Vence Tudo
Seeder and Planter

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Seed quantity and fertilizer quantity need to be calibrated
Calibration - planter

For planters the correct disc and ring is selected:

- only one seed per hole
- the seed must not jam
- the seed must not stick out over the disc
- disks with one row of wholes (28) are for 3 – 10 seeds per linear meter (maize, sunflower)
- disks with two rows of wholes (90) are for narrow spacing of 8 to 37 seeds per linear meter (soy bean)
For planters the correct disc and ring is selected:

- Thick disks go with thin (3 mm) rings, thin disks with thick (4.3 mm) rings
Calibration - planter

Different disks require different kick-out starwheels:

- disks with one row of wholes get simple wheels
- disks with two rows of wholes get double wheels
- for different whole sizes there might be different starwheels (4 or 5 fingers)

Disks need greasing with graphite!
Calibration - planter

Different disks require different kick-out starwheels:

Disks need greasing with graphite!

Kick-out starwheel housing from below
Calibration - planter

Left wheel is turned 10 times (= 17.6 m distance) and the seeds are collected and counted.
Same for wheat: grain from 10 wheel turns (17.6 m) is collected from 5 rows (0.85 m) and weighed
Calibration - seeder

For fine adjustment of seed quantity on the seeder use the push-wheel mechanism (chose openings not smaller than 10 for wheat to avoid grain damage)
Calibration

If necessary, the gears of the drive transmission are changed and the procedure repeated.
Calibration - fertilizer

- For fertilizer calibration, the drive mechanisms of the finger wheel must be removed from those rows not used (row crops) or inserted (grain crops).

- Flaps for the rows which are not in use must be loosened so that they remain in closed position when the outlet openings are adjusted.
For fertilizer the right wheel is turned 10 times (17.6 m) and fertilizer from one row (row crops) or 5 rows (grain crops) collected; adjustments with gears and flaps
Calibration - fertilizer

Check fertilizer quantity, if necessary change gears and/or flap opening position and repeat calibration procedure.
Furrow openers - planter

Components on a row crop furrow opener unit

Depth control of cutting disk and fertilizer disk
Cutting disk
Fertilizer disk
Seed disk
Seed-Depth control wheel

Depth control for seed
Scrapers
Control for furrow closing
Pressure control
Presswheel
Furrow openers - planter

Chisel type furrow openers for fertilizer are used on hard, dry and compacted soils
Furrow openers - planter

Double disk furrow openers for fertilizer are used on soft soils or with difficult residues; they can work with or without cutting disk.
To achieve the desired depth for fertilizer and seed the machine weight is transferred through pressure springs to the furrow openers; it is important that the machine, when working, does not rest on the limiting bolts of the drive wheels.
Penetration depth of cutting disk and fertilizer disk/chisel is controlled by the front pressure spring.
Penetration depth of the seed disk is adjusted by the lower stop of the rear pressure spring to assure that sufficient pressure is resting on the depth control wheels to close and compress the seed slot.
The upper stops of the rear pressure springs control only the position of the furrow opener units when the seeder is lifted to avoid touching the ground; they do not control pressure and must NEVER touch the support when the seeder is working in the field.
For soft and moist soils grain (wheat) disks have rings attached which limit the seed depth to 3-4 cm; for dry conditions, deeper planting or thick residue covers they have to be removed. Depth control is then adjusted by the presswheel.
Depth control - seeder

Grain crop seeder (wheat) without rings on the seed-disks
Machinery care

- Drive chain tensioners must never be placed on the load bearing track of the chain but only on the idle track.
- Grease nipples must be greased with a suitable grease gun every 8 hours as indicated on the machine.
Assembling Vence Tudo
Row Crops
Assembling Vence Tudo Row Crops

- Cutting disk
- Chisel type furrow openers
- Line’s support
Assembling Vence Tudo Row Crops

Pressure Spring (Depth control of cutting disk and chisel)

Pressure control
Assembling Vence Tudo Row Crops

Doble Disc for Seed
Assembling Vence Tudo Row Crops

Seed´s Conductor

Sleeve´s Conductor
Assembling Vence Tudo Row Crops

- Support’s depth control for seed
- Screw
Assembling Vence Tudo Row Crops

Support's Presswheel

Pressure Control
Assembling Vence Tudo
Row Crops

Presswheel
Assembling Vence Tudo Row Crops

Compactor/Limiter – Iron Wheel in “V”

Depth control for seed
Assembling Vence Tudo Row Crops

Support's Depth control for seed

Changing to Compactor – 3rd wheel
Assembling Vence Tudo Row Crops

Support's Presswheel

Depth control for seed
Assembling Vence Tudo Row Crops

Concave Disk
Changing Vence Tudo Seeder to Planter
Changing Vence Tudo Seeder to Planter

Frontal alignment of the lines

Number of odd lines=central line
Number of pair lines=divide the center

Chassis
Plataform
Changing Vence Tudo Seeder to Planter

Back alignment of the lines (stabilizer)
Changing Vence Tudo Seeder to Planter

Alinhamento traseiro das linhas

Seed Tube
Changing Vence Tudo Seeder to Planter

Spring to press concave disk

Spring to press double disk (seed)
Changing Vence Tudo
Seeder to Planter

Spring to press concave disk
Spring to press doble disk (seed)
Support's springs
Changing Vence Tudo Seeder to Planter

Counterpin

Lower stop
Changing Vence Tudo Seeder to Planter

Seed Box
Seeder:
Fertilizer Transmission

Changing Vence Tudo
Seeder to Planter

Planter:
Fertilizer Transmission
Changing Vence Tudo
Seeder to Planter

Seeder:
Seed Transmission

Planter:
Seed Transmission
Thank You!

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