3520 Sugar Cane Harvester
There is no match for the 3520’s powerful performance around the world

The John Deere 3520 is the best-selling harvester globally. No other chopper harvester can match its performance, reliability, comfort, options, and ease of use.

The 3520 gets through the toughest conditions, powered by the proven 337 hp (375 hp optional) John Deere 24 Valve PowerTechTM 9.0L engine developed specifically for agricultural applications.

The true test of strength is not what the harvester can do at rated engine power, but what it can do above it. When you lug down this harvester, it develops as much as 14% power bulge. This extra muscle is what truly keeps you moving in tough conditions.

The Exclusive Field Cruise™, now standard, allows the operator or supervisor to set the engine speed as low as 1900 RPM in low tonnage fields to save fuel.

Reliable, powerful, and easy on fuel, the John Deere 9.0L reshapes the boundaries of power.
To maintain the engine and other components operating at the right temperature, a remote cooling package—with a self-cleaning reversible fan—runs on an automatic cleaning cycle, eliminating the need for unwanted stops to remove the trash.

The largest fuel tank is now even bigger. Combine fuel efficiency with our new 605 liter (160 gallon) tank and you have the longest fuel autonomy.

Efficient and reliable hydraulic system

Hydraulics are a critical aspect of the 3520’s functionality, so John Deere has engineered a hydraulic system that is powerful, efficient, reliable, and easy to maintain.

Top of the line piston pumps are used on the propulsion, primary extractor, basecutter, and chopper circuits to handle the heaviest cane.

Nitrogen accumulators protect the lift, elevator, and topper circuits.

Only abrasion-resistant hoses are used in a clear, easy-to-maintain routing scheme. The number of hoses and fittings has also been dramatically reduced for simplicity.

With 100% filtration and filters located inside the tank, there is minimal risk of contamination.
High-reach topper options for every condition

Unmatched 5.2 m (17ft) topper reach with a strong boom design and a cushion accumulator allows topping of the tallest cane.

The optional shredder topper facilitates residue management. There is also a shredder topper piston motor option for even more power in heavier green cane.

Smooth crop feeding at the right angle

Large diameter crop divider scrolls gently lift and feed cane into the harvester throat with a much lower approach angle, avoiding the “bulldozing effect” seen with other harvesters.

Optional outside scrolls rotate in the opposite direction of the inside scrolls to push the cane of the adjacent row away from the machine. Stalks that are not separated upon reaching the optional side knives are cut before the harvester pulls them from the ground.

The hydraulic tilt option for the crop dividers and knock down rollers makes a twenty-minute field adjustment an on-the-move operation from the cab. The toe tilted down lifts the sprawling crop, ensuring all cane is fed into the machine. In standing cane, the toe angled up reduces soil content. The knock down roller positioned in the outer position facilitates feeding heavy lodged cane.

The deep-tooth paddles of the knockdown rollers prevent wrapping of cane leaves and vines.
Parallel linkage crop dividers minimize cane loss

Parallel linkage crop dividers consistently maintain the proper orientation to the ground. It minimizes whole stalk losses under the crop divider toe as the row height varies and reduces dirt content.

The optional hydraulically driven crop divider knockdown rollers are independently mounted on the upper side of each crop divider. These rollers help gently guide long, wrapping cane to the center of the harvester’s throat, which minimizes cane build-up at the top of the crop divider.
Benchmark for cutting

The basecutter is a center driven design with just four gears to balance the load and reduce wear, powered by a hydraulic piston motor.

The standard 337 HP engine option has the basecutter and chopper on one high-pressure hydrostatic circuit driven by a powerful piston pump maximizing efficiency. The 375 HP option includes an additional piston pump so that the basecutter and chopper are on two independent circuits increasing the capacity to process the heaviest cane.

New 4 bar open buttlifter option minimizes soil intake and mud build-up.

Standard large 61 cm (24") diameter discs or optional 56 cm (22") are available.
Non-stop feeding and consistent billets

Powerful hydraulic radial piston motor drives the 380 mm (15") differential chopper fitted with either 6 or 8, 95 mm blades.

An 8 blade overlap chopper is also available increasing the life of the blades in most conditions and simplifying removal and replacement.

Externally mounted chopper bearings allow the chopper shafts to easily slide out from the side and have no splines to wear.

The feedroller path is straight and opens wide to reduce cane breakage and improve feeding to the chopper.
Best in class, comfort, visibility and functionality

The 3520 has a variety of features to provide all-day and -night comfort and convenience...so operators feel as good at the end of a shift as they do at the start.

The cab is pressurized with heat and air-conditioning for optimum operator comfort. The expansive area of glass gives operators a clear view of the topper, crop dividers, side wagons, and sugar cane. Acoustic insulation keeps the cab quiet. From the air-suspended seat, all the major machine and harvesting controls are within easy reach. The controls float with the seat and are ergonomically designed to fit the human hand. Training is made safer and easier with the standard instructor seat.

With an exclusive steering wheel on both the Track and Wheel harvester and independent propulsion control lever the operator can easily and safely keep the harvester centered on the row and make corrections quicker and more precisely.

The new CommandCenter™ armrest display is the interface that allows the operator to display harvester, engine and diagnostic information while harvesting. With touch-screen technology it is simple to make quick adjustments to critical controls. Supervisors can lock important settings to maintain quality and uniformity of the operation, save fuel and protect assets. "Smart Mode" is available to automatically reduce the primary extractor speed to a preset minimum when the elevator is turned off. The new color Digital Corner Post Display graphically illustrates everything an operator needs to know about engine and harvesting parameters. It is located in the optimal line of sight to minimize operator disruption.
Hands-free harvesting with AutoTrac™

Progressive customers are utilizing Global Positioning System (GPS) technology for advanced applications, such as field documentation and machine guidance. An expanded product line from John Deere offers a wide range of complete systems and accuracy levels that can be combined to create a powerful management tool for tillage, planting, crop care, and harvesting operations.

AutoTrac™, a hands-free steering system, automatically steers the machine through the fields while harvesting. This system helps to maximize productivity, reduce operator strain, decrease stubble damage, and prevent row crossing in heavy lodged cane. It is especially useful for keeping the harvester centered on the row during night time operation and when opening a field.

John Deere offers different levels of accuracy depending on the signal selected. The SF2 signal delivers a 15-minute pass-to-pass accuracy of +/- 10 cm (4 inches), 95 percent of the time. It can also be upgraded to operate at Real Time Kinematic (RTK) level of accuracy of under 2.5 cm (one inch) repeatable when it is paired with the appropriate RTK base station.

All 3520 Track harvesters now come from the factory with integrated AutoTrac™ components, thus making this machine AutoTrac™ ready. Simply add additional GreenStar™ components, such as AutoTrac™ activation and StarFire™ receiver, to complete the system. Additionally, the 3520 Wheel units are ready for use with the AutoTrac™ Universal (ATU) Steering kit. Please contact your local dealer for other components needed to complete either AutoTrac™ system.
Efficient extracting system delivers the cleanest cane ever

Unique primary and secondary hood designs increase the 3520 cleaning capability to match customer needs, consistently delivering the cleanest cane in the market.

The largest primary extractor fan in the industry cleans at lower speeds, reducing horsepower consumption, noise levels, and cane losses.

The fan is mounted directly to the motor shaft, which means no bearings, no blade balancing, less vibration, and less components. The motor drive support system features four rubber-mounted legs to improve fan stability and reduce vibrations. The primary extractor fan’s motor is internally mounted and does not need to be removed for transport.

The four-blade, 152 cm (5') diameter fan is directly mounted to the motor shaft.

The secondary extractor completes the cleaning and with its 360 degree hood rotation, directs the trash away from the wagon in the desired direction.
Robust high capacity elevator

The 3520 features a high capacity structural tube frame elevator for extended durability. The top and bottom idler sprockets reduce wear and prolong the elevator chain life. The tall side walls and reversible slats will handle the heaviest cane keeping billets from "boiling down".

The elevator hoses are routed inside the solid frame promoting longer life by improving protection and minimizing exposure.

Grease cylinder facilitates easy chain tension adjustment.

Exclusive tall reversible slats and perforated floor for cleaner cane.

Heavy duty elevator swing table designed to withstand the heaviest loads and toughest field conditions. Exclusive wiper is now standard.

New optional elevator speed control. Chain speed can be set from the CommandCenter to save fuel and prolong the life of the chain and other wear items.
Less down time means more money in your pocket and more value for your investment.

Service operations are now easier and more readily accessible than ever with the new ISO Compliant design that will save time for your technicians, whether entering the cab, changing oil, replacing filters, or checking the battery.

Ladders and handrails are located on both sides of the machine. All steps are high-grip eruption-plate steel for additional footing. Service platforms have non-skid surfacing and are surrounded by handrails for safe, walk-around access.

The CommandCenter™ will help you protect your equipment and quickly find solutions to possible issues by displaying alarms and diagnostics instantly.

The tilting cab provides true access to the engine compartment. The reversible fan automatically keeps the cooling package clean.

The exclusive grease cylinder facilitates elevator chain tension adjustment.

Reduced number of grease points, hydraulic hoses, and connections improve reliability and lower maintenance cost.

The large air filter reduces maintenance intervals and increases life.
Only John Deere gives you more standard features.

Factors such as cane variety, operator skill, weather conditions, soil type, drainage issues, and more make each farm unique. John Deere wants to work with you to customize your equipment package.

Top-quality parts and components are used to build your harvester, so why use anything other than these same top-quality parts to keep your investment up and running? Genuine John Deere Parts are the answer to all your maintenance needs.

John Deere offers superior parts service, so you achieve maximum uptime with the minimum investment.
### Engine
<table>
<thead>
<tr>
<th><strong>Brand</strong></th>
<th>John Deere</th>
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</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>6090T PowerTech (Tier II)</td>
</tr>
<tr>
<td><strong>Cylinders</strong></td>
<td>6 in line</td>
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<tr>
<td><strong>Displacement</strong></td>
<td>9.0 L</td>
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<tr>
<td><strong>Power</strong></td>
<td>251 kW / 337 hp / 342 cv</td>
</tr>
<tr>
<td><strong>Air intake</strong></td>
<td>Turbo and after-cooler (air-to-air)</td>
</tr>
<tr>
<td><strong>Injection pump</strong></td>
<td>Electronically controlled</td>
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### Transmission
- Two hydrostatic pumps providing variable speed
- Wheel machine: 0 to 24.6 km/h (15.3 mph)*
- Track machine: 0 to 9.0 km/h (5.6 mph)*
  *(Top speed dependent on tire and/or hydraulic system option)*

### Tank Capacities
<table>
<thead>
<tr>
<th><strong>Fuel</strong></th>
<th>605 L (160 gal)</th>
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<tbody>
<tr>
<td><strong>Hydraulic oil</strong></td>
<td>405 L (106 gal)</td>
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### Tires
<table>
<thead>
<tr>
<th><strong>Front</strong></th>
<th>14×17.5 - 10 Ply</th>
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<tbody>
<tr>
<td><strong>Rear</strong></td>
<td>23.5×25 - 20 Ply Industrial w/Ag Lug</td>
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</tbody>
</table>

### Tracks
<table>
<thead>
<tr>
<th><strong>Sealed track chains</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single piece bolt-on sprocket</strong></td>
</tr>
<tr>
<td><strong>457.2 mm (18 in) track shoes</strong></td>
</tr>
<tr>
<td><strong>Welded track guides with bolted wear plates</strong></td>
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</tbody>
</table>

### Harvesting Functions
- **Primary Extractor**
  - Polyethylene plastic 152 cm (5 ft) hood
  - Hydrostatic variable speed fan
  - Vertical mount
  - Direct drive fan
  - Four blade fan (requires no balancing with blade change)
  - Hydraulically controlled hood rotation
  - Abrasive resistant steel wear ring
- **Secondary Extractor**
  - Polyethylene plastic hood
  - Hydraulically controlled hood rotation
  - Hydraulically driven flap

### Elevator
- Loading to either side
- Grease cylinder chain adjustment
- Motor driven directional discharge
- Nitrogen accumulator

### Comfort and Security
- Quick shut-off switch for all harvesting functions with quick reset feature
- Engine oil pressure and cooling temperature alarm
- Front tipping cab
- Pressurized cab with air conditioning and heating systems
- Air suspension operator seat
- Wide cab with training seat
- Adjustable side mirrors
- Speedometer (standard on track units only)
- Windshield wiper with water nozzle
- Chemical fire extinguisher
- Anti-slip platforms in service areas
- Command Arm ergonomically adjusts to operator
- Reverse alarm
- Engine compartment working lights
- Signal and warning lights
- 10 operating lights (Including headlights)
- Compliant with all applicable standards
Optional Features
375 hp engine Tier II & III or 337 hp engine Tier III
Sealed and lubricated track chains
41 cm (16 in), 51 cm (20 in), track pads widths
Bent track shoes
Shredder topper
Shredder topper with piston motor
Standard topper extensions
Hydraulic crop divider & knockdown roller tilt
Crop dividers knock down rollers
Outer scrolls
Side knives
Crop dividers gauge wheels
Crop dividers vines cutter knives
56 cm (22 in) basecutter disc
Assisted basecutter control (ABC)
Breakaway basecutter legs

Optional Features (continued)
3 paddle open butlifter
4 bar open butlifter
6 blade chopper
8 blade overlap chopper
Billet length control valve
Primary extractor duraliner steel wear ring
Elevator extensions
Less secondary extractor
Battery remote jump start terminals
GPS speedometer (Wheel unit)
Radio
Convex mirror
Side windshield wipers
Additional floor mat
HID lights
Service tool kits

Model | A | B | C | D | E | F | G | H | I*
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
Track | 15.14m | 2.97m | 6.23m | 4.87m | 6.45m | 1.88m | 4.39m | 2.33m | 4.04m
Wheel | 15.14m | 2.97m | 6.23m | 4.87m | 6.45m | 2.08m | 6.38m | 4.39m | 2.48m | 4.04m

* Louisiana units, I: 4.29m