## Box Drills





## Finding the best John Deere box drill

More than 140 years ago, the first grain drill was sold. Although there have been substantial product improvements on the product line since then, the drill remains a reliable, effective way to get seed into the ground quickly.

But box drills are not all created equal. To choose the right John Deere drill for your needs, answer the questions below. Then, visit your dealer for assistance finalizing your selection.

#### 1. What crops are you drilling?

Soybeans: Your best choice is the 1590 No-Till Drill. When ordered with the front-rank lock-up option, the 1590's 7.5- or 10-inch spacing converts to 15- or 20-inch spacing.

Small grains or grasses: Select from the 1590 No-Till Drill, the 1520 Drill, the 455 Folding Drill, or the BD11 End-Wheel Drill. All can be equipped with a grass-seed attachment, and several row-spacing options are available.

#### 2. What are your residue levels?

A drill's residue-handling capabilities rest largely on its opener. In fields with minimal residue, the double-disk opener on the BD11 and 455 Drills works well. For no-till, don't settle for anything but the single-disk opener found on the 1590. It provides superb results in conservation applications.

### 3. How critical is consistent depth control?

If you're drilling soybeans, canola, or alfalfa, it's essential to maintain a uniform seeding depth. That's why the 1590 Drill has a depth-gauging wheel located right where the seed enters the soil. All other drills are available with depth-gauging wheels that trail behind the opener. Most not only provide consistent depth control, but also firm seed into the furrow.











## Different openers, different results

When choosing a new drill, consider its opener style. Each is designed for use in specific conditions. Use this summary to compare openers and determine which is suited to your fields.

#### No-till single-disk opener

- Uses an 18-inch disk mounted at a 7-degree angle for aggressiveness
- Designed to work equally well in no-till and conventional-till fields
- Active hydraulic down-pressure provides 165 to 400 pounds of pressure per opener
- Features a durable, one-piece seedboot
- Found on the 1590 No-Till Drill, as well as the larger 1990CCS No-Till Air Drill

### Offset double-disk opener

 Uses 13.5-inch disks offset a quarter-inch for better penetration

- Designed for prepared seedbeds
- Uses a zig-zag pattern for better residue flow
- · Minimizes soil throw
- Up to 190 pounds of downpressure available per opener
- Found on the 455 and 1520 Drills

#### Double-disk opener

- Uses two 13.5-inch disks
- Leaves fields relatively smooth
- Choice of cast iron or aluminum boots to match soil conditions
- Down-force springs aid opener penetration
- Found on BD11 Series Drills.

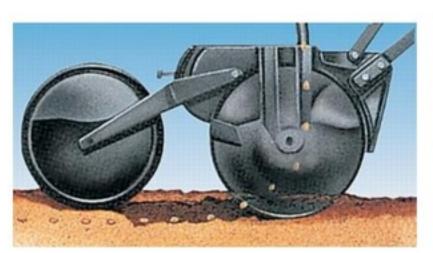
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Visit www.JohnDeere.com for more details, or use the online product configurator to build and price a new drill.







## No-till design. All-till capability.

**No-till, conventional-till, and min-till.** If you use a variety of tillage approaches, then you need a 1590 No-Till Drill. Its versatile single-disk no-till openers are designed to work in every type of field condition. With up to 450 pounds of down pressure and a 7-degree angle, these openers can cut through tough residue or hard soils. Corn stalks and other trash flow smoothly, thanks to plenty of clearance between the blade, seed tube, and arm, while the unique seedboot design improves accuracy and durability.

Designed to work in both tilled and non-tilled soils, the down pressure on the machine's openers is adjustable. Better still, the openers have the ability to float up 8 inches and down 6 inches independently to adapt to uneven field conditions.

For accurate, consistent seeding rates, the 1590 uses a right-wheel drive meter (centerwheel drive on the 20-foot model) that's hinged at the frame, so it stays in contact with the ground for constant power to the meter drive.

The 1590 No-Till Drill is offered in 10-, 15- and 20-foot sizes, with plain grain and fertilizer-grain configurations to accommodate a variety of cropping systems.







- 1. Floating indicator Shows you at a glance the level of seed in the box, so there's no guessing.
- 2. Electronic Population Rate Control Change seed populations on-the-go. This standard feature works with seed sensors and either a ComputerTrak or SeedStar 2 monitor for easy rate adjustments.
- 3. Exclusive active hydraulic down pressure Maintain 165 to 450 pounds of down pressure, no matter the field conditions. Reduce down-pressure to as little as 165 pounds for conventional seeding.

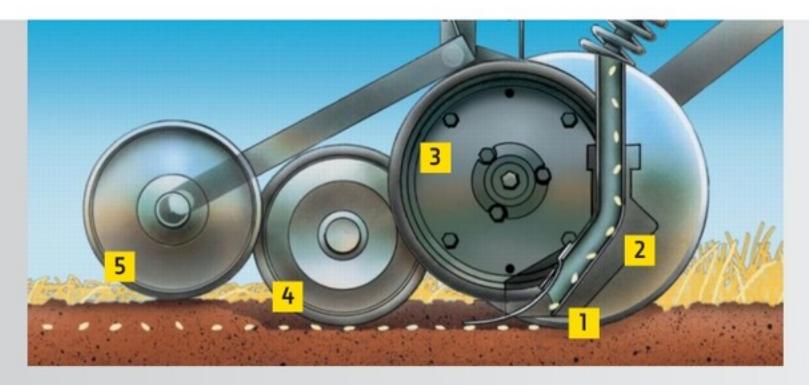


Narrow country lanes pose no problem when transporting your 1590. You'll easily get from field to field, farm to farm with this tool.









#### An up-close look at the 90-Series No-Till Opener:

- 1) The seedboot is situated at the centerline of the hub so seed is placed at the bottom of the furrow for good germination. This alignment also provides better depth control and longer seedboot life.
- 2) The one-piece cast-iron seedboot is made to deliver both accuracy and durability. The slim boot design minimizes soil disturbance for less moisture loss.
- 3) Consistent depth control is accomplished with 4.5x16-inch semi-pneumatic gauge wheels. Thirteen quarter-inch adjustments, ranging from a quarter inch to 3.5-inches, let you set the correct depth for your crop. Choose a smooth plastic hub for less soil disturbance, or steel-rim gauge wheels for no-till applications.
- 4) To boost germination, a .75x9-inch rubber press wheel firms seed into the furrow. No tools are needed to adjust down-pressure from 5 to 45 pounds.
- 5) A 1x12-inch cast closing wheel trails behind the press wheel. The closing wheel can be adjusted to run on top of the furrow or to its side. Three settings let you add from 26 to 43 pounds of down-pressure.



Seed-tube sensors work in tandem with a ComputerTrak™ (shown) or SeedStar 2 monitor to alert you immediately if seed flow is obstructed, saving you time, money, and trouble.





Choose a hitch that matches your power and acreage: a regular drawn hitch (not shown), a semi-integral hitch for rolling fields (left), and, for smaller horsepower tractors, a drawn caster-wheel hitch (far left) that includes a reversible link.

# Big performance, even in uneven terrain

Achieving reliable seeding results on rolling ground and terraces can be challenging – but not with the 455 Drill. A full 15 degrees of flexibility between drill sections, combined with offset double-disk openers featuring patented active hydraulics, let you maintain a uniform seeding depth.

In addition to hydraulic down-pressure, the openers have 15 inches of adjustable, spring-loaded flexibility. This allows each opener to work independently over obstacles and changing terrain. Plus, depth-gauging press wheels running behind the openers give you unbeatable depth control.

You won't sacrifice productivity with the 455. Running at 6 mph with a 35-foot three-section 455, you can drill more than 20 acres an hour. Also available: a two-section 25-foot, or three-section 30-foot machine. All can be ordered on 6-, 7.5-, or 10-inch row spacings.

And one more thing: The 455 works effectively in fields with up to 45 percent residue. See your dealer soon for information about this big performer.





Four depth-gauging press wheel choices ensure good seed-to-soil contact at a consistent depth:

1) Standard 2x13-inch press wheels are narrow and smooth-sided. They work in general conditions and heavy soil and can be used with all spacings. 2) Optional 4x12-inch press wheels with a double rib leave loose soil over the seed. 3) These 1x12-inch "V" press wheels firm soil on each side of the furrow, but leave loose soil over the seed to reduce the risk of crusting. (Not recommended for 6-inch spacing.) 4) The 1x12-inch semi-pneumatic press wheel promotes excellent seed-to-soil contact.

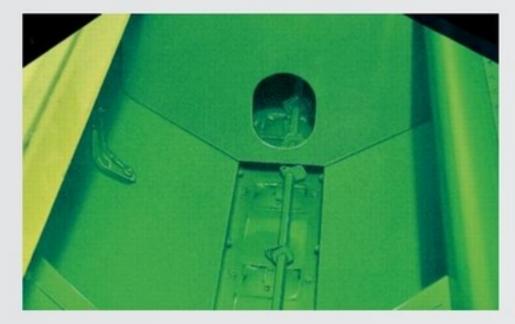




When drilling headlands and point rows, optional Select-Lift lets you control from inside the cab which section of openers keeps working and which doesn't. If a section is shut off, the openers come out of the soil and the meter drive clutch disengages.



Choose a grass seeding attachment for accurate metering of grasses, forages, small grains, and oil-crops.



Add a grain agitator to keep light, fluffy, odd-shaped, or inoculated seeds feeding smoothly into meters.



Seed-tube sensors alert you immediately if a tube plugs, eliminating costly stretches of unseeded ground.



Monitor seed flow from up to 24 openers with the ComputerTrak 350 monitor.

# Get accuracy, reliability, and pick-up-and-go convenience

Want a dependable drill to seed grass on your CRP ground, or maybe cereals or legumes elsewhere? The 1520 Integral Drill features John Deere offset double-disk openers that place your seed accurately. Opener blades are offset a quarter-inch for better penetration. A narrow, 10-degree angle between blades means a lower pinch point and more consistent seed trenches.

Depth-gauging press wheels firm seed into the furrow for excellent seed-to-soil contact. With one handle, you can select from 12 seed-depth positions.

Large grain boxes provide plenty of seeding capacity for fewer refill stops. The 15-foot 1520 holds 42 bushels, while the 20-foot model holds 40 bushels.

Need to work in residue? Just add the 1570 Coulter Cart.
Then see your John Deere dealer to get a closer look at the
1520 Integral Drill.









**The disks on John Deere double-disk openers** are offset for better penetration and residue slicing. Plus, you can quickly adjust the depth-gauging press wheels to one of 12 settings in quarter-inch increments, ranging from .25-inch to 3.5-inches deep.

**Choose a grass seeding attachment** for accurate metering of grasses, forages, small grains, and oil-crops such as canola. This addition is excellent for set-aside ground and waterways.

**Optional John Deere active hydraulics** give you constant opener down-pressure for consistent depth control. Set depth across the entire drill quickly by adjusting one handy knob.



An adjustable combination grain/fertilizer box allows you to put down both seed and fertilizer.

The optional grass seeding attachment provides accurate seeding of grasses and alfalfa or low-volume crops.

Depth-gauging press wheels ensure good seed-to-soil contact at a consistent depth.

## BD11 End-Wheel Drills: Effective and affordable

Need an economical way to get seed in the ground? Pick a BD11. Used individually, these drills are ideal for CRP ground or small acreages. For more productivity, hitch two or three units together.

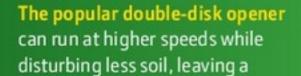
A BD11 Drill is truly at home in well-prepared fields. However, in moderate residue, a BD11 Drill provides as much as 124 pounds of down-pressure per opener. The result is more accurate and consistent seeding depth.

The BD11 comes in three sizes: 8-, 10- and 13-feet wide. The standard row-spacing is 7.5 inches. For the 10- and 13-feet models, 6-inch spacing is available. Ten-inch spacing is offered on the 13-foot tool.

Visit your John Deere dealer to learn more about the versatile and affordable BD11 Series.



Choose aluminum boots, which provide up to 118 pounds of down-pressure, for prepared seedbeds and dry soil. Cast-iron boots (right) deliver as much as 124 pounds of down-pressure, so they're ideal for wet, sticky conditions.





## 1590 No-till Drill: Dynamic capabilities



MODELS	10-FT. (3.0	5 M) DRILL	15-FT. (4.	6 M) DRILL	20-FT. (6.1 M) DRILL							
Type box	Plain Grain	Grain/Fertilizer	Plain Grain	Grain/Fertilizer	Plain Grain	Grain/Fertilizer						
DIMENSIONS												
Working width	10 ft. (3.05 m)	10 ft. (3.05 m)	15 ft. (4.6 m)	15 ft. (4.6 m)	20 ft. (6.1 m)	20 ft. (6.1 m)						
Overall width	10 ft. 3 in. (3.12 m)	10 ft. 3 in. (3.12 m)	15 ft. 3 in. (4.7 m)	15 ft. 3 in. (4.7 m)	20 ft. 3 in. (6.2 m)	20 ft. 3 in. (6.2 m)						
Overall height	6 ft. 10 in. (208 cm)	6 ft. 3 in. (191 cm)	6 ft. 10 in. (208 cm)	6 ft. 3 in. (191 cm)	6 ft. 10 in. (208 cm)	6 ft. 3 in. (191 cm)						
Overall length												
With castering wheels	20 ft. (6.1 m)											
Without castering wheels	17 ft. 8 in. (5.38 m)											
Weight (maximum base)	6,430 lb. (2917 kg)	6,580 lb. (2985 kg)	8,460 lb. (3837 kg)	8,660 lb. (3928 kg)	12,860 lb. (5833 kg)	13,160 lb. (5969 kg)						
CAPACITIES												
Grain box	3.5 bu./ft. (404.7 L/m)	1.4 or 2 bu./ft. (160 or .230 L/m)	3.5 bu./ft. (404.7 L/m)	1.4 or 2 bu./ft. (160 or .230 L/m)	3.5 bu./ft. (404.7 L/m)	1.4 or 2 bu./ft. (160 or .230 L/n						
Fertilizer box	-	113 or 162 lb./ft. (168 or 242 kg/m)	-	113 or 162 lb./ft. (168 or 242 kg/m)	-	113 or 162 lb./f (168 or 242 kg/r						
Total box	3.5 bu./ft. (404.7 L/m)	3.4 bu./ft. (393 L/m)	3.5 bu./ft. (404.7 L/m)	3.4 bu./ft. (393 L/m)	3.5 bu./ft. (404.7 L/m)	3.4 bu./ft. (393 L/m)						
OPENER ASSEMBLY												
Spacing	7.5	or 10* in. (19 or 25	cm); 15 or 20 ir	n. (38.1 or 51 cm) w	th front-rank loc	k-up						
Down-pressure		Active hydraulic do	wn-pressure, ad	justable from 165-40	00 lb. (75-181 kg	)						
Disk	Beveled	-edge 18-in. (46 cm	) disk at 7-degre	e angle; separate fer	tilizer placement	available						
Gauge wheels	4.5x1	6 in. (114x41 cm),	adjustable .25-3	.5 in. (0-9 cm) in .25	in. (0.6 cm) incr	ements						
Press wheels	.75x9 in	. (1.79x22.9 cm) rub	ber wheels, adju	stable down-pressur	e from 5-45 lb. (2	2.3-21 kg)						
Closing wheels		1x12 in. (2.5 7-degree hori	x30 cm) cast wh zontal angle; 26-	eel at 20-degree ver 43 lb. (12-20 kg) dov	tical angle, wn-pressure							
CLEARANCE												
Underframe			24 in.	(61 cm)								
Between ranks	48.5 in. (123.2 cm)											
Between openers		With 7.5-in. spacing	g – 15 in. (38.1 d	cm); 10-in. spacing -	- 20 in. (50.8 cm	)						
Road to opener			8 in. (2	20.3 cm)								

<sup>\*10-</sup>in. spacing is available only on 15-ft. and 20-ft. models.



Like the 1590 No-Till Drill, but need more productivity? Then consider the 1990CCS No-Till Air Drill. It's the economical, effective way to seed soybeans and small grains on your larger acreage. Ask your dealer for more information, or review the material in the Air Seeding Equipment brochure.

### The 455 Drill: Built to deliver more



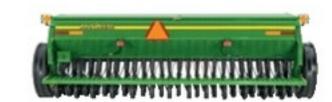
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MODELS	25-FT	(7.6 M)	DRILL	30-FT	(9.1 M)	DRILL	35-FT.	(10.7 M)	DRILL	
Number of openers	50	40	30	60	48	36	70	56	42	
Row spacing	6 in. (15 cm)	7.5 in. (19 cm)	10 in. (25 cm)	6 in. (15 cm)	7.5 in. (19 cm)	10 in. (25 cm)	6 in. (15 cm)	7.5 in. (19 cm)	10 in. (25 cm	
OUBLE-DISK OPENERS										
Configuration					Zig-zag					
Disk diameter				13.	5 in. (343 r	nm)				
Disk offset				.2	5 in. (6.4 m	m)				
Down-pressure adjustment	"Active" hydraulic down-pressure									
Drilling depth	Adjustable .75 to 3.5 in. (19 to 89 mm)									
RESS WHEELS										
Standard	2x13 in. (5x33 cm)									
Optional	1x12 in. (3x30 cm); 4x12 in. (10x30 cm) double-rib; dual 1x12 (3x30 cm) (not recommended for 6-in. spacing)									
SEEDBOX CAPACITY										
Plain grain box	70 bu. (2,467 L); 2.8 bu./ft. (324 L/m)			84 bu. (2,960 L); 2.8 bu./ft. (324 L/m)			98 bu. (3,453 L); 2.8 bu./ft. (324 L/m)			
Grain/fertilizer box	85 bu. (2,995 L); 3.4 bu./ft. (393 L/m)		102 bu. (3,594 L); 3.4 bu./ft. (393 L/m)		119 bu. (4,193 L); 3.4 bu./ft. (393 L/m)					
100% grain	69 bu. (2,431 L)		82.8 bu. (2,918 L)			96.6 bu. (3,404 L)				
60/40 split	45.5 bu. (1,603 L) grain, 2,825 lb. (1,281 kg) fertilizer		54.6 bu. (1,924 L) grain, 3,390 lb. (1,538 kg) fertilizer		63.7 bu. (2,245 L) grain, 3,855 lb. (1,794 kg) fertilize		grain, fertilizer			
40/60 split	34.7 bu. (1,189 L) grain, 3,800 lb. (1,724 kg) fertilizer			40.5 bu. (1,427 L) grain, 4,560 lb. (2,068 kg) fertilizer			47.2 bu. (1,665 L) grain, 5,320 lb. (2,413 kg) fertilizer			
Footboard	Full-length, steel with nonskid surface									
METERING										
					Fluted feed	d				
IRES										
Frame	Fo	ur 11L, 10	PR	Four 11L, 10 PR			Four 11L, 10 PR			
Wings	Tw	0 7.6-15, 6	PR	Tv	0 7.6-15, 6	PR	Fo	ur 7.6-15, 6	PR	
IMENSIONS										
Working width	25 ft. (7.6 m)		30 ft. (9.1 m)			35 ft. (10.7 m)				
Transport width	15	ft. 2 in. (4.6	6 m)	15 ft. 2 in. (4.6 m)		15 ft. 2 in. (4.6 m)				
Transport length		22 ft. (6.7 n	n)	24	24 ft. 6 in. (7.5 m)			27 ft. (8.2 m)		
Transport height	6 f	t. 11 in. (2.1	1 m)	6 f	t. 11 in. (2.1	l m)	6 f	t. 11 in. (2.1	m)	
Transport height with markers		13 ft. (4 m)	)		13 ft. (4 m)		15	5 ft. 6 in. (4	m)	

## The 1520 Drill: Integral advantages



MODELS	15-FT. (4.6 M) DRILL			20-FT. (6.1 M) DRILL					
Number of openers	30	24	18	40	32	24			
Row spacing	6 in. (15 cm)	7.5 in. (19 cm)	10 in. (25 cm)	6 in. (15 cm)	7.5 in. (19 cm)	10 in. (25 cm)			
DOUBLE-DISK OPENERS									
Configuration	Zig-zag								
Disk diameter	13.5 in. (343 mm)								
Disk offset	.25 in. (6.4 mm)								
Down-pressure adjustment	Hand-crank adjustment; "active" hydraulic down-pressure optional								
Drilling depth	Adjustable .75 to 3.5 in. (19 to 89 mm)								
PRESS WHEELS									
Standard			2x13 in. (	5x33 cm)					
Optional	1x12 in. (3x30 cm); 4x12 in. (10x30 cm) double-rib; dual 1x12 (3x30 cm) (not recommended for 6-in. spacing)								
SEEDBOX									
Capacity	42 bu. (1,	480 L); 2.8 bu./ft.	(324 L/m)	40 bu. (	1,409 L); 2 bu./ft. (	231 L/m)			
Footboard	Full-length, steel with nonskid surface								
METERING									
Туре	Fluted feed								
Drive/gauge wheel	Two 9.5Lx14, 8PR								
MOUNTING									
	Integral, Cat. 3 or 3N with Quick-coupler								
DIMENSIONS									
Overall width		15 ft. (4.6 m)			20 ft (6.1 m)				
Length (without press wheels)	6 ft. 4 in. (1.9 m)			6 ft. 4 in. (1.9 m)					
Height (working)	5 ft. 6 in. (1.7 m)			5 ft. 6 in. (1.7 m)					
Height (transport, less markers)		6 ft. 5 in. (2.0 m)		6 ft. 5 in. (2.0 m)					
Weight (base machine, empty, 7.5-in. spacing)	3	4,180 lb. (1896 kg)							

## BD11 End Wheel Drill: Affordable performer



MODELS	BD1108	BD1	BD1110		BD1113					
Number of openers	13	21	17	26	21	16				
Row spacing	7.5 in. (19 cm)	6 in. (15 cm)	7.5 in. (19 cm)	6 in. (15 cm)	7.5 in. (19 cm)	10 in. (25 cm)				
PENERS										
Double disk		13-in. (33 cm)	diameter disks							
Seedboot	Cast-aluminum; cast-iron optional									
Depth gauging (optional)	Depth bands (one or both sides); single adjustable depth-gauge wheel; dual adjustable depth-gauge wheel; depth-gauging press wheels									
EED-TO-SOIL CONTACT										
Cover chains (optional)	1x12 in (2.5x30 cm), 2x	13 in. (5x33 cm), or 4	4x12 in. (10x30 c	m) double-ril	press whe	els				
Grain agitator	(Standard equipment on the BD11 Series)									
METERING										
		Flute	d feed							
TRES										
	7.5-20, 4PR	rib implement; or 7.	5-20, 4PR double	e-rib impleme	ent					
IMENSIONS		40.0.0.1-	4044.75	40.0	100 1	10.0.1				
Seeding width	8 ft. 1 in. (2.46 m)	10 ft. 6 in. (3.23 m)	10 ft. 7 in. (3.23 m)	13 ft. (3.96 m)	13 ft. 1 in. 4.00 m)					
Overall width	10 ft. (3.05 m)	12 ft. 6 in.	. (3.81 m)	1000000	t. 1 in. (4.59	520000				
Transport clearance		5.5 in (14 mm) open	er to road clears	ance						
Weight (with 7.5-in. spacing)										
Plain grain	1,330 lb. (603 kg)	1,600 lb.	1,600 lb. (726 kg)		2,225 lb. (1009 kg)					
Grain/fertilizer	1,475 lb. (669 kg) 1,800 lb. (816 kg)			2,435 lb. (1104 kg)						
APACITY										
Plain grain box (2.8 bu/ft.)	22.4 bu (789 L)	28 bu. (	(986 L)	36	.4 bu (1219	L)				
Grain/fertilizer box (3.4 bu./ft.)										
40% grain	10.8 bu. (380 L)	13.5 bu. (475.7 L)		17.5 bu. (616.6 L)						
60% grain	14.6 bu. (514 L)	18.2 bu.	18.2 bu. (641 L)		23.6 bu. (831.6 L)					
1000/	22.1 bu. (778 L)	27.6 bu. (	27.6 bu. (972.5 L)		35.9 bu. (1265 L)					
100% grain										
Grass seed box (optional)	1.5 bu. (52.8 L)	1.5 bu. (	(52.8 L)	1.	7 bu. (52.8	L)				

Outside disk scrapers, half-speed drive, grass seed box







