

# Cotton Picker and Strippers



JOHN DEERE

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## Quick, easy daily servicing makes it fast to the field... up to 3.42 mph picking speed makes it fast through the field with a John Deere 9900 Picker

Once your cotton is ready to pick, there is absolutely nothing good that can happen to it as long as it remains in the field. That's why it's so important to make the most of every day—every hour—of good harvest weather.

And making the most of good weather is the story on the John Deere 9900 Picker. In fact, the 9900 is the fastest picker that has ever worn the John Deere name. It's a picker designed to give you more output from every man-hour of labor and to get your crop out of the field in the shortest possible time.

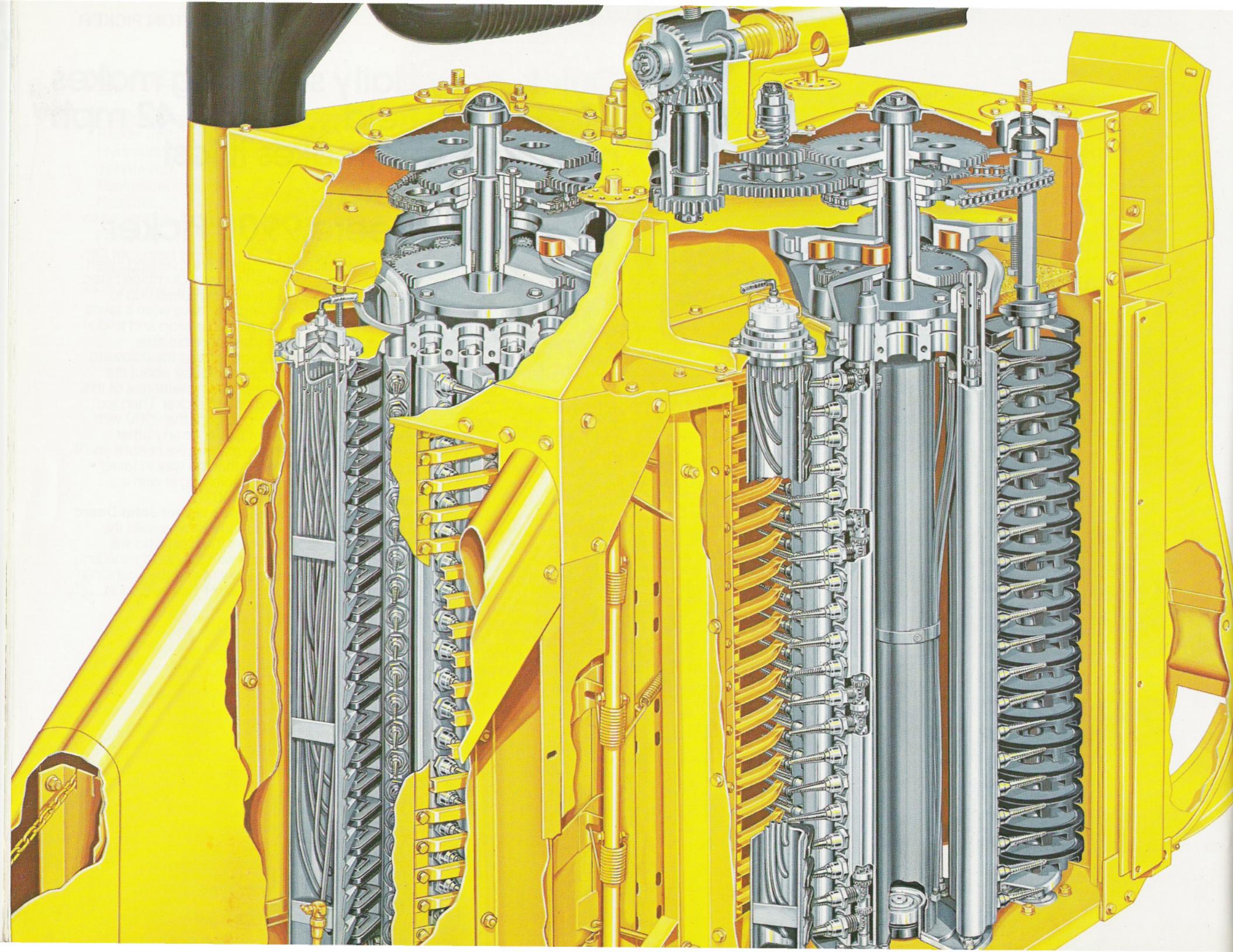
**Thanks to such advanced features as a centralized lubrication system** in the picker units, you save time before you ever get to the field with the John Deere 9900. For example, there are only four grease fittings to lubricate the picker bars and spindles. And hinged wheel shields make it fast and easy to service the rear pressure plate.

But it's in the field where the 9900 really shows and proves what kind of picker it is. The 9900 has an

excellent reputation for picking clean the first time through. Combine clean picking with picking speeds up to 3.42 mph and you have what it takes to save more of your crop and to do it in the shortest possible time.

We invite you to read the following pages that go into detail about the many features and advantages of this outstanding cotton picker. Then we urge you to compare the 9900 with your present picker or any other picker on the market. We're sure you'll be convinced that the way to faster and cleaner harvesting is with a John Deere 9900.

**The man to see is your John Deere dealer.** He's the man who sells the 9900s and he's the man who will back them up with the good service you're sure to want and the financing help you may want. See him soon.



# Low-load cam assembly permits fast picking speed... all-gear drive eliminates the "stretch-and-break" problems of chain drives

When the 9900 Picker was brought into the market, it replaced the famous John Deere 699. The 9900 features redesigned picking units that have newer features but still retain many time-proved principles of the 699.

For example, exclusive all-gear drive of the row units was retained. A gear drive provides a strong, reliable power train that takes grease lubrication. And with a gear drive, there simply isn't any chain that can stretch, get loose, and always be subject to breaking.

The 9900 picking units are approximately 10 percent faster than the 699 units. To achieve this higher speed, the units were redesigned and new materials were used to reduce weight.

**One of the major advancements is a redesigned cam track.** It's a nodular-iron cam track with bronze cam rollers. The result is a smooth, quiet-running action, with peak loads on the cam being as low as one-tenth the cam loads on the 699.

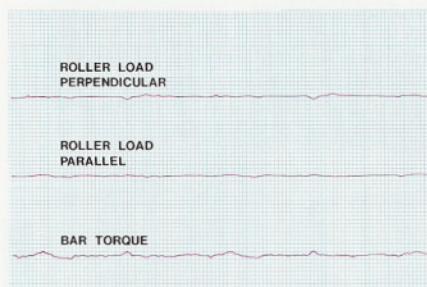
Also, shorter spindles are used in the 9900 units. The shorter spindles exert less leverage on the picker bar and put less weight in motion. While the spindles are shorter and smaller, the critical working area (the tip and the barbs) is not reduced.

The 9900 also features aluminum-alloy picker bars instead of heavy steel bars. The lighter aluminum-alloy bars put less mass or weight in motion and permit faster picking speeds. If a rock or a stump should enter the picking unit, the lighter picker bars hit with less force. And they stop quicker when the slip clutch releases.

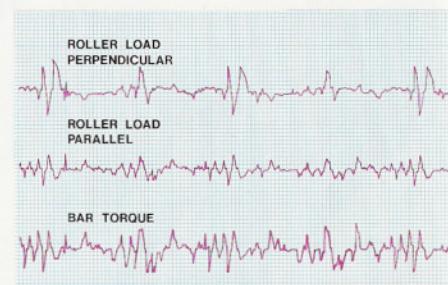
**Another 9900 design advance is smaller-diameter doffers.** They still have the same amount of rubber to strip cotton from the spindles. Again, the smaller doffers are lighter and put less mass in motion.



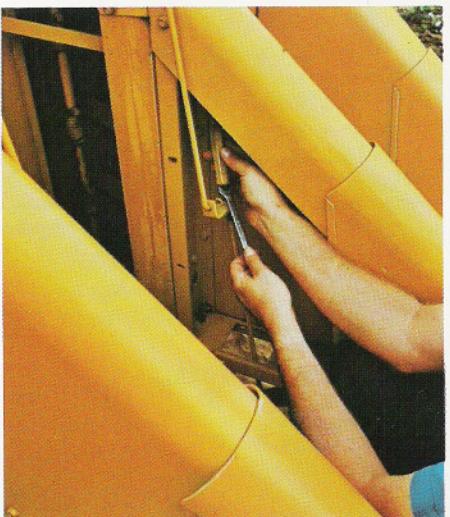
The graphs (right) are from actual tests comparing the old-style 699 cam with the 9900 cam. The areas depicted on these graphs—perpendicular and parallel roller loads and bar torque—are areas of heaviest loads associated with a working unit. The difference shown between the two cams is amazing, considering that the 9900 is running faster than the 699.



9900 CAM



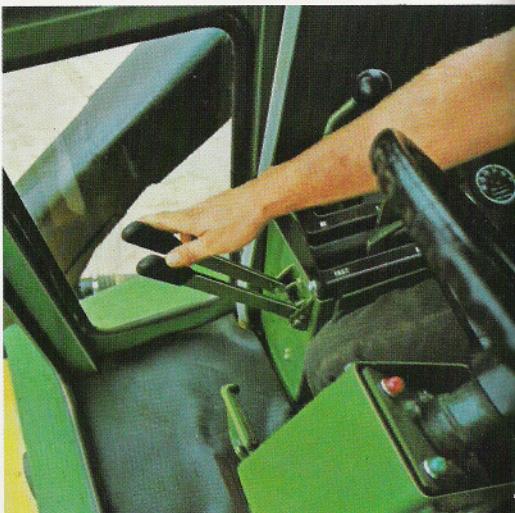
699 CAM



The optional hydraulically operated height-sensing unit for the 9900 Picker has four sensing shoes—two per row unit. With two sensing shoes per row unit, the units can closely follow the ground contour to save as many low-growing bolts as possible.

A simple, easy-to-make adjustment on each row unit sets the height sensing for your particular field condition. Once it's set, all you do is engage the control levers and the system takes over to adjust hydraulically and automatically to changing contours.

The levers that engage and disengage the height-sensing system are located on the front of the control console.



# Optional height sensing features two sensing shoes on each row unit for quick, accurate response to ground contour changes

Optional height sensing on the 9900 Picker is improved to cut adjustment time, reduce mechanical linkage that is subject to problems, and double the ground contact by using four sensing shoes instead of two.

Two height-sensing shoes per row unit permit a finer degree of ground-following. Variations in ground level along both sides of the bed can be detected more accurately with a height-sensing shoe running on each side of the row or bed.

These shoes, running along both sides of a bed, sense variations in the ground contour and actuate a hydraulic cylinder which adjusts the height of the row unit. Accurate height sensing permits row units to operate as low as is practical to save low-growing bolls and still keep the units from digging dirt.

**The 9900's height-sensing system is a two-stage system.** The first stage functions when ground variation is less than four inches. In this stage, just the nose of the picking unit is raised or lowered to compensate for a change in contour. But when the variations exceed four inches, the second stage is actuated to raise the entire unit over the high spot.

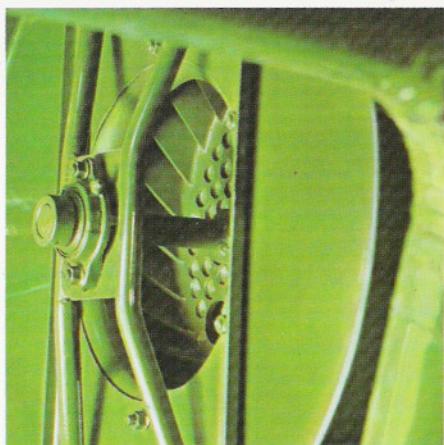
Height sensing on the 9900 also features individual unit response. Each unit is free to raise or lower independently of the other unit. Maximum lift height of the picking units is 19.6 inches. This high clearance will be especially important to you when you're working in muddy fields, turning at row ends, and when transporting.



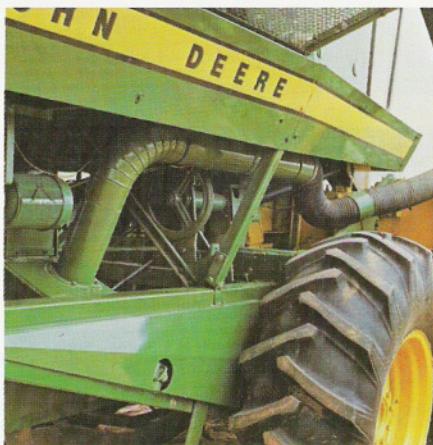
Push-type cylinders lift picking units—more reliable than pull-type cylinders because they're less likely to leak. The lift-arm linkage is designed to increase lift height, and exert less load on the rockshaft bearings.

The range of individual unit lift becomes apparent in the photo at the right. Row units "sense" and adjust independently. This permits each picking unit to follow ground contours in the bedded row it's working.





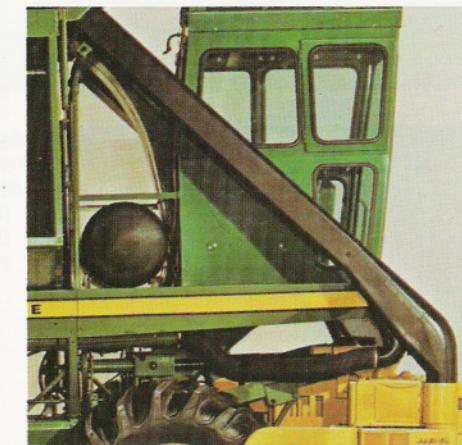
1. The aluminum rotor fan with aerodynamically designed fins produces a powerful air flow to handle the huge harvesting capacity of the 9900. This fan is designed to run quietly and smoothly.



2. Sheet-metal tubing makes up a large portion of the air duct from the fan. This contributes to long life and fewer service and repair problems. The front portion is rubber tubing to provide the flexibility that is needed when picking units are raised and lowered.



3. The 9900 has wide 16-bar suction doors to admit the high volume of air needed to handle the large flow of cotton this picker can harvest. Rear door nozzles are extra wide to increase air capacity and provide a smooth flow of cotton.



4. Straight conveyor ducts provide an obstruction-free ride for the cotton from the picking unit to the basket. There are no sharp edges or corners to damage cottonseed as it is carried through the ducts.

# Exclusive Jet-Air-Trol® preserves quality by eliminating cotton contact with the fan

Jet-Air-Trol is the exclusive John Deere system for conveying cotton between the picker unit and basket without sending delicate lint and seed near the fans or fan housings as less-advanced cotton pickers do.

The principle is simple but the results are dramatic. Cotton touches only two moving parts from field to gin—spindles and doffers. Seed cannot be cracked and twigs, leaves, or leaf fragments cannot be broken and ground into the lint by fans. Ducts are straight; no chance of damage to cotton from hitting sheet metal

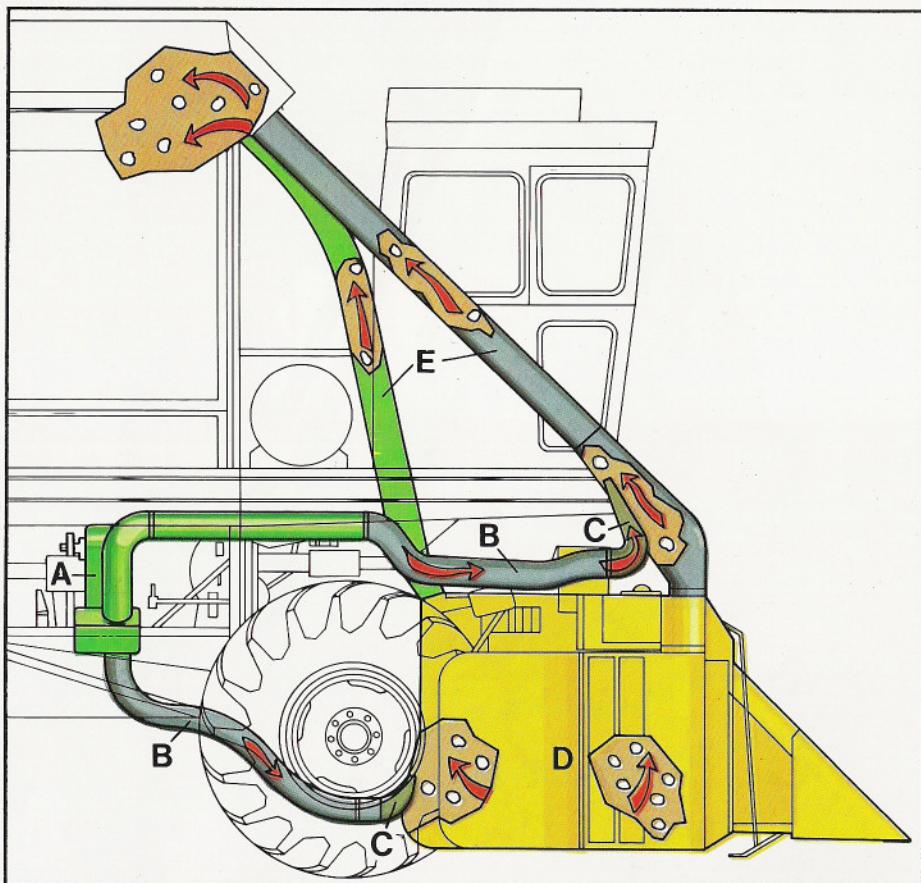
while rounding corners. The result is a cleaner sample. Trash that may be in the sample is in large pieces and loose, hence easier to remove in the ginning process. Reduced cleaning at the gin means reduced machine damage to cotton, and better preservation of its quality and value.

**And the 9900 features improvements in the Jet-Air-Trol system** to make it an even better protector of your cotton. The 16-bar suction doors and rear doors are wider to provide more capacity for a smoother flow of cotton. The rear-door nozzle has been moved downward, closer to the opening in the rear door, for greater air-flow efficiency. And the nozzle is the full width of the door.

Air ducts are now metal except for a short section of flexible tubing at the front of the duct where flexibility is necessary. This improves reliability as well as appearance.

Here's how the Jet-Air-Trol works. A single fan (A) in the engine area blows warm air through hoses (B) to nozzles (C). As air enters cotton conveyor ducts, it creates a suction in the doors (D) which draws cotton out of the doffer area and into conveyor ducts (E) where it is blown into the basket. From field to gin, cotton touches only two moving machine parts—spindles and doffers. Possibility of seed crackage or grinding of trash into lint is reduced to a minimum, and quality is preserved.

Air flows through the suction ducts on a straight course. Also the aluminum rotor fan, with aerodynamically designed fins, has the capacity to handle the high volume of cotton the 9900 can harvest per hour. The fan design also helps substantially to hold down noise level in the cab.





# Optional basket compactor gives you full use of the 608-cubic-foot basket

Once your pickers move into the field, getting as much cotton harvested in as little time as possible is your primary concern. One way to increase harvesting productivity is to have a large basket so you spend less time dumping. Add to that a basket compactor that increases basket holding capacity and you have a picker that stays on the move more of the time.

And that's what you get with the 9900. The 608-cubic-foot basket on the 9900 holds 3,000 pounds of seed

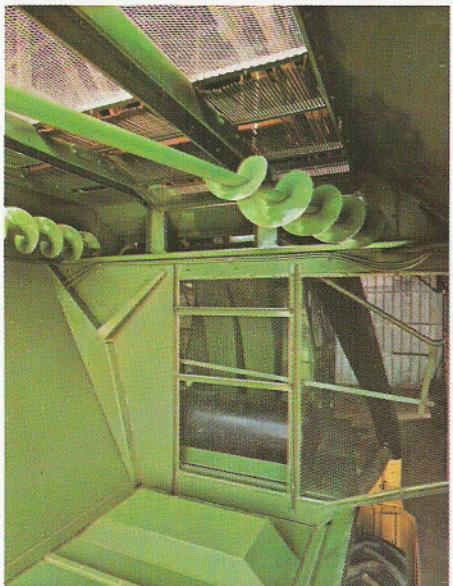
cotton. Hydraulically driven compactor augers (optional) increase the basket's holding capacity to 3,600 pounds.

The compacting augers are located in the basket lid, so they're out of the way when the basket is dumped. The hydraulic motors that power the augers are located outside the lid. There are no oil lines in the basket to leak and damage cotton. The gently-turning augers distribute cotton to the back corners of the big basket. Augers can be operated on the go—no need to stop and tramp cotton down in order to make it to the end of long rows.

And there's more. The basket lid features triangular cleaning-grate fingers—no sharp edges to crack or impale seeds. And now there are more cleaning grates than on the 699. Cleaning grate area has been increased 29 percent for extra separation of dirt and trash.

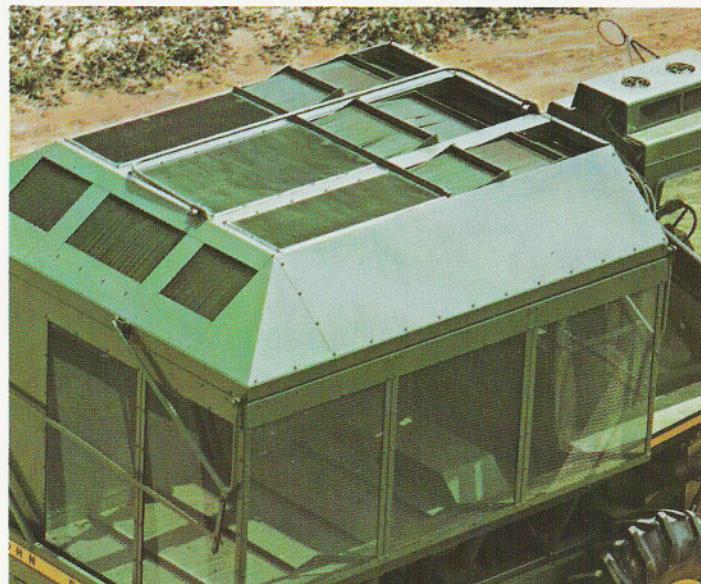
Do big baskets have a disadvantage? Some do...if they make the picker top-heavy and unstable. That's no problem with the 9900, because of its low-profile design. Also space occupied by fans and fan housing on old-fashioned pickers has been opened up to

provide space for a longer, lower basket. Thus, even with its big capacity, the 9900 stands just 13 feet 6 inches high. Dumping height of the 9900 is 10 feet 4 inches (measured at the basket lip)—and that is standard equipment.



Two 6-foot-long, hydraulically driven augers (shown at left) gently distribute cotton to the back corners of the 608-cubic-foot basket to increase its holding capacity 20 percent.

The cleaning-grate area on the 9900 basket (at right) has been increased by 29 percent over the 699 to provide maximum cleaning ability. The illustration shows the triangular shape of each of the cleaning-grate fingers. This shape protects your cotton quality by keeping seed from being cracked.

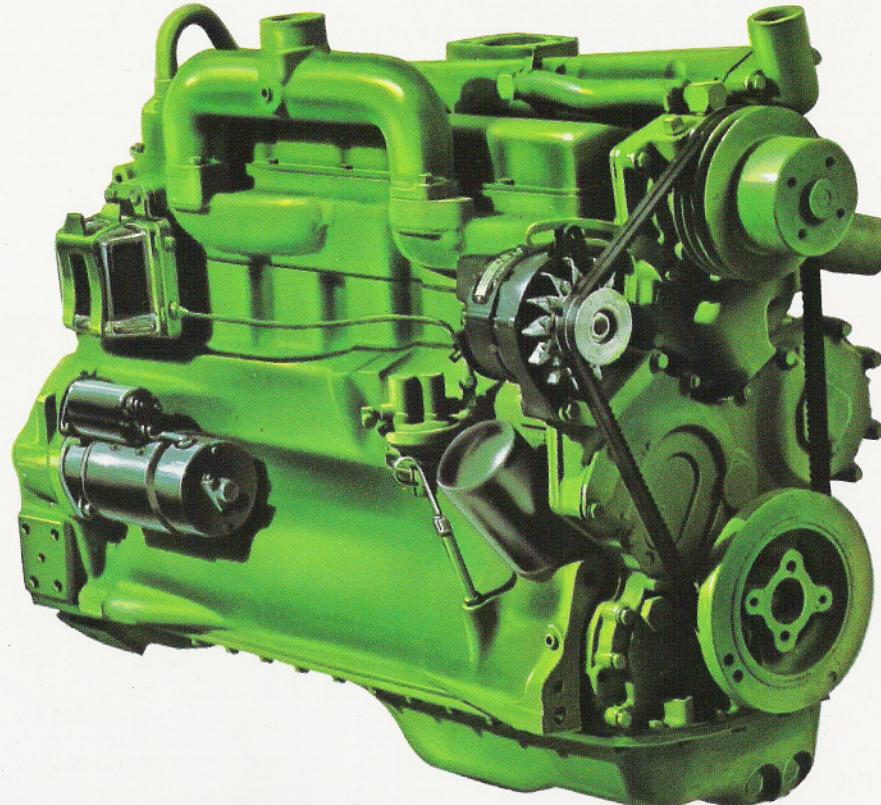


# 11 practical features...all standard...provide easy servicing by you and long-life picking for you

Time is money. And picking time that is lost to servicing time costs you in the pocketbook. But when you lose picking time due to breakdowns, you pay double—for the picking time lost and for the repairs themselves.

The 9900 is a picker designed to give you more picking time by saving

time. From its reliable 6-cylinder diesel engine to its many easy servicing features, you can expect to spend less time (and money) making repairs and servicing your picker—if that picker is the John Deere 9900.

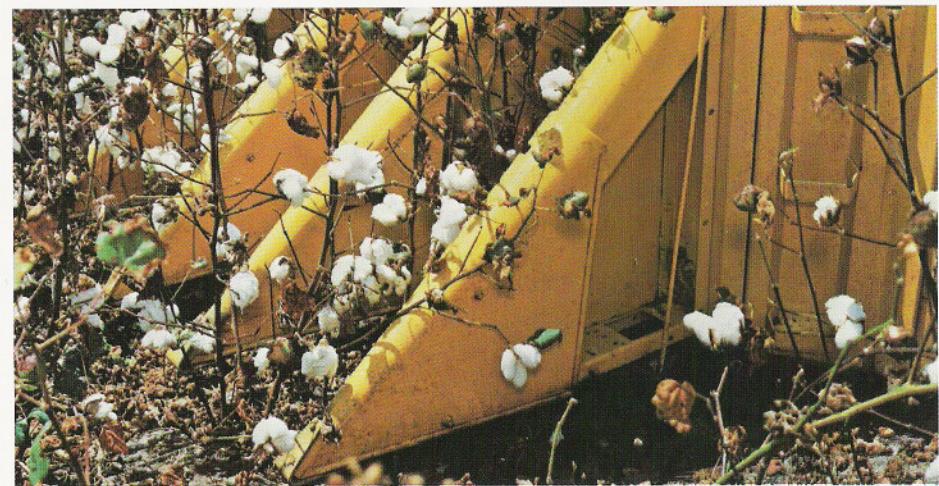
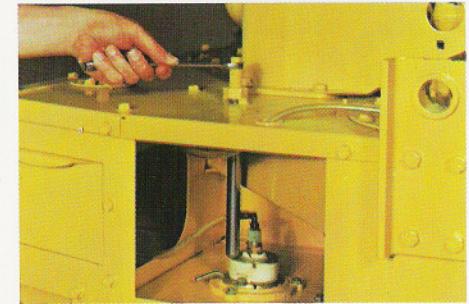


Regular equipment includes a diesel engine. It's a 6-cylinder, variable-speed, valve-in-head engine that develops 105 horsepower.

A slip clutch located between the picker's power source and each picking unit greatly increases the reliability of the units because there's less possibility of damage when rocks or stumps enter the picking zone. The reduced amount of mass in motion within the unit makes the slip clutch very effective.

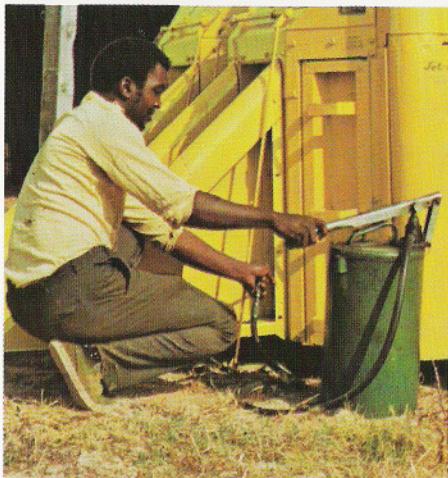


It's easy and quick to adjust the moistener column on 9900 Pickers.

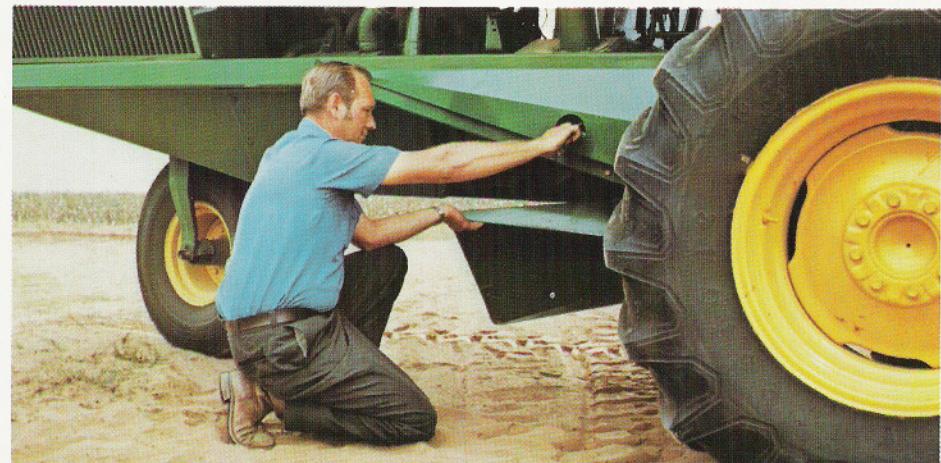


Points on the stalk lifters are rounded to prevent digging. Chain supports keep the stalk lifters from tilting forward...again to prevent digging. All stalk lifters are common for right or left side.

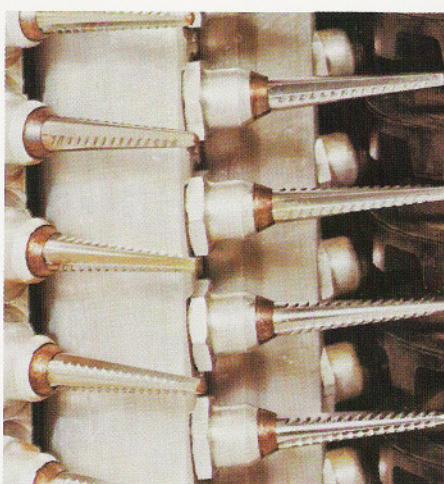
Time required for daily greasing of picker units is reduced 75 percent over other systems, thanks to a centralized lubrication system. Four easy-to-reach fittings grease all picker bars, fittings, and spindles.



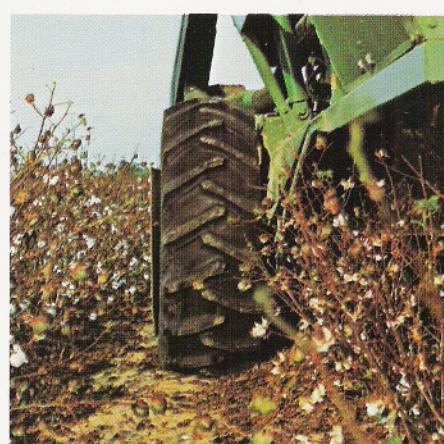
Big trash outlets behind both front and rear picking drums let big trash particles escape. An exclusive baffle on the rear keeps discharged dirt from being sucked back into row units.



Hinged wheel shields make servicing of the rear pressure plate and trash grates much easier. No more climbing over the top or crawling up from the bottom.

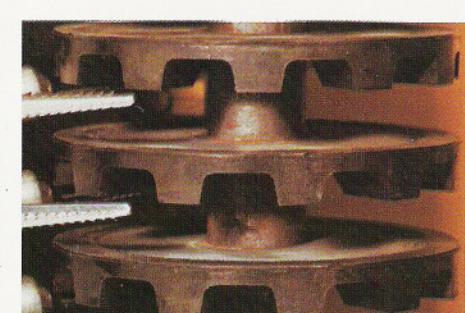


Deep-cut, barbed spindles pick even knotty cotton successfully. These file-hard spindles will break before they bend and damage units. Action is straight into the compressed plants, straight out—no raking.



Big 18.4-26 tires help the 9900 get through muddy fields while others wait. You get less slippage, better synchronization with drum rotation for minimum damage in picking.

Quick-Tatch plant tunnels make removal for servicing rear drums a quick, easy operation. The tunnels are shaped so they are not likely to get bent when picking in muddy conditions.

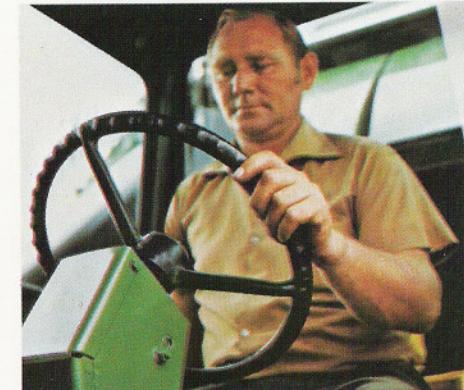


"Throwaway" doffers, with smaller diameter, play a major role in reducing the weight of the picking units and thus help increase the unit's reliability. They are less expensive to replace than rebonded doffers. They run smoother, and replacement is quick and easy.

# Convenient controls make long days easier... 69-gallon fuel tank means fewer refilling stops

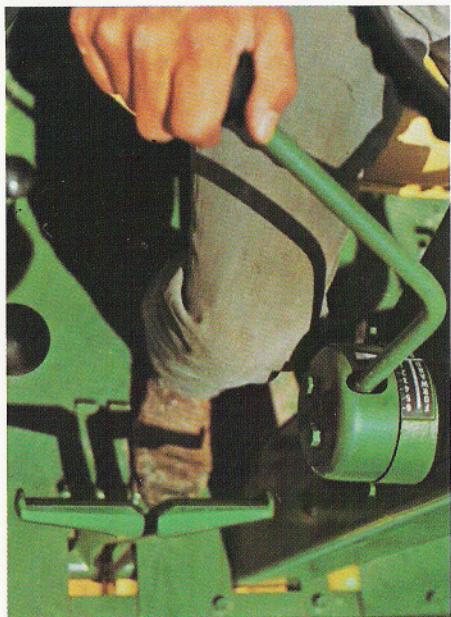
An operator who is rested and alert will just naturally do a better job of operating a cotton picker. And whether you run your own picker or hire an operator, you'll appreciate—and profit from—the location of the 9900's controls.

The control console is located to the right of the posture-type seat. Levers are easy to reach; dials are easy to read. Everything is grouped in an orderly arrangement. There's no stretching or straining. Consequently, it just stands to reason that you or your operator will do a better job of running the picker. And by being more alert all day long, it just stands to reason you'll get more cotton—and that means more profit—from every acre you raise.



Hydrostatic power steering with adjustable-tilt wheel, standard on the 9900, helps to make long working days easier on the operator. It provides complete control with minimum effort. In muddy fields, stay on the row with one-hand ease. This is the same accurate, quick-response steering you're used to on John Deere Tractors.

The height-sensing control levers (1), main gearshift (2), throttle (3), Hi-Lo range lever (4), and fan clutch (5) are conveniently located in a console within easy reach of the operator's right hand. A panel of easy-to-see, easy-to-read gauges and warning lights is also located on the console. Most-frequently-used controls are at the front of the console; less-frequently-used controls are near the back.



Optional hydrostatic drive gives the operator single-lever control of an infinite number of speeds between 0 mph and 3.42 mph without changing gears. He can adjust ground speed to field conditions, slow down in heavy stands, and speed up in lighter stands. Hydrostatic drive improves maneuverability.

Large radiator screens provide plenty of air-intake area. The screens are of fine mesh to prevent lint from getting into the radiator area.



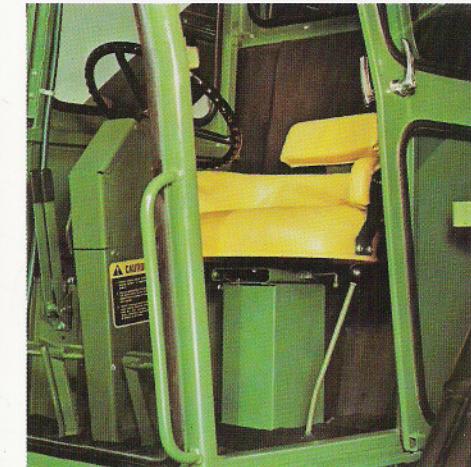
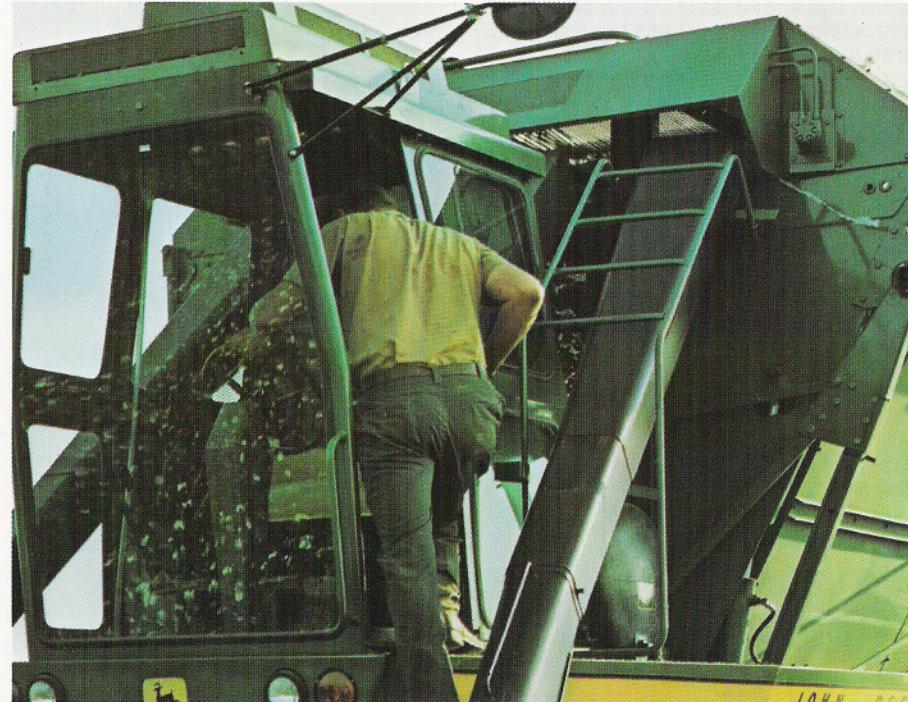
Fuel tank on the 9900 Picker holds 69 gallons, enough for a full day's run in normal conditions. Notice that the tank can be filled at the rear of the machine.



# Optional cab provides comfortable working environment plus good 3-way visibility

You well know that long, hot days in a cotton field can be mighty tiring. And one way you can make those days a lot easier to take is to equip your 9900 Picker with a cab and air conditioner. While they are extra-cost options, they improve the working environment so much they will pay big dividends in more output per man-hour.

Cab (special equipment) protects cotton profit as it protects the operator from dust, heat, and the glare of sun. Operators are better able to remain alert all day, better able to fine-tune adjustments and steer with precision. Cab is lined to help cut noise levels. Three options are available—no cab, cab with pressurizer, or cab with air conditioning.

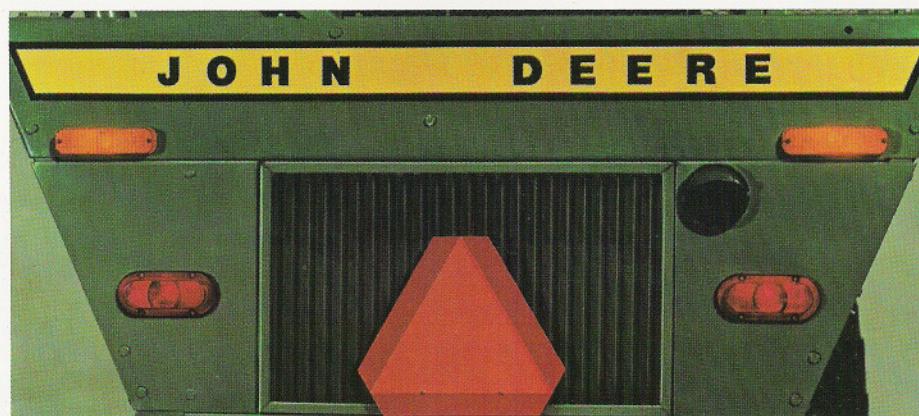
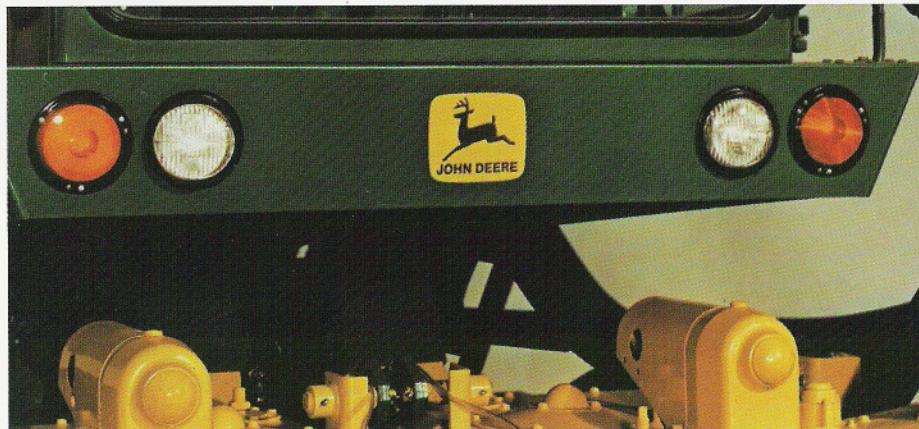


Settle into this posture seat...adjust it ahead or back. The seat, mounted on a slide rail, automatically puts short or tall operators in correct relationship to controls. Variable-density foam padding and correctly placed arm and back supports help defend the operator against fatigue.



Visibility through the big, obstruction-free front glass gives the operator a good view of the picking units and makes it easy to stay on the row.

Dual high-low-beam headlights and a pair of amber warning lights are mounted in the front of the 9900. High-low switch is on the floor of the cab. These headlights permit your picker to work longer hours to help get your crop out before foul weather sets in.



The 9900 also features dual taillights and a pair of amber warning lights mounted on the rear of the machine. These lights aid in safe transport travel during early morning or late evening.

## SPECIFICATIONS:

(Specifications and design subject to change without notice)

**Number of rows** ..... 2

**Row spacing** ..... 32 (skip-row), 38, or 40 in. (81, 96 or 102 cm)

**Number of picking drums** ..... 4

**Picking-drum height:**

Low-drum ..... 14 spindles  
High-drum ..... 20 spindles

**Bars in front drum:** ..... 16

Rear drum ..... 12

**Number of spindles per machine:**

Low-drum ..... 784  
High-drum ..... 1120

**Dumping height (lip)** ..... 9 ft. 10 1/2 in.  
(3.01 m)

**Axle clearance** ..... 33 in. (838 mm)

**Fuel-tank capacity** ..... 69 gal.  
(261 liters)

**Height** ..... 13 ft. 6 in. (4.12 m)

**Length** (with extensions) ..... 22 ft.  
(6.71 m)

**Row-unit lift (approx.):**

With height sensing ..... 17 in.  
(432 mm)

Without height sensing ..... 19 in.  
(483 mm)

**Wheel tread** ..... 79.62 in. (2.02 m)

**Engine type:**

**Diesel:**

Horsepower ..... 105 (78.3 kW)

Cylinders ..... 6

Displacement ..... 329 cu. in.  
(5391 cm<sup>3</sup>)

Electrical system ..... 12-volt  
Hydrostatic drive ..... Optional

**Picking speeds** ..... 2.26, 2.90, 3.42 mph  
(3.64, 4.67, 5.50 km/h)

With hydrostatic drive ..... 0-2.9 mph  
(0-4.67 km/h) in first; 0-3.42 mph  
(0-5.5 km/h) in second

**Transport speeds** ..... 8.9, 11.49, 13.52 mph  
(14.38, 18.49, 21.75 km/h)

With hydrostatic drive ..... 0-11.49 mph  
(0-18.49 km/h) in third; 0-13.52 mph  
(0-21.75 km/h) in fourth

**Reverse gear speed** ..... 3.57 mph  
(5.74 km/h)

With hydrostatic drive ..... 0-6.76 mph  
(0-10.88 km/h)

**Basket capacity** ..... 608 cu. ft.  
(17.21 m<sup>3</sup>); 3000 lb. (1360 kg)

With optional basket compactor ..... 3600 lb. (1633 kg)

**Weight**\* (approx.):

Low-drum ..... 12,000 lb. (5443 kg)

High-drum ..... 12,600 lb. (7056 kg)

\*With cab add 500 lb. (277 kg)

**Options:** Hydrostatic drive ..... cab w/  
pressurizer ..... cab w/  
air conditioning ..... 4-shoe  
height sensing ..... basket  
compactor ..... tire treads  
R-1, R-2, or R-3