

LUBRICATION SYSTEM

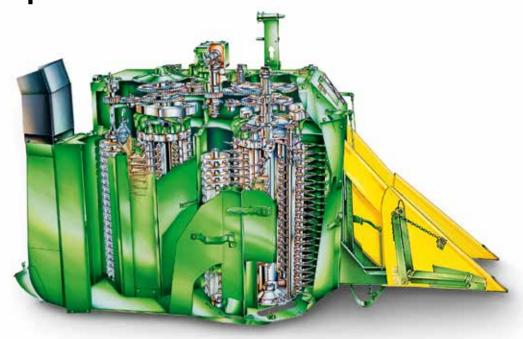
The picking unit system comprising over 9,000 moving parts in each row unit is precisely designed and engineered to ensure optimum machine performance.

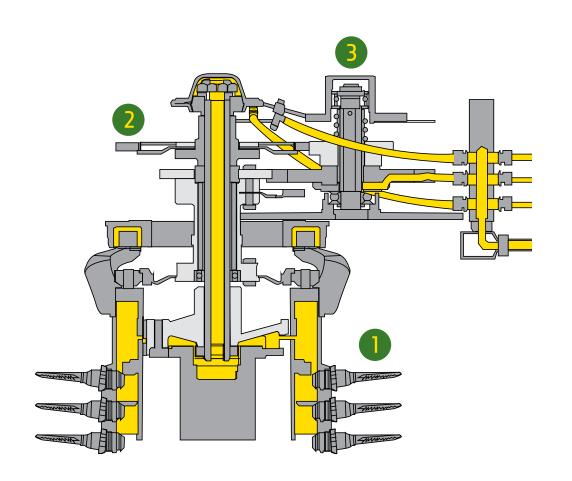
CLEANING SYSTEM

John Deere Spindle Cleaner is specifically developed for keeping the cleaning system spindles, moisture pads and doffers pads clean to increase harvesting performance and reduce your operation and maintenance costs.

John Deere Spindle Cleaner protects and cleans the picker spindles by cleaning dirt, plant material and other contaminates from the spindle. It guards against wear, rust, corrosion and oxidation. The cleaner will keep moisture pads from drying out, hardening or cracking and helps keep doffers pliable and in good condition. It is compatible with the spindle grease, so it will not wash spindle grease out of the critical areas of the spindle assembly like soap does.

A row unit lubrication system this advanced requires special treatment.





You need a grease that does all these jobs well:

1. FOR SPINDLE ASSEMBLY

- Provides high-speed anti-wear
- Penetrates porous bushings
- Provides brass on chrome anti-wear
- Flows properly to lubricate lower bar

2. FOR CAM TRACK

- generates tough film strength
- copes with brass on steel
- protects like a gear oil
- provides corrosion resistance
- provides vibration and sliding anti-wear

3. FOR DRUM DRIVE GEARS

- provides minimal low-temp torque
- has good adhesion
- has long life
- provides low speed, high pressure anti-wear

The ideal spindle grease

Performs as a penetrating oil to lubricate bushings and spindles, as a gear lubricant to minimize cam shaft wear, and as a grease to protect bearings.

Functions in a wide range of temperature conditions, including low, cold weather starting torque, while not thinning and leaking out at higher operating temperatures.

Includes additives to reduce wear and provide rust protection to equipment while the machine is standing idle during off season.

There are over **9,000 moving parts** in your spindle system agrease needs to protect.



Superior formula. Not all spindle greases provide the same level of performance – that is why we developed our own. Here is what makes the John Deere formula outperform other brands:

- John Deere Spindle Grease meets NLGI No. "00" specifications and meets John Deere cotton picker spindle lubricant JDN 380 & JDN 360 specifications for John Deere cotton pickers.
- High-grade, anti-wear additives and rust inhibitors protect the spindles and picking unit components, extending the service lives of all parts.
- Lithium soap holds oil in suspension better than other types of greases. Bentonite-clay greases, for example, can form deposits or "caking" in the picker bars, preventing the grease from lubricating the picking assembly.
- Proper base lubricating oil ensures excellent performance and lubrication in extremely hot operating temperatures. It will not thin out like other brands. If base oil viscosity is too low, it can reduce bearing life. If it is too high, a cotton picker will be forced to use higher horsepower at lower temperatures, and it extends warm-up times.
- John Deere Spindle Grease is an all-in-one lubricating grease, gear lubricant, penetrating oil, and corrosion protector.

John Deere Spindle Grease is a multi-use, high-performance grease formulated for your John Deere cotton picker row unit.

John Deere Spindle Grease is specially formulated with highly refined base lubricating oils and unique anti-wear additives to prevent abrasion and extend the service life of high-wear parts.

- It's not just another off-the-shelf product. John Deere Spindle Grease was specifically designed to ensure maximum lubricating performance and efficiency of high-speed spindles in John Deere cotton pickers, as well as other makes. Thoroughly tested and proven to outperform competitive greases, this quality-made product will provide the best value for your investment.
- Don't jeopardize your equipment! There's a tremendous amount of metal-to-metal contact in a picker head. Using high-quality grease ensures maximum performance by reducing wear on these metal surfaces. To keep your equipment running efficiently, even under the harshest operating conditions, you can depend on John Deere Spindle Grease.

JDN 380 & JDN 360*:

Required Specs for Optimal Performance

John Deere Spindle Grease meets NLGI No. "00" specifications and meets John Deere Cotton Picker Spindle Lubricant JDN 380 & JDN 360 specifications for John Deere Cotton Pickers.

CAUTION: Brand X Grease options DO NOT meet these spec

* JDN 360T specifications are specially formulated for tropical climates and meet NLGI No. "0" specifications.

John Deere Spindle Grease protects your investment...

A lower price, lesser-quality spindle grease costs more than you expect – especially if it doesn't stand up to the harmful effects of extreme temperatures, high-speed operation, rust, and corrosion.

JOHN DEERE









BRAND X









Spindle Bushing

Drive Shaft Gear

Repair Sleeve

Bar Journal

JOHN DEERE SPINDLE GREASE:

- Minimizes wear for optimum performance in the field and minimal consumption.
- When using John Deere grease and cleaner, row units can last 1,500 fan hours (5 years) before needing major overhaul.
- Reduces operating and maintenance costs and prolongs the life of your picker heads.
- Minimizes your downtime for maintenance and protects against unexpected breakdowns.

...and saves you money

JOHN DEERE **BRAND X**

\$45,000 Cost for major overhaul of six-row unit

Average fan hours between major overhauls for machines using John Deere grease

\$30/hour with John Deere grease

Cost for major overhaul of six-row unit

Average fan hours between major overhauls for machines using non-OEM grease

\$50/hour with off-spec grease

That's a savings per-hour of \$20 per hour. Assume a rate of 16 bales per hour.

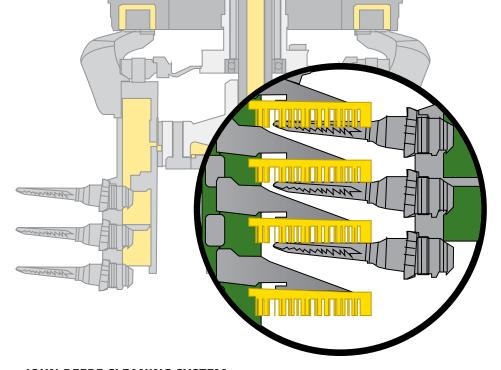
16 bales \div \$20 = \$1.25 per bale savings

in rebuild costs by using John Deere Spindle Grease, which costs only 15 cents per bale more than non-OEM grease. Plus John Deere Spindle Grease reduces friction to save fuel, minimizes spindle vibration which maximizes yield, reduces risk of unexpected downtime, consistently meets specifications, and is available in bulk.



The row unit cleaning system in your picker is highly advanced.

Your cleaner should be too.



Moistener Pads



Spindles



JOHN DEERE CLEANING SYSTEM

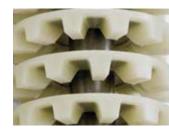
Per row unit:

PRO-12™ - 432 spindles and 36 moistener and doffer pads

PRO-16™ - 560 spindles with 40 moistener and doffer pads

The spindles and moisture and doffer pads work in sync to provide maximum performance and reduce operating and maintenance costs.

Doffer Pads



The cleaner you need

THE RIGHT FORMULA AND BENEFITS

- Uniquely formulated, oil-in-water emulsion that incorporates tiny droplets of oil to both clean and protect spindles, bushings, doffers and moisture pads.
- Oil droplets provide protection against rust and oxidation of bushings and spindles.
- Cleans spindles effectively even when working with extremely hard water.
- Applies easily through small nozzles, reducing consumption.
- Mixes with water at a ratio of 1 to 67 gallons (5.4 gal./360 gal. tank)
- Meets JDN354 specifications

John Deere Spindle Cleaner delivers superior results

Soap and water are not enough. Using dishwashing soap instead of a quality spindle cleaner doesn't protect your machinery and parts. Even worse, dishwashing soap actually washes away the lubricating spindle grease from the spindle bushings and attachments leaving them unprotected.

JOHN DEERE







BRAND X







- The spindle on the right, cleaned with a lesser-quality product, shows excessive wear, pitting, rust, corrosion and bacteria, versus the parts on the left.
- Poor quality spindle cleaner and spindle grease caused excessive corrosion and wear to the spindle gear on the right.

The doffer pad on the right was exposed to a lesser quality product, making it brittle and prone to wear and chunking.



What does the Spindle Cleaner mean a you?

- Increases your harvesting performance
- Reduces your operating and maintenance costs by protecting your cotton picker's mechanical parts from rust, oxidation, or corrosion
- Minimizes wash off of spindle grease saving you on grease costs
- Does not harden doffers and moistener pads as some soaps or surfactants do
- Allows longer intervals between tank refills
- Keeps spindles cleaner- cleans away dirt, plant residue and contaminants from the spindles
- Reduces spindle wrapping and staining
- Higher yield of cleaner cotton

John Deere Cotton Picker Spindle Grease and Spindle Cleaner are available in multiple container sizes or in bulk at a dealer near you.



JOHN DEERE COTTON PICKER SPINDLE GREASE

| AN113719 | 35 lbs. | Pail |
|----------|-----------|------|
| AN31360 | 120 lbs. | Keg |
| AN31361 | 400 lbs. | Drum |
| TY25845 | 2000 lbs. | Tote |
| TY22036 | Bulk | Tank |

JOHN DEERE COTTON PICKER SPINDLE CLEANER

| AN114022 | 5 Gallon | Pail |
|----------|-----------|------|
| ΔΝ114023 | 55 Gallon | Drum |

Try all these John Deere multi-purpose and special-purpose greases

MULTI-PURPOSE



SD Polyurea

This high-temperature, extreme-pressure polyurea grease is John Deere's best multi-purpose choice for all-purpose lubrication, especially applications requiring a severe-duty grease.



Lithium

The lithium thickened grease is ideal for all-season, general-purpose lubrication. The product is suitable for applications such as light to medium duty wheel bearings and u-joints.



Extreme Duty Synthetic

This non-staining, water and saltwater-proof grease tolerates extremely high and cold operating temperatures. It can be used for all applications, making it very useful for both home and farm.



Lithium Complex

This amber colored highquality lithium complex has excellent high temperature and extreme-pressure properties. The product is suitable for heavy-duty applications and elevated temperatures and out performs lithium greases where recommended.

SPECIAL-PURPOSE



Corn Head

An extra-soft green polyurea grease formulated to give optimal lubrication for John Deere's corn head row-unit gear cases and other slow-speed gear cases.



Calcium Sulfonate 5% Moly

For high temperature, extreme pressure, protects against corrosion and stays in place in wet conditions. For use in pins, bushings and heavy duty shock loads or continuous sliding contact. Moly grease is not recommended for bearing applications.



HD Water Resistant

This blue lithium grease is recommended for all applications where water is present. The product has excellent water resistant properties and corrosion protection making it ideal for marine applications.



Lithium Complex 3% Moly

A moly containing lithium complex grease slate-gray in color suitable for heavy-duty application with shock loads or for lubrication of sliding surfaces. The product is recommended for applications such as pins and bushings and ball joints.

