

# Total Planting Solutions



# Everything you need to seed smart

## Premier Technology/Data for better decision making

Total Planting Solutions from John Deere is an integrated collection of best-in-class planting products and services you won't find anywhere else. It includes state-of-the-art monitoring technology that gives you the data you need to make better decisions in the field.

## Performance Parts and Attachments

Total Planting Solutions offers you an unprecedented breadth of choice when it comes to high-performance attachments and parts for every stage of planting – from world-class seed meters to closing systems. With over 40 years of experience designing, building, selling and supporting millions of John Deere planter units and meters, we've learned what works well and what doesn't. And all of our parts and attachments have been rigorously tested throughout the development and manufacturing process – assuring you of the highest quality.

## Stellar Dealer Support

John Deere offers exceptional service and support to help you stay in the field. They include mobile service, next-day parts availability, factory-trained technicians and preventive maintenance – all from the professional agronomic resource that's right in your own backyard – your local John Deere dealer.

Only John Deere offers you everything you need to seed more profitably – including financing assistance. Check it out today.

## Customize your own Total Planting Solution

Every grower has different planting needs. That's why we offer flexible options. With our complete line of planting parts, attachments, technology, data and services, you can pick and choose which work for you ... creating your own Total Planting Solution.

[JohnDeere.com/AgParts](http://JohnDeere.com/AgParts)  
[JohnDeere.ca/AgParts](http://JohnDeere.ca/AgParts)



## Five planting areas that concern you the most

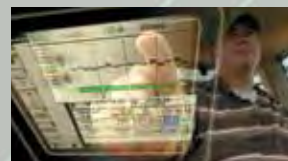
You face challenges every planting season.

- Controlling seed input costs
- Maximizing singulation and spacing
- Maintaining consistent depth control
- Improving ground conditions
- Achieving precise monitoring and documentation

When you're in the trenches, we've got the planting tools, technology and service solutions to help you tackle to challenges in more effective ways. So you can reduce costly planting errors and make the right decisions to enhance performance. If you're ready to plant – and you're ready to profit – partner with John Deere.

## CONTENTS

SeedStar™ XP Monitoring and Documentation .....	4
RowCommand™ .....	6
Section Control .....	6
Variable Rate Drive .....	7
Pro-Shaft™ drive .....	7
Data .....	7
Singulation and Spacing .....	8
Precise Seed Placement .....	9
Row Cleaners .....	10
Openers .....	11
Active Pneumatic Downforce .....	12
Precise Depth .....	13
Closing Systems .....	14
Dealer support .....	15



SeedStar™ XP Monitoring and Documentation



RowCommand™



Variable Rate Drive



Pro-Shaft™ drive



Singulation and Spacing



Precise Seed Placement



Row Cleaners



Active Pneumatic Downforce



Precise Depth



Closing Systems

# SeedStar™ XP Monitoring and Documentation

## New, more powerful technology

### Make smarter decisions based on better, in-field data

With input costs rising, you need ways to increase your operational efficiency. You want to ensure that you plant every seed accurately and precisely within the seed furrow for maximum yield potential. And SeedStar™ XP monitoring technology can help you do that – all from the convenience of your cab.

Built on the foundation of SeedStar 2, SeedStar XP collects real-time, user-friendly data from the row units – data about seed spacing and downforce. Then it transmits this information to a single, easy-to-read GreenStar™ 3 touch-screen display. That way, you get an overall picture of your planter's functioning at a glance.

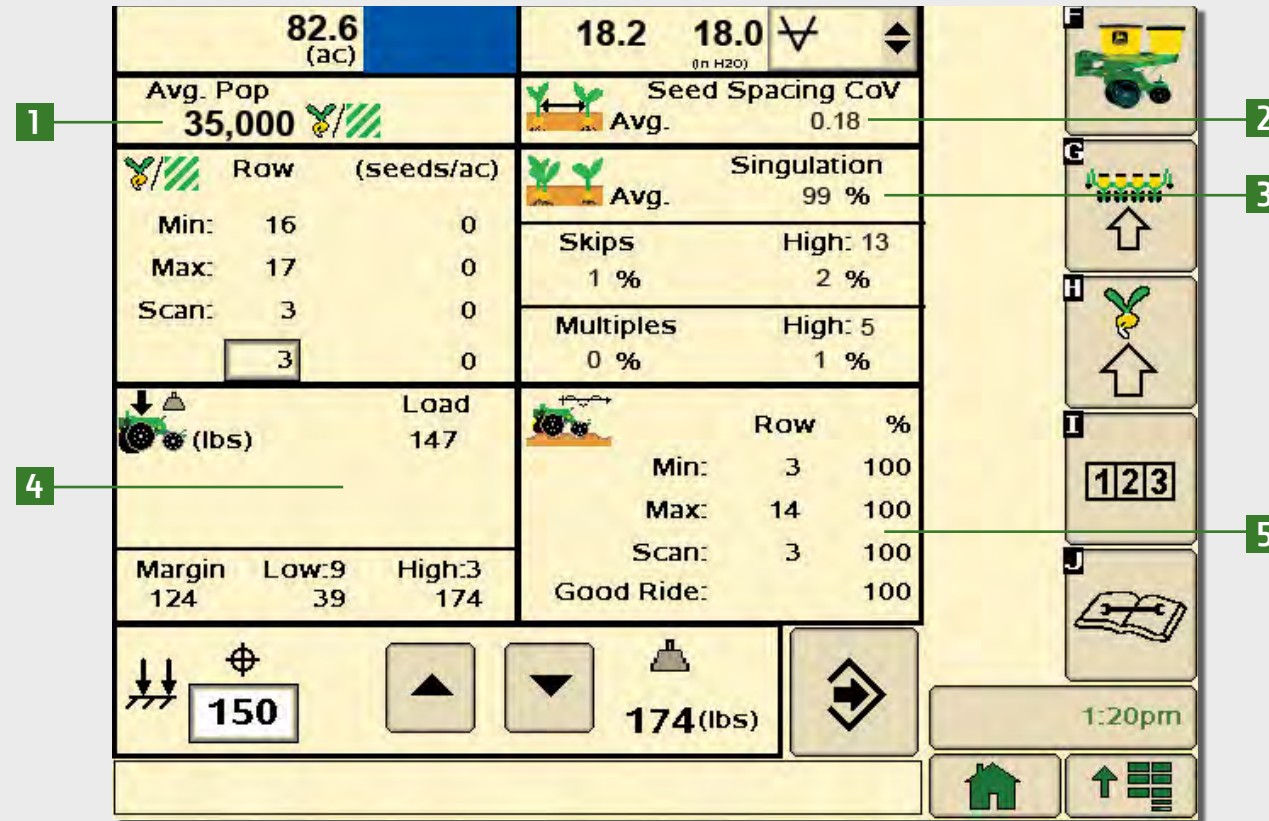
Best of all, should you see any potential issues, you can tap the screen to zoom in on a specific factor and then quickly make easy adjustments to optimize planter performance and improve plant emergence.

### See the big picture ... or drill down for details

Using SeedStar XP's monitoring technology, your GreenStar 3 display provides an extremely clear overview of how your planter is operating as a whole. It features on-the-go planting performance for:

- 1 population
- 2 spacing
- 3 singulation
- 4 downforce
- 5 ride dynamic

— all on one, full-color screen. Check out all aspects of your planter or focus in on how one specific row unit is doing. With SeedStar XP monitoring technology, you don't miss a thing.



## Support when you need it

John Deere offers a built-in support system for our SeedStar XP technology: our dealer network. And if your local dealer can't help you, he will put you in touch with someone at our Dealer Technical Assistance Center. In-person support when you need it ... just another example of our Total Planting Solution at work.

## SeedStar™ XP: A suite of technologies to maximize planter performance



**Singulation and Spacing** SeedStar XP helps you keep your eyes on the furrow from the convenience of your cab. Real-time singulation and spacing data from the row units are displayed on the John Deere GreenStar 3 screen. Then, identify the row units with the highest percentage of seed skips or doubles – so you can make the proper adjustments on your display and correct them fast.

**Variable Rate Drive (VRD)** Not every portion of your farm produces the same results. Yield potentials vary based on soil type, elevation and other factors. Variable Rate Drive (VRD) technology lets you match planting populations to each section of your farm – maximizing yields as well as inputs.

**Active Pneumatic Downforce** Active pneumatic downforce provides convenient adjustment of downforce for the whole planter from one location. Set the row-unit target margin in SeedStar XP and achieve ideal planting depths by monitoring and adjusting the applied downforce to changing soil types. The result? Precise soil penetration and consistent planting depth without sidewall soil compaction.

**RowCommand™** Section Control with Row Command gives you amazing control over your planter while limiting seed overlap – especially on headlands and point rows. From automatically shutting individual row units on and off to turning entire planter sections on and off with GPS technology, these integrated SeedStar XP systems make seed waste a thing of the past.



Download a full version of our GreenStar simulator, including SeedStar XP applications, here: [JohnDeere.com/SeedStarXPDemo](http://JohnDeere.com/SeedStarXPDemo)

At the bottom of the landing page, there are two yellow download boxes. Click on the one for "Display and CommandARM™ Simulator". Once you download this, you can set up the SeedStar XP simulation.



## RowCommand™

### Maximize seed placement accuracy at the row-unit level

John Deere RowCommand gives you control over your planter while limiting seed overlap – especially on headlands, odd-shaped fields, waterways and point rows. Using SeedStar XP software activated on your GreenStar™ 3 display, RowCommand helps you save on seed inputs by maximizing accurate seed placement at the row-unit level. No other system provides this level of precision.

RowCommand gives you true, individual row control of up to 16 rows with the help of low-amperage clutches – all from the convenience of your cab. When power is supplied, clutches disengage the seed meters and seed flow stops.

With RowCommand, you don't need to manually turn the individual rows off and on. Once you've set your field parameters, RowCommand makes your changes automatically – reducing operator fatigue so you can stay in the field longer.

RowCommand is easy to install on all Pro-Shaft™-driven row units, both Pro-Series™ and MaxEmerge XP™, and chain-driven MaxEmerge XP™.

### Improve seeding efficiency on a larger scale with Section Control

Section Control, like RowCommand, also gives you more accurate control over your planter while limiting seed overlap – especially in odd-shaped fields and on headlands and point rows – resulting in instant crop input savings. However, instead of row units, Section Control can automatically turn up to 16 individual planter sections on and off using GPS technology to minimize over planting. A minimum of 60-ins.(152.4 cm) -wide sections are recommended for optimum performance.

Here's what you can expect when you combine Section Control with RowCommand:

- Manage seed output
- Reduce operator fatigue
- Minimize risk of planting errors
- Improve machine efficiency



## Variable Rate Drive

### Quick rate changes let you adapt to field conditions FAST

Variable Rate Drive (VRD) technology lets you match planting populations to the yield potential of each field on your farm – so you can boost your yields and make more efficient use of inputs.

And because you don't have seed to waste, John Deere VRD delivers near instantaneous rate changes. This gives you the ultimate on-the-go planting precision. No ramping up, no ramping down. It's yet another example of how we put planting efficiency at the forefront when developing our machinery and technology.



We offer you two methods to populate each field section perfectly using John Deere VRD. You can:

1. Manually set presets using SeedStar XP™.
2. Use prepared prescription planting maps specific to each field. These are based on factors like yield maps, soil types, elevation, irrigation, aerial imagery and fertility.\* When you choose this method, the planter automatically assigns and changes rates as it moves across the field.

\*Requires John Deere Apex™, Field Doc™ and Map Based Prescriptions as well as SeedStar XP.



### Pro-Shaft™ drive The maintenance-free way to power seed meters

Imagine not having to oil your chain drives daily or replace chains annually ... all while increasing your efficiency. That's what you get when you retrofit your MaxEmerge 2™ and MaxEmerge Plus™ chain-driven seed meters with fully enclosed, lubed-for-life Pro-Shaft drives. **With Pro-Shaft drives you eliminate:**

- Rusty chains
- Chain maintenance
- Chain knockoff in high residue planting
- Trash shields

Stay in the field longer with Pro-Shaft drives.



### Revolutionize field operations with the help of you data

Your John Deere equipment generates a tremendous amount of usable, valuable data about your seeding operation. Data collected about your farm, crops and machinery can now be easily assembled and organized so you can make more informed planting decisions. At John Deere, we believe there's a significant benefit in sharing data – to help you in the field and to help us improve our equipment and technology. That's a win – win for everyone.

## Singulation and Spacing

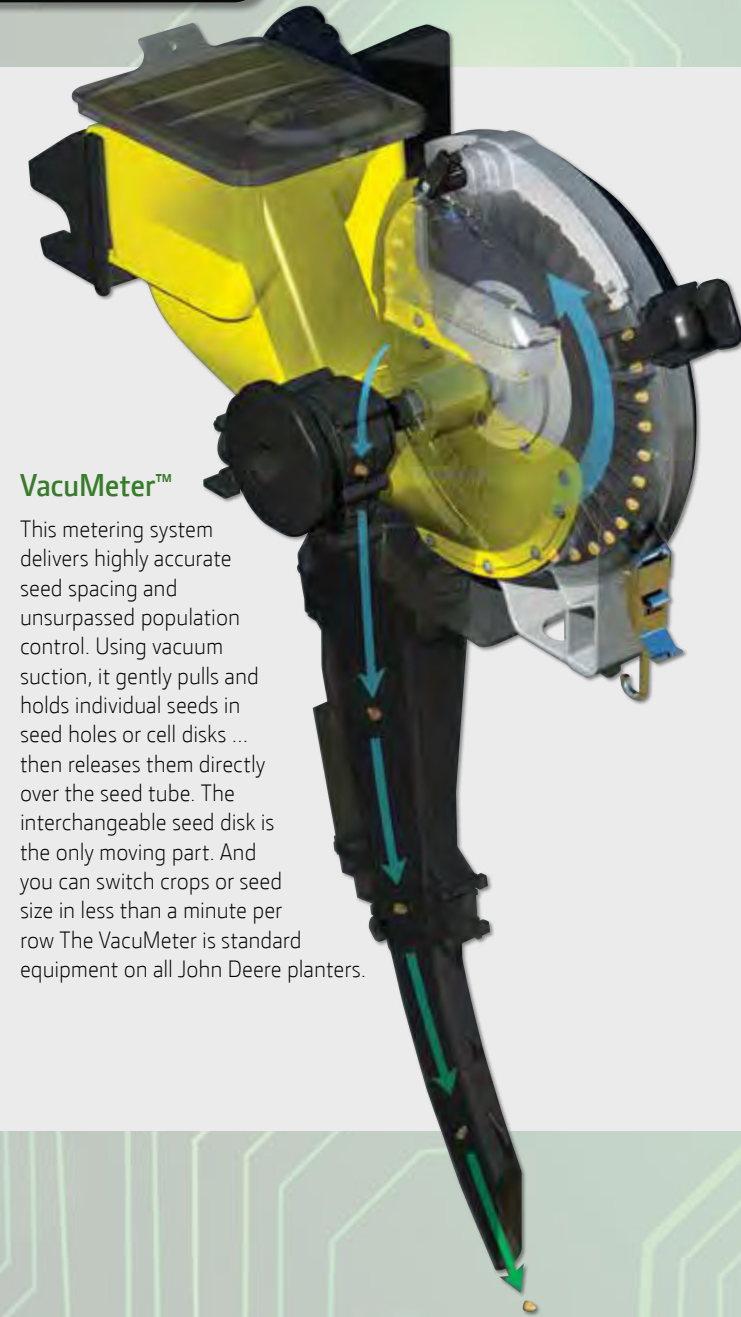
### Accurate and precise seed placement from hopper to soil

At John Deere, our goal is to get you ready to plant. That's why we spend so much time refining our planters and their components, including the seed meters. For example, we've made factory-installed double eliminators standard on our Pro-Series™ row units. It's a small change but one that helps ensure that you always get the best seed spacing possible when using our popular ProMAX 40 Flat Seed Disk.

It's these simple yet important updates that keep the John Deere VacuMeter™ system at the industry forefront for accuracy, efficiency and reliability. Its design ensures that every seed is consistently released above the seed tube for improved seed drop and unbeatable spacing.

For more customized options, visit:

[JohnDeere.com/AgParts](http://JohnDeere.com/AgParts)  
[JohnDeere.ca/AgParts](http://JohnDeere.ca/AgParts)



#### VacuMeter™

This metering system delivers highly accurate seed spacing and unsurpassed population control. Using vacuum suction, it gently pulls and holds individual seeds in seed holes or cell disks ... then releases them directly over the seed tube. The interchangeable seed disk is the only moving part. And you can switch crops or seed size in less than a minute per row. The VacuMeter is standard equipment on all John Deere planters.



#### ProMAX 40 Flat Disk and Double Eliminator



The ProMAX 40 Flat Disk accurately singulates a wide variety of corn seed sizes and shapes – for exceptional seed spacing and population control. Our ProMAX 40 disk is made up of forty, 4.5mm holes, each one perfectly designed for pulling in and retaining a large variety of seed shapes and sizes. (Disks with fewer holes have more trouble picking up seed.) The ProMAX 40 is even more effective when used with the double eliminator – a factory-installed device that prevents more than one seed from being planted at a time. Altogether, the ProMax 40 Flat Disk and double eliminator metering system deliver 99 percent singulation of today's seed sizes or types along with world-class spacing. No other meter offers this level of repeatability.

Even with all that, the ProMAX 40 disk offers you more:

- Its sturdy design gives you unmatched wear life to last through tough planting seasons.
- ProMAX 40 is less expensive than comparable flat seed disks. ProMAX 40 is factory installed.

ProMAX 40 Flat Disk is definitely a major player in our Total Planting Solution.



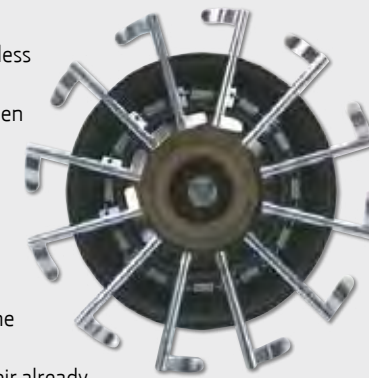
#### Flush-Face seed tube

The Flush-Face seed tube provides the ultimate in seed-spacing consistency thanks to its smart design. Its translucent tube allows the seed tube sensor to be mounted externally. With nothing to bounce off of, seed follows the smooth curve of the seed tube's front interior surface – achieving optimum seed spacing and singulation while minimizing skips and multiples. In comparison, competitor's seed tubes have internally mounted sensors that can cause dropping seed to ricochet.

#### Finger-pickup

Finger-pickup plateless seed meters are an excellent choice when planting corn. They provide consistent seed spacing and population control. Plus, recently engineered refinements for the assembly have

increased their already impressive accuracy. Available for MaxEmerge™ row units only.



#### AccuCount seed sensor

Find out exactly how many seeds you're planting with this accurate sensor. It counts every seed – making it ideal for high-population crops. For use with regular curved seed tubes only.



#### Talc and graphite

Both high-quality products prevent gummy deposits. Our unique, talc formulation – mined in the U.S. and 97 percent pure – minimizes the buildup on vacuum seed disks and cups caused by seed treatments and high humidity. You can use less of it, too. Our graphite reduces deposits that can form on finger-pickup meters. The result? Easy, trouble-free operation and enhanced wear at higher planting speeds. Ask us about our new 80/20 blend.

## Row Cleaners

### Performance parts and attachments for any field condition

At planting season, we know you'll need more than a handful of high-performance parts and attachments to ensure success. You'll need a Total Planting Solution – starting with row cleaners and openers. No one offers more complete planting tools than John Deere.

### Customize your own Total Planting Solution(s)

Incorporate what works best for you and your specific field conditions, such as soil type and residue level. John Deere has what you need to get the perfect seedbed, whether you have heavy residue, lightly compacted soil or light, sandy soil.

For more options, visit:  
[JohnDeere.com/AgParts](http://JohnDeere.com/AgParts)  
[JohnDeere.ca/AgParts](http://JohnDeere.ca/AgParts)



#### Screw-adjust, unit-mounted row cleaner

The SharkTooth® wheels on this row cleaner aggressively cut tough residue and resist residue buildup. The row cleaner is mounted directly to the faceplate of the row unit – so the gauge wheels control the depth of the row cleaner and the row unit. Fine-tune cleaner depth with the handy, screw-adjustment knob.



#### Floating row cleaner with unit-mounted couler

The ultimate solution for managing tough residue and soil conditions. This unique row cleaner can “float” or adapt to varying terrain independent from the row unit.



#### Unit-mounted coulers, Frame-mounted coulers

Unit-mounted couler arms use the weight and gauging ability of the planter unit in reduced-till conditions. Frame-mounted couler arms resist row-unit damage in rocky fields.



Total Planting Solutions

## Openers



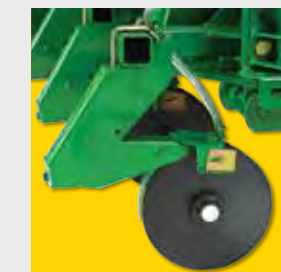
#### Tru-Vee™ openers

Create a consistent, uniform V-shaped furrow in all soil types and residue levels. The trench's shape puts seed in positive contact with firm soil for improved germination. These Diamond Series blades are available in 3 mm, 3.5 mm and heavy-duty options.



#### Unit-mounted, single-disk, liquid-fertilizer, injection-system opener

This opener uses a single, 50-wave couler to penetrate tough seedbeds. Liquid fertilizer is then injected into the loosened soil directly before it. Compatible with select planter models.



#### Unit-mounted, double-disk, liquid-fertilizer opener

This opener disturbs less soil than frame-mounted versions – making it ideal for conventional, reduced-till and light, no-till fields. Fertilizer can be placed even with seed depth or one inch (2.54 cm) below. Opener can be positioned up to 2-1/4 (5.08 cm) inches off the row.



## Add More

Productivity  
 Versatility  
 Convenience  
 Comfort  
 Performance  
 Muscle  
 Efficiency

### WITH JOHN DEERE PLANTER ATTACHMENTS

John Deere attachments Add More of these advantages so you can stay in the field longer and get more done with less effort.

Attachments Add More to your planter so you can Do More – Do More kinds of tasks. Do More in a day.

The attachments in this brochure are just a few of the many available for your planter. See your local John Deere dealer for a complete listing today. Then Add More performance to your operation tomorrow.

## Active Pneumatic Downforce



Consistently hitting the right planting depth in changing soil conditions is one of your biggest planting challenges. But you don't have a choice if you want to achieve proper germination and maximize yield.

John Deere's Active Pneumatic Downforce makes it easy to achieve precise soil penetration and consistent planting depth – without sidewall compaction. All you have to do is set the row-unit target margin value, and Active Pneumatic Downforce takes it from there – automatically adjusting the pressure in your air bags as soil conditions and hopper weights change. It does so with the help of a hydraulically-driven compressor, a sensor node system and the SeedStar™ XP monitoring system. (And it does it faster than other comparable seeding systems on the market.) This frees you from constantly making manual downforce adjustments as conditions change – minimizing operator fatigue. That way, you can focus on all the other planting factors that drive up yields like seed singulation and spacing.



That way, you can focus on all the other planting factors that drive up yields like seed singulation and spacing.



## Precise Depth



### Gauge wheels

#### Dual gauge wheels

These wheels provide additional flotation in light, well-prepared seedbeds. Dual 4 x 12 in. (10.6 cm x 30.48 cm) gauge wheels furnish the support needed for consistent seed depth. For 1700, 1710, 1720, 1730, 1750 and 1760 Series planters and their individual row units.



#### Single gauge wheels

These 4 x 12 in. (10.6 cm x 30.48 cm) wheels come standard, and provide excellent depth control in most soil conditions, including heavily-tilled and loose soil. Available for most 1700 Series models and DB Planters.



#### Reduced, inner-profile (RIP) gauge wheels

With their tapered design, these wheels reduce sidewall compaction in wet soil. The RIP-tire is not recommended for light, sandy soil or conventionally tilled soil.



# Closing Systems

John Deere offers high-performance closing systems that consistently deliver precise seed-to-soil contact. Closing systems that uniformly firm each and every seed to the bottom of the trench where they can get the proper moisture to flourish. The result is uniform germination and perfect stands ... and impressive yields come harvest.



### Standard, rubber-tire closing wheel

This type of closing wheel works for most conventional- to no-till fields. You can adjust the spacing between the wheels as well as pressure, or stagger them, for positive, seed-to-soil contact and improved residue flow.



### Cast-iron closing wheel

These closing wheels are best for tough soil and heavy residue conditions when more pressure is needed to close the furrow. Angle and stagger adjustments are identical to standard rubber wheels.



### Disk closing system\*

Recommended when planting at shallow depths in light, sandy soil. The disks push soil against and over the seed, while the wide press wheel applies light pressure for maximum seed-to-soil contact.

\*Not available on the Pro-Series XP™ row unit.

## Support that keeps you in the field



### Mobile service

At John Deere, we don't want unexpected repairs to drive you from the field to the service bay. So we offer mobile service. We'll come to you with the superior parts and service expertise you need to get right back to work – without ever leaving the field! Now that's how to stay productive.

That's the John Deere difference. See us today.

[JohnDeere.com/AgParts](http://JohnDeere.com/AgParts)



# Plant some financial stability



**Your Multi-use account** gives you a fast and easy way to pay for all of your everyday needs at your John Deere dealer. Get parts, service, inspections, attachments, technology upgrades and more. Be sure to ask your dealer about flexible payment options including deferred-payment terms\*. Then watch your profits grow.

\*Subject to John Deere Financial approval and dealer participation. Minimum finance amount may be required. See your dealer for details. Program subject to change without notice at any time. U.S. Only: John Deere Financial multi-use account is a service of John Deere Financial, f.s.b.

\*Financing on approved John Deere Financial credit only. See your multi-use account merchant for complete details.

[JohnDeereFinancial.com](http://JohnDeereFinancial.com)  
[JohnDeereFinancial.ca](http://JohnDeereFinancial.ca)

