alternator Rating   | 200 amp   |             |
| Lights  | Standard halogen: 2 front / Optional halogen: 2 front, 3 rear, 1 cab right side, 1 cab left side / Optional LED: 4 front, 3 rear, 1 cab right side, 1 cab left side |             |
| <b>Boom</b>   |   |             |
| Knuckleboom   | 9.76 m (32 ft. 0 in.)   |             |
| <b>Swing Mechanism</b>  |   |             |
| Swing Speed   | 10.0 rpm  |             |
| Drive   | 2-stage planetary gearbox with piston motor   |             |
| Bearing   | Hardened gear, greaseable from cab  |             |
| Swing Torque  | 52 032 Nm (38,400 lb.-ft.)  |             |
| <b>Serviceability</b>   |   |             |
| Hinged engine side shields; local grease points; hydraulic "O"-ring face-seal connectors; ground-level hydraulic oil and filter changes; hydraulic oil electric-fill pump; vacuum pump optional |   |             |
| <b>Fluid-Change Intervals</b>   |   |             |
| Engine Oil  | 500 hours   |             |
| Hydraulic Oil   | 2,000 hours   |             |
| Engine Coolant  | 6,000 hours   |             |
| Swing- and Pump-Drive Gearbox Oil (each)  | 1,000 hours   |             |
| <b>Refill Capacities</b>  |   |             |
| Fuel Tank   | 340 L (90.0 gal.)   |             |
| Diesel Exhaust Fluid (DEF) Tank   | 20 L (5.0 gal.)   |             |
| Cooling System  | 28 L (7.5 gal.)   |             |
| Engine Crankcase  | 20 L (5.3 gal.)   |             |
| Hydraulic Tank  | 151 L (40.0 gal.)   |             |
| Swing-Drive Gearbox   | 5.3 L (1.4 gal.)  |             |
| Pump-Drive Gear Case  | 5 L (1.4 gal.)  |             |
| <b>Operating Weight (less attachment)</b>   |   |             |
| Includes Standard Equipment, Half-Full Fuel Tank, All Fluids, 80-kg (175 lb.) Operator, and Grapple   | 15 909 kg (35,073 lb.)  |             |

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

| Machine Dimensions |                                      | 437E                   |                                     |                            |                        |
|--------------------|--------------------------------------|------------------------|-------------------------------------|----------------------------|------------------------|
| A                  | Tail Swing                           | 721.3 mm (28 in.)      | G Stabilizer Spread at Ground Level | 5309 mm (17 ft. 5 in.)     |                        |
| B                  | Machine Height                       | 4112 mm (13 ft. 6 in.) | H                                   | Overall Lower Frame Length | 3810 mm (12 ft. 6 in.) |
| C                  | Maximum Stabilizer Reach Below Grade | 257 mm (10 in.)        | I                                   | Stabilizer Pad Length      | 533 mm (21 in.)        |
| D                  | Trailer Height                       | 972 mm (3 ft. 2 in.)   | J                                   | Boom Reach                 | 9754 mm (32 ft. 0 in.) |
| E                  | Maximum Trailer Width                | 883 mm (35 in.)        | K                                   | Stabilizer Pad Width       | 889 mm (35 in.)        |
| F                  | Transport Width                      | 2606 mm (8 ft. 7 in.)  |                                     |                            |                        |

### 437E Knuckleboom Loader



### Lift Capacity — 437E (no heel, bare pin)

| Load Point Height  | Reach — Horizontal from Centerline of Rotation |                        |                      |                      |                      | Maximum Weight at Maximum Distance      |
|--------------------|--|------------------------|----------------------|----------------------|----------------------|---|
|                    | 3.1 m (10 ft.)                                 | 4.6 m (15 ft.)         | 6.1 m (20 ft.)       | 7.6 m (25 ft.)       | 9.1 m (30 ft.)       |   |
| Lifting Over Front |  |                        |                      |                      |                      |   |
| 6.1 m (20 ft.)     |  | 7660 kg (16,887 lb.)   | 6850 kg (15,102 lb.) | 6220 kg (13,713 lb.) | 3910 kg (8,620 lb.)  | 3675 kg (8,102 lb.) at 9.1 m (29.9 ft.) |
| 4.6 m (15 ft.)     |  | 8960 kg (19,753 lb.)   | 7460 kg (16,446 lb.) | 6480 kg (14,286 lb.) | 5410 kg (11,927 lb.) | 3580 kg (7,893 lb.) at 9.6 m (31.4 ft.) |
| 3.1 m (10 ft.)     | 8980 kg (19,798 lb.)                           | 10 500 kg (23,149 lb.) | 8160 kg (17,990 lb.) | 6780 kg (14,947 lb.) | 5710 kg (12,588 lb.) | 3800 kg (8,378 lb.) at 9.8 m (32.0 ft.) |
| 1.5 m (5 ft.)      | 6180 kg (13,625 lb.)                           | 11 730 kg (25,860 lb.) | 8690 kg (19,158 lb.) | 6950 kg (15,322 lb.) | 5570 kg (12,280 lb.) | 3880 kg (8,554 lb.) at 9.7 m (31.8 ft.) |
| <b>Log Grapple</b> |  | <b>4048</b>            |                      | <b>4552</b>          |                      |   |
| Maximum Opening    |  | 1219 mm (48 in.)       |                      | 1328 mm (52.2 in.)   |                      |   |
| Minimum Opening    |  | 102 mm (4 in.)         |                      | 115 mm (4.5 in.)     |                      |   |

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Contact us to learn more.

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[JohnDeere.ca/Knuckleboom](http://JohnDeere.ca/Knuckleboom)



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