

SPOTLIGHT on MACHINERY-JOHN DEERE NO-TILL DRILL

Manufacturer: John-Deere

Model: 1590 No-till Drill

Year of purchase: 2009

Introduction

More media attention is paid to nutrition and food quality than in past years. Daniel Marano* notes *“The soil itself is the key to nutrient content of food. The nutritional value of our produce is determined more by the abundance of minerals and microbes in the soil it’s grown in than by any other factor. Deep root structures are able to break up and absorb nutrients that lie far beneath the surface. Beyond root systems, soil management techniques such as plowing significantly affect the nutrient holding capacity of land. Over decades, the annual plowing and disking of fields reduce the essential carbon matter of the soil. Tilling soil, then, is the equivalent of stripping the gut of bacteria by depriving it of fibre-rich whole foods and over consuming antibiotics. By not tilling soil, farmers allow their crops to die off and form a protective armor over the soil that helps retain carbon, nutrients, and water.”*

*Marano, D.A. (2014, January/February). Rich dirt, poor dirt. *Psychology Today*, 38-40.

Key features

- **90 Series Opener**
The openers slice through residue with ease, while delivering accurate seed placement.
- **Floating seed indicator**
A seed level indicator is used on plain grain boxes and is visible from the tractor seat.
- **Active hydraulic down pressure**
Down pressure can be adjusted from 165 to 400 pounds to penetrate hard soils and heavy residue.
- **Electronic Population Rate Control**
Changing seed populations on-the-go from the tractor is simple.
- **Hitch choice**
A regular drawn hitch; a two-point semi-integral hitch for rolling fields, and a drawn caster-wheel hitch for smaller tractors let you match your power and acreage.
- **Bi-fold markers**
Easily avoid expensive overlaps and skips and watch efficiency improve with bi-fold markers.

Operation

- Type of box: Grain/Fertilizer
- Working width: 15’ (4.6 m)
- Capacity: 57.5 bu

Tractor requirements

- Recommended tractor power: 100 HP
- Power Take Off (PTO): No
- Hydraulic connections: Two sets (1 SCV)
- Electrical plug: 7-pin

Transport

- Overall width: 15’3” (4.7 m)
- Overall height: 6’10”
- Overall length (with castering wheels): 20’ (6.1 m)
- Total weight (empty): 8460 lb

- Hitch weight (empty): 3100 lb
- Hitch weight (full): 4500 lb
- Clearance: 8" (road-opener)
- Example of appropriate tractor transport:
 - Hitch on tow bar, max speed 35 km/h
- Example of appropriate trailer transport:
 - Less than ideal, as the equipment is tricky to reverse onto the trailer

More info

Visit the [Manufacturer's webpage](#):

https://www.deere.com/en_US/products/equipment/planting_and_seeding_equipment/box_drills/1590_no_till_drill/1590_no_till_drill.page

Download the [Equipment brochure](#):

http://www.deere.com/en_US/docs/html/brochures/publication.html?id=80759caf#l

Rental

For rental rates, visit [YAA website](#):

<http://www.yukonag.ca/equipment.cfm>.

Rental arrangements can be made through the YAA office; please note that YAA membership is a requirement for rental. For more information about rentals or membership, please contact the YAA office:

867-668-6864 or admin@yukonag.ca

