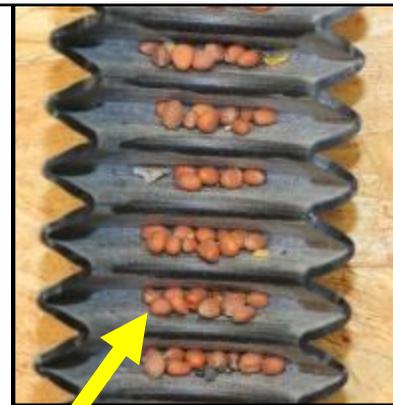


Needham Ag Seed Tubes For Box Drills

The Problem.

Most seed tubes on the market drop seeds evenly if the tubes remain almost vertical in operation. However, as you drive up or down slopes, especially when seeding lighter seeds such as radish or grass seeds, seeds often hang in the corrugations of the seed tubes. Often these seeds fall out in clumps when the seed tube straightens back out or when enough vibration shakes the seeds loose, resulting in inconsistent seed placement down the rows.

Some drills (as illustrated right) don't start out with vertical seed tubes, even when new, so this presents greater problems.



Radish seeds hanging in a factory seed tube angled at only 30 degrees from vertical.



For more information on how these seed tubes work better than others on the market. Search for "Needham Ag Seed Tubes" at youtube.com

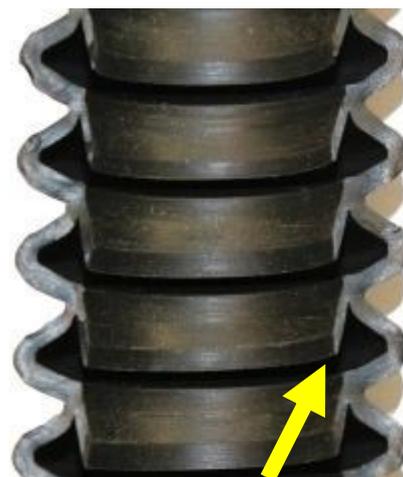
The Solution

We have been able to source a new design of rubber seed tube to help improve seed flow, especially when seeding smaller seeds or when seeding on rolling ground (or both). These new seed tubes are made from natural rubber and provide excellent flexibility. They also incorporate internal folds above each corrugation, so as the seed tube stretches out, the folds direct the seeds away from the corrugations and help eliminate any seeds being held in the seed tube.

These seed tubes also incorporate a small amount of peroxide into their formulation, this has been found to be a safe and effective way of deterring rodents from damaging the seed tubes.

When installing these seed tubes, be sure to install them the correct way up.

We have found these seed tubes fit most drills available on the market and the chart to the right illustrates which ones install on specific brands and models. Seed tube dimensions are provided for brands or models not included.



Cross-section of a stretched seed tube, showing the folds.

Three sizes available to fit most drills, see the following page for dimensions.



Please compare your current drill seed tube length with our specifications below, to ensure they match. Some require hose clamps to secure them to seed cup.

Tube Part Number: NA-S

Dimensions: 8-20" Operating Range, with 1 1/4" ID Coupler at both ends

Installs On: **John Deere Single Disc No-Till Drills.** - Including 750, 1560 and 1590
John Deere Double Disc Drills - Including 8200, 8250, 8300, 8350, 8500 and 450.

Seed Tube NA-S \$10.50, plus shipping

Tube Part Number: NA-M

Dimensions: 12-26" Operating Range, with 1 1/4" ID Coupler at both ends

Installs On: **Great Plains** - All late model double disc drills (early models had a seed tube with a long non corrugated area at one end). No-till drills with parallel linkage requires the seed tube NA-L shown below.

Sunflower - 9300, 9400, 9500 and 9600 Series.

Landoll - 5210, 5211. 5530 and 5531

Tye - All double disc drills

UFT - Conventional and 5000 Series No-Till Drills

Best - All No-Till Drills.

Frontier - BD 1307

John Deere Double Disc Drills - Including 515 and 520

Seed Tube NA-M \$11.50, plus shipping

Tube Part Number: NA-L

Dimensions: 15-36" Operating Range, with 1 1/4" ID Coupler at both ends

Installs On: **Great Plains** - All No-Till drills with parallel linkage (including the 10 Series openers, such as 2N-2410, 2N-3010 and 3S-4010). As with all seed tubes on these drills, please unclip the bottom of the seed tube or lower the drill to the ground when not used for extended periods to prevent hose stretch.

Haybuster - 77, 77C, 107, 107C, 147 and 1575

John Deere Double Disc Drills - Including 455

Seed Tube NA-L \$12.50, plus shipping