

Martin Paired 13" Spading Closing Wheels



Martin Spading Closing wheels move soil toward the seed at planting depth, while lifting and fracturing the surface layer to achieve compaction free closing of the seed trench in wet, hard, or sod conditions. With soil firmed around the seed from each side and the surface layer loosened, crops emerge sooner and planting can be done at the proper depth, even in wetter conditions, without fear of crushed soil above the seed preventing emergence.

Our Spading-Closing Wheels do not attempt to close the seed trench by a crushing action from the top down. The soil is wedged toward the seed from either side at seeding depth by a pair of Martin Row Cleaner wheels. The ends of the teeth have full bevels cut on them. The beveled sides of the teeth on each wheel are placed toward the row and the narrow edge enters the soil first producing a wedging action. As the teeth on the wheels rotate up out of the soil, a slight lifting and crumbling occurs in the surface layer. The area on either side of the seed and immediately above it is not fractured, and because of the shape and spacing of the teeth on these wheels, wet soil does not bind to them.

Spading Wheels - Specific Advantages

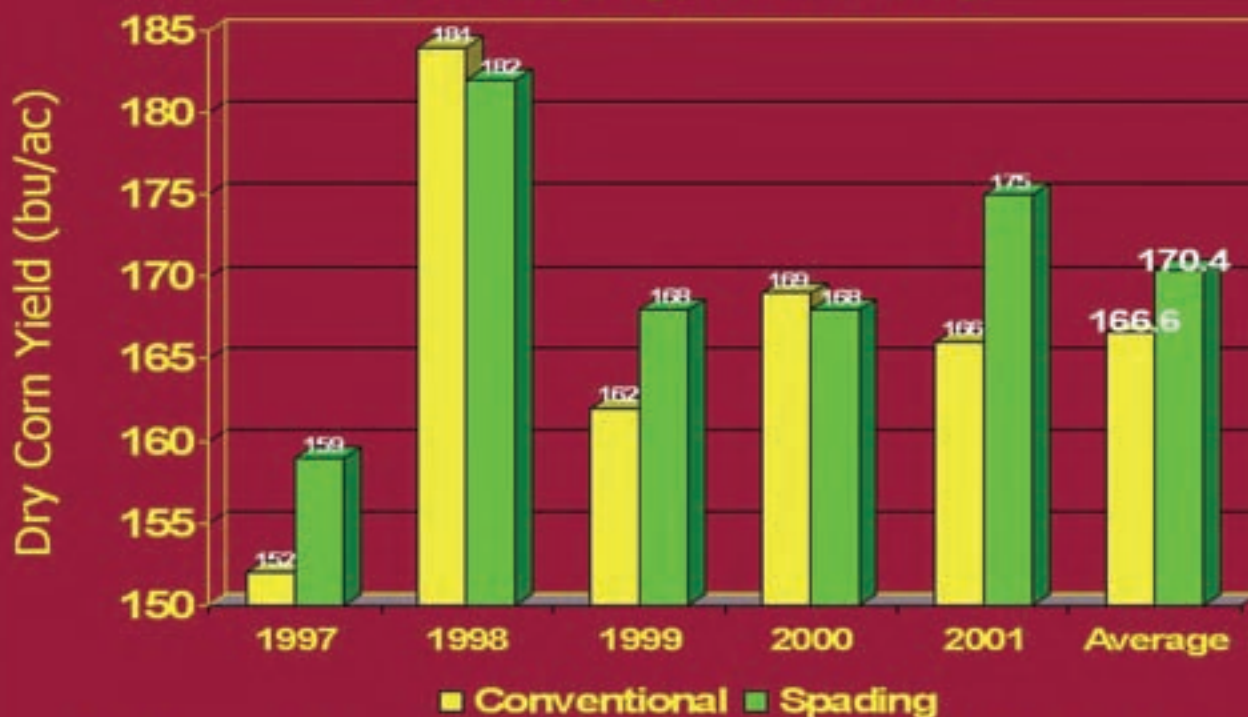
- Speeds up warming of the row area
- Closing wheel arm pressure can be greatly reduced
- Seed trench is closed in the most severe conditions
- Seed depth does not have to be raised to insure emergence
- Soil above the seed is loose and slightly mounded allowing quicker emergence in a compaction-free environment
- Sidewall compaction is greatly reduced

In the past we thought the only way to grow no-till crops successfully was to wait until the soil was dry enough for the planter's smooth closing wheels to crumble the soil over the seed. Our long-standing struggle with the problem prompted us to find a solution that we have since patented.

Customers around the country are praising it.

Comparison of two different planter closing systems* over five years.

Research conducted by Greg Lyon (formerly Opti-Crop)
Location: Keysburg (southern Kentucky)



* A pair of conventional smooth factory wheels were compared to a pair of 13" spading closing wheels.

SCW1341 Spading Closing Wheels

For planters with roll-pin attached hubs: Deere 7000 & 7100 series, early Kinze series planters

- 3/8" thick, 13" diameter right and left toothed steel wheels with diamond shaped points
- Cast hubs
- Adaptor axles
- Two 17mm I.D. bearings

SCW1343 Spading Closing Wheels

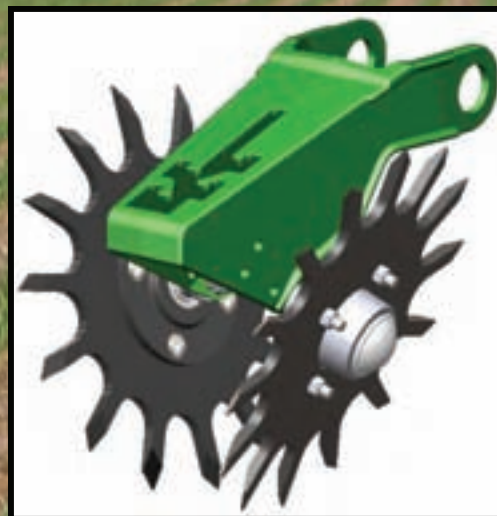
For Deere 7200-7300 series planters

- 3/8" thick, 13" diameter right and left toothed steel wheels with diamond shaped points
- Cast hubs
- Two 17mm I.D. bearings

SCW1344 Spading Closing Wheels

For planters with bolt-on hubs: Deere 1700 series, Kinze & White 6000 & 8000

- 3/8" thick, 13" diameter right and left toothed steel wheels with diamond shaped points
- HU44-B2 cast hubs with long life 50mm 5203 bearing



SCW 1344 Spading Closing Wheels pictured on a John Deere 1700 series closing wheel



SCW 1344 Spading Closing Wheels pictured on a John Deere 1700 series closing wheel arm with optional drop-down brackets. Drop down brackets are designed for paired 13" wheels and they help maintain a level closing wheel arm assembly in loose soils. See the following page for more information.

Maximizing The Performance Of A Pair Of 13" Spading Closing Wheels.

Most producers are good at centering their closing wheel arm assembly above the seed slot, however, its surprising to see how many producers don't adjust their closing wheel arm to run level when planting, especially with a pair of 13" spading closing wheels.

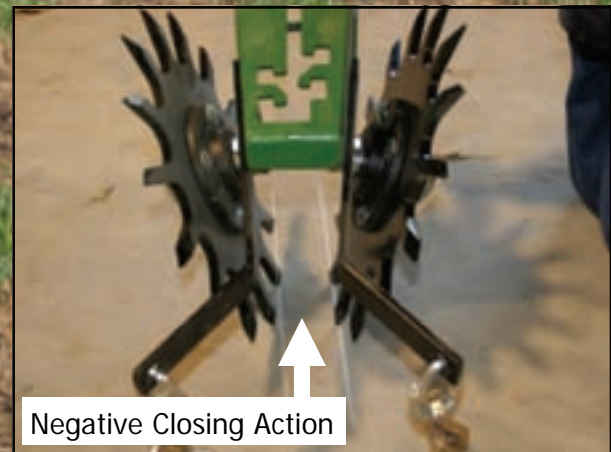
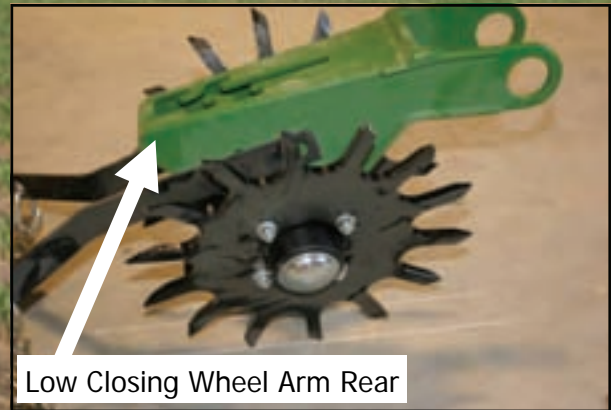
A 13" spading closing wheel is 1" greater in diameter than a standard smooth closing wheel, this is by design to allow the wheels to engage the soil and effectively close the seed slot as previously discussed.

When working in looser soils, they frequently engage the soil deeper than within firmer soils, so to help reduce this excessive soil engagement, down pressure may need to be reduced (sometimes to a minimum setting).

Greater down pressure settings tend to lower the rear of the closing wheel arm assembly, which reduces the gathering action of the two spading wheels.

The images to the right illustrate the problem. Look closely at how the angle of the closing wheel arm assembly influences the gathering action of the spading closing wheels.

A closing wheel arm assembly can be leveled slightly on a 3000 series Kinze by adjusting the eccentric bolts which attach the arm to the planter, but John Deere and White cannot be adjusted this way.



SCW1541 Spading Closing Wheels

For planters with roll-pin attached hubs: Deere 7000 & 7100 series, early Kinze series planters

- 3/8" thick, 15" diameter right and left toothed steel wheels with diamond shaped points
- Cast hubs
- Adaptor axles
- Two 17mm I.D. bearings



SCW1543 Spading Closing Wheels

For Deere 7200-7300 series planters

- 3/8" thick, 15" diameter right and left toothed steel wheels with diamond shaped points
- Cast hubs
- Two 17mm I.D. bearings



SCW1544 Spading Closing Wheels

For planters with bolt-on hubs: Deere 1700 series, Kinze, plus White 6000 & 8000 series.

- 3/8" thick, 15" diameter right and left toothed steel wheels with diamond shaped points
- HU44-B2 cast hubs with long life 50mm 5203 bearing

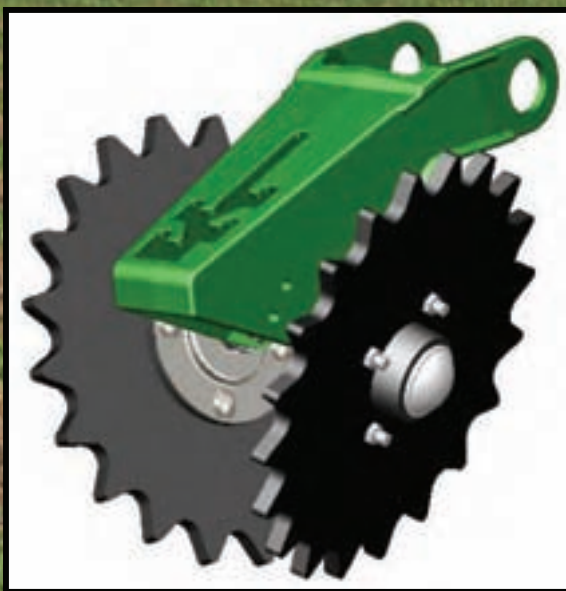
Single SCW1544 spading closing wheels don't close the seed slot as well as a pair of correctly leveled 13" spading closing wheels, but they do perform significantly better than a pair of smooth factory closing wheels in higher moisture no-till soils.

The above two photos were taken from the same pass of a 3600 Kinze planter while no-tilling corn into higher moisture soybean residue. While down pressure could be increased on the unit with the smooth closing wheels, the amount of sidewall compaction would be severe.

SCW1341D Closing Wheels

For planters with roll-pin attached hubs: Deere 7000 & 7100 series, early Kinze series planters

- 1/2 thick, heat treated T-1 material wheels with 20 rounded points
- Cast hubs
- Adaptor axles
- Two 17mm I.D. bearings



SCW1343D Closing Wheels

For Deere 7200-7300 series planters

- 1/2 thick, heat treated T-1 material wheels with 20 rounded points
- Cast hubs
- Two 17mm I.D. bearings



SCW1344D Closing Wheels

For planters with bolt-on hubs: Deere 1700 series, Kinze, plus White 6000 & 8000 series.

- 1/2 thick, heat treated T-1 material wheels with 20 rounded points
- HU44-B2 cast hubs with long life 50mm 5203 bearing

The SCW1344D, 20 point dimple wheels are a sound choice for producers who plant most of their crops from medium moisture to dry conditions.

Their 20 rounded points help this closing system performs well in hard sod conditions plus they frequently outperform factory closing systems in minimum till soil conditions.

These closing wheels can be added to the White 5000 or 6000 series planters that have single closing tires. The Martin Spading Closing Wheels enhance closing of the seed trench while the smooth wheel gently tamps the surface.

Moist soil is moved toward the seed at seeding depth, even in wet, hard or sod conditions. In wet conditions, the soil is prevented from forming a continuous ribbon by the lifting action of the teeth as they rotate up out of the soil.

Other benefits include:

- Closing wheel arm pressure can be greatly reduced
- Seed trench is closed in the most severe conditions
- Seeding depth does not have to be raised to insure emergence
- Soil above the seed is loose, allowing quicker emergence in a compaction free environment
- Sidewall compaction is eliminated



SCW51 Spading Closing Wheels

- Double 13" diameter left and right hand toothed steel wheels with diamond shaped points
- Single 2-row ball bearing
- Left and right angled brackets
- Fits White 5100 planters with single closing wheels
- Does not change planters' overall length

SCW61 Spading Closing Wheels

- Double 13" diameter left and right toothed steel wheels with diamond shaped points
- Single 2-row ball bearing
- Left and right angled brackets
- Fits White 6000 series planters with single closing wheels
- Does not change planters overall length

The SCW899 guarantees a closed seed trench, while the smooth wheel gently tamps the surface. These specially designed toothed wheels replace the regular closing disk.

Moist soil is moved toward the seed at seeding depth even in wet, hard or sod conditions. In wet conditions, the soil is prevented from forming a continuous ribbon by the lifting action of the teeth as they rotate up out of the soil.

Other benefits include:

- Closing wheel arm pressure can be greatly reduced
- Seed trench is closed in the most severe conditions
- Seeding depth does not have to be raised to insure emergence
- Soil above the seed is loose allowing quicker emergence in a compaction free environment
- Sidewall compaction is eliminated



SCW899 Closing Wheels

- 9" diameter toothed steel wheels and ball bearing hubs
- Replaces closing disk on Case IH 800, 900, 1200 and 1250 planters; for use on offset closing wheel arm only
- Also fits Deere and Kinze shallow closing systems



Model SCW899. Nine-inch diameter spikes replace covering disc on IH planters. Not available for units without offset covering disc arm (for example the Early 800 series).