

CULTIVATION RANGE

Designed and built in the UK to the ISO9001:2008 quality benchmark, McConnel's range of Discaerators and Shakaerators can play a key part in your soil preparation plans.

LAYING THE FOUNDATIONS FOR GREATER CROP YIELDS



INNOVATIVE LEG DESIGN

McConnel machines deliver high performance and low disturbance, using innovative Shakaerator vibration unit technology and a world-famous low-draught leg design to deliver exceptional results.



INTERCHANGEABLE, POINT OPTIONS

A choice of wide delta and standard Euro points is available enabling operators to tailor their machine for peak performance in deep or shallow soil.

For a wider heave and greater soil movement at shallower depths, the 250mm wide delta point can be fitted.

LEG DESIGN

Perfected over four decades, McConnel's world-famous sabre-style low-draught legs are proven the world over.

The unique, forward position and angle of the point ensures the soil is heaved and shattered ahead of the shank reducing draught requirements by easing the passage of the leg through the ground and reducing the risk of horizontal compaction.

Legs, points and shins are all cast from high-quality, hardened steel delivering unrivalled wear rates for minimal downtime and operating costs. All wearing parts can be quickly and simply replaced in the field further reducing downtime.



GROUND-BREAKING DESIGN COMPLETE SOIL CONDITIONING

ENHANCED CULTIVATION

Unlike conventional cultivation techniques which bring unwanted subsoil to the surface, McConnel machines feature a sharply tapered leading edge which not only prevents bow waves from building up and compacting the soil ahead, but also ensures the soil is heaved and aerated without any mixing of top-soil and subsoil.

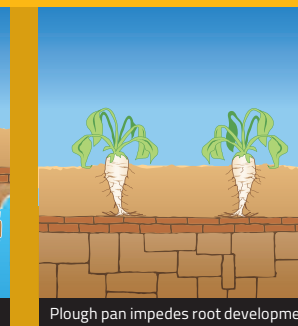
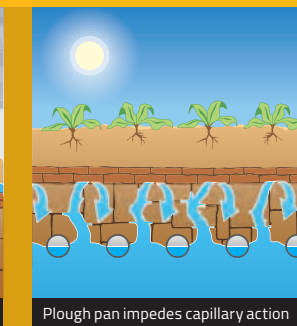
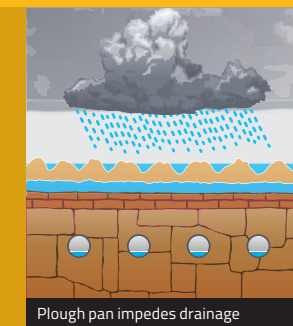


REAP THE BENEFITS

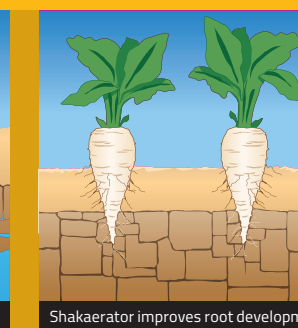
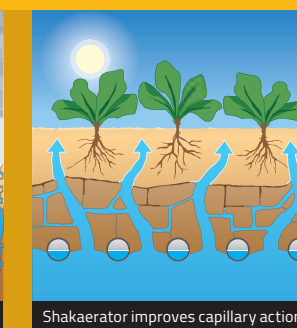
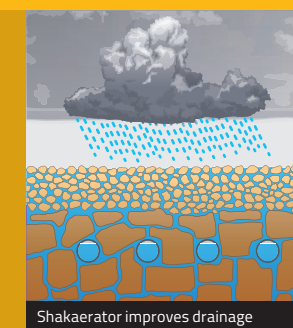
The legs pass through the ground heaving and shattering the soil upwards, minimising surface disturbance because the impact is felt in the soil below.

This removes soil compaction and plough pans creating space for the roots to grow and moisture to percolate – resulting in highly effective capillary aeration.

CONVENTIONAL CULTIVATION



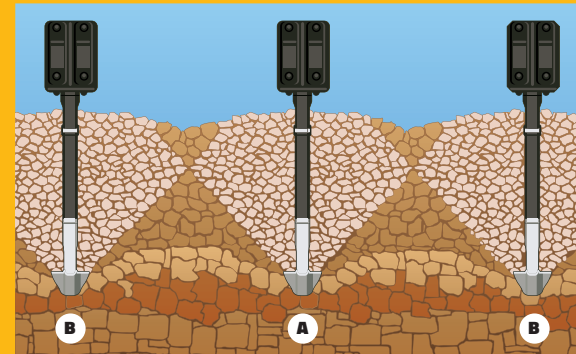
SHAKAERATOR CULTIVATION



LEG DESIGN ADVANCED FEATURES

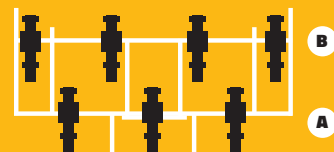
LEG SPACING AND CONFIGURATION

McConnel's range of Shakaerators and Discaerators can be fitted with a wide variety of different leg configurations to suit soil types, tractor horsepower and customer preference. Two rows of legs ensure there is sufficient space between the heave zones of the working legs, eliminating the risk of lateral compaction accruing.

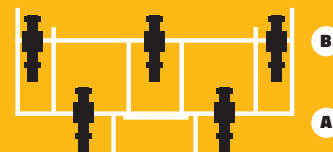


A FRONT ROW B BACK ROW

The staggered formation of the legs also lowers draught as each shank helps its neighbour.



7 LEG CONFIGURATION



5 LEG CONFIGURATION

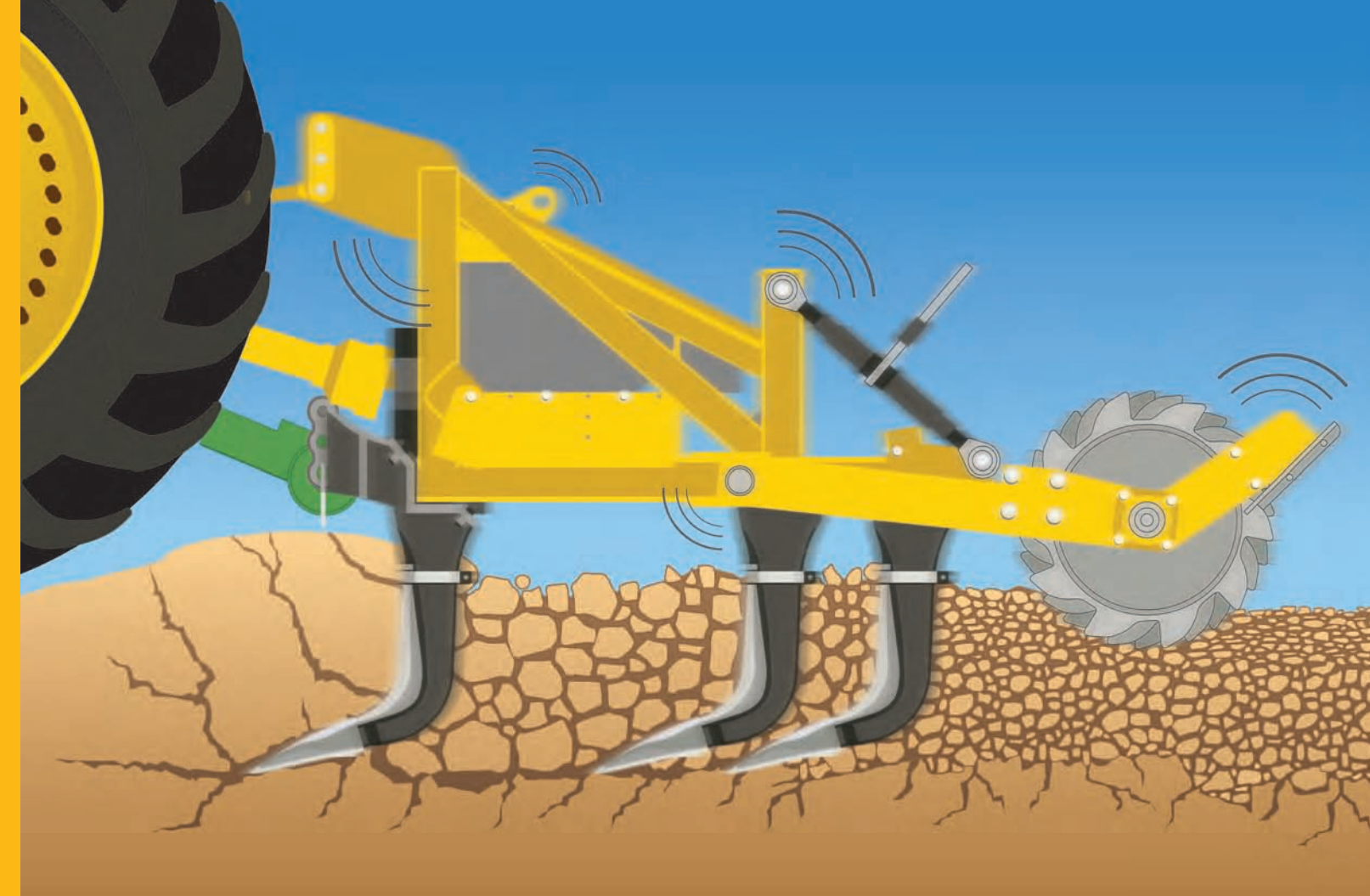
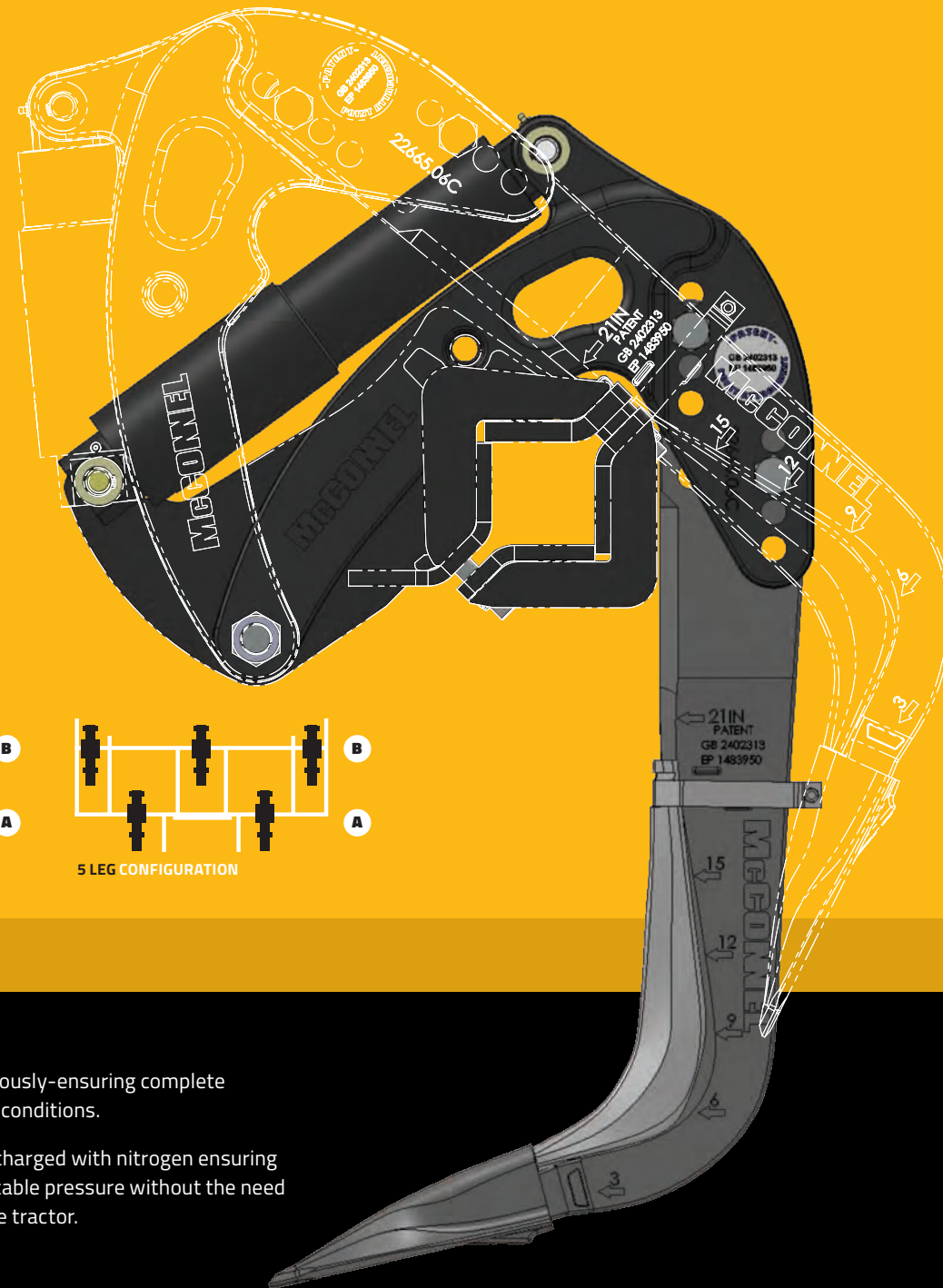
BREAKAWAY LEG TECHNOLOGY

McConnel's patented gas-strut breakaway protection system allows the legs to break-back up to 50 degrees on contact with an obstacle and then automatically returns the legs to the working position without the need for operator input.

Each leg has its own independent gas-strut so the break-back pressure for each leg remains constant even if multiple

legs break-back simultaneously—ensuring complete protection in the toughest conditions.

All gas-struts are factory charged with nitrogen ensuring long-life and consistent, stable pressure without the need for hydraulic input from the tractor.



MCCONNEL VIBRATION UNIT

McConnel's unique vibration unit dramatically reduces draught by shattering the soil and easing the passage of the machine's legs through the ground.

This unique action ensures a lower tractor horsepower requirement compared to machines without vibration units, reducing fuel consumption and operating costs, and aiding traction.

The entire machine is moved up and down and side to side as it travels through the ground at a rate of 500-600 vibrations per minute delivering a vigorous shattering action that breaks up the soil, creates fissures and eases compaction.

The tractor is completely isolated from vibration because the energy is all absorbed within the soil, so users will never notice any shaking inside the cab.

PERFECT FOR
WORKING IN THE
TOUGHEST TERRAIN



ROLLERS AND OTHER ACCESSORIES

MCCONNEL OFFERS
A CHOICE OF FOUR
DIFFERENT ROLLERS

FLAT ROLLER



SUITABILITY: Grassland Shakaerator

- Smooth full-width flat roller
- 600mm diameter
- Removable plug to add water ballast
- Minimal surface disturbance
- Weight: 300kg



SHARK-FIN PACKER ROLLER



SUITABILITY: Grassland Shakaerator, Shakaerator, Discaerator

- Full width roller with 21 rows of teeth (3.0m model) for maximum traction in loose soil conditions
- 600mm diameter
- Removable plug to add water ballast
- Highly effective clod breaking
- Weight: 420kg



RIDGE PACKER ROLLER



SUITABILITY: Shakaerator, Discaerator

- Full width ridge roller
- 12 ridges provide an ideal surface finish with vee channels for drainage and a fine crumb tilth
- Option of 600mm or 800mm diameter
- Weight: 450kg (3.0m, 600mm roller)
- Weight: 730kg (3.0m, 800mm roller)



CONSOLIDATOR ROLLER



SUITABILITY: Shakaerator, Discaerator

- Full width consolidator roller
- Constructed from Hardox steel for the best in durability and longevity
- Consolidates the seed-bed, leaving behind a ridged, weather-resistant surface
- Weight: 580kg
- 700mm diameter



OTHER ACCESSORIES

SEEDER UNIT

McConnel can offer a fully fitted Stocks seeder unit for sowing small seeds including oil seed rape. The unit sits between the discs and roller enabling farmers to carry out a complete sub-soil and seeding solution in a single pass.

GRASSLAND DISCS

Pivoting spring-loaded discs can be added to cut through turf and surface residue for minimal surface disturbance.

REAR LINKAGE

Optional rear linkage and PTO through-drive can be added to the Shakaerator 300 Classic enabling a secondary implement to be attached such as a rotavator for additional functionality.





CULTIVATION

SHAKAERATOR300 CLASSIC

SHAKAERATOR 300 CLASSIC	
MODEL	300 CLASSIC
Main frame	
Working width	3.0m (9' 10")
Frame type - Ridged	1-piece frame
Attachment - 3pt. linkage	CAT II
Working depth range	Max 355mm (14")
Depth adjustment increments	Variable
Road lighting kit	■
Legs and points	
Number of legs	5 or 7
Leg spacing	600mm (5 leg)/430mm (7 leg)
Leg length	600mm (24")
Gas-strut auto re-set protection	—
Shear-pin protection	■
Standard 'Euro' point	■
Wide 'Delta' point	□
Wear shin	■
Vibration unit	
Hydraulic drive	—
540 PTO drive	■
1000 PTO drive	□
Rear packers	
600mm (24") Consolidator	—
600mm (24") Ridge packer	—
600mm (24") Shark-fin packer	■
600mm (24") Flat roller	—
Rear scrapers	■
Options	
Leading disc	□
Hydraulic rear linkage	□
Dimensions	
Machine weight*	1,300kg
Transport width	3.25m (10' 8")
Transport height	1.8m (5' 11")
Requirement	
Minimum tractor horse power	125hp

■ Standard Equipment □ Optional Equipment — Not available * Dependent on specification

A PROVEN

PEDIGREE

One of McConnel's most popular cultivation products, the Shakaerator 300 Classic is a deep soil conditioner that has proven itself all over the world in a wide variety of weather and soil conditions.

Available in a 3.0m working width, the machine is rugged and robust, features McConnel's innovative vibration unit which breaks up the ground, and low-draught legs.



KEY FEATURES

Designed for arable farmers and contractors, the machine is an ideal tool for relieving compaction and aiding water percolation.

- McConnel's entry-level arable machine offers exceptional value for money
- Available with rear linkage, allowing a second implement to be worked simultaneously

A timeless classic, the Shakaerator builds on a 40-year design pedigree.



McDONNELL
SHAKAERATOR

CULTIVATION
SHAKAERATOR 3000

SHAKAERATOR 3000	
MODEL	3000
Main frame	
Working width	3.0m (9' 10")
Frame type - Ridged	1-piece frame
Attachment - 3pt. linkage	CAT II
Working depth range (24" leg)	Max 355mm (14")
Working depth range (30" leg)	Max 457mm (18")
Depth adjustment increments	25mm (1")
Road lighting kit	■
Legs and points	
Number of legs	5 or 7
Leg spacing	600mm (5 leg)/430mm (7 leg)
Leg length	600mm (24") or 750mm (30")
leg height adjustment increments	25mm (1")
Gas-strut auto reset protection	<input type="checkbox"/>
Shear-pin protection	■
Standard 'Euro' point	■
Wide 'Delta' point	<input type="checkbox"/>
Wear shin	■
Vibration unit	
Hydraulic drive	<input type="checkbox"/>
540 PTO drive	—
1000 PTO drive	—
Rear packers	
600mm (24") Consolidator	<input type="checkbox"/>
600mm (24") Ridge packer	<input type="checkbox"/>
600mm (24") Shark-fin packer	■
600mm (24") Flat roller	—
Rear scrapers	■
Options	
Leading disc	<input type="checkbox"/>
Dimensions	
Machine weight*	1,350kg
Transport width	3.05m (10' 0")
Transport height	1.8m (5' 11")
Requirement	
Minimum tractor horse power	125hp

■ Standard Equipment ☐ Optional Equipment — Not available * Dependent on specification

A MODERN CLASSIC

The latest incarnation of the classic Shakaerator design, this machine features a 3.0m working width and delivers outstanding deep soil conditioning.

Tough and durable, the Shakaerator 3000 has been designed to work in challenging conditions with the addition of auto-reset legs.

KEY FEATURES

Created for large-scale arable farmers and contractors seeking a rugged and effective low-draught sub-soiler.

- Gas-strut auto-reset legs protect the machine and enable operators to work in challenging conditions
- Self-contained hydraulic vibration unit with no need for a PTO shaft





CULTIVATION

SHAKAERATOR 400/500 CLASSIC

SHAKAERATOR 400/500 CLASSIC		
MODEL	400 CLASSIC	500 CLASSIC
Main frame		
Working width	4.0m (13' 1")	5.0m (16' 5")
Frame type - Hydraulic folding	3-piece folding	3-piece folding
Attachment - 3pt. linkage	CAT II	CAT II
Working depth range (24" legs)	Max 355 mm (14")	Max 355 mm (14")
Working depth range (30" legs)	Max 500 mm (20")	Max 500 mm (20")
Depth adjustment increments	25mm (1")	25mm (1")
Road lighting kit	■	■
Legs and points		
Number of legs	7 or 9	9 or 11
Leg spacing	570mm or 470mm	570mm or 470mm
Leg length	600mm (24") or 750mm (30")	600mm (24") or 750mm (30")
leg height adjustment increments	25mm (1")	25mm (1")
Gas-strut auto re-set protection	<input type="checkbox"/>	<input type="checkbox"/>
Shear-pin protection	<input type="checkbox"/>	<input type="checkbox"/>
Standard 'Euro' point	<input type="checkbox"/>	<input type="checkbox"/>
Wide 'Delta' point	<input type="checkbox"/>	<input type="checkbox"/>
Wear shin	■	■
Vibration unit		
Hydraulic drive	<input type="checkbox"/>	<input type="checkbox"/>
540 PTO drive	—	—
1000 PTO drive	—	—
Rear packers		
600mm (24") Consolidator	<input type="checkbox"/>	<input type="checkbox"/>
600mm (24") Ridge packer	<input type="checkbox"/>	<input type="checkbox"/>
600mm (24") Shark-fin packer	<input type="checkbox"/>	<input type="checkbox"/>
600mm (24") Flat roller	—	—
Rear scrapers	■	■
Options		
Leading disc	<input type="checkbox"/>	<input type="checkbox"/>
Dimensions		
Machine weight*	3,900kg	4,400kg
Transport width	3.0m (9' 10")	3.0m (9' 10")
Transport height	1.6m (5' 3")	1.6m (5' 3")
Requirement		
Minimum tractor horse power	180hp	240hp

■ Standard Equipment ☐ Optional Equipment — Not available * Dependent on specification

OUTSTANDING VERSATILITY

A value-for-money high-output sub soil conditioner with an innovative folding frame design.

The machine's folding wings grant farmers greater flexibility, reducing horsepower requirements when the ground is heavy - enabling the machine to work on smaller tractors, and proving highly effective when called upon to treat tramlines.



KEY FEATURES

Designed for farmers looking for performance and value and who want the versatility to switch the working width to match the soil conditions and different tractors.

- Foldable wing extensions boost the working width to 4.0 or 5.0m hydraulically
- Can be used as a 3.0m machine with the wings folded



McCONNEL SHAKAERATOR

CULTIVATION
SHAKAERATOR 4000/5000

SHAKAERATOR 4000/5000		
MODEL	4000	5000
Main frame		
Working width	4.0m (13' 1")	5.0m (16' 5")
Frame type - Hydraulic folding	2-piece folding	2-piece folding
Attachment - 3pt. linkage	CAT III & IV	CAT III & IV
Working depth range	Max 500mm (20")	Max 500mm (20")
Depth adjustment increments	25mm (1")	25mm (1")
Road lighting kit	■	■
Legs and points		
Number of legs	7 or 9	9 or 11
Leg spacing	570mm or 470mm	570mm or 470mm
Leg length	750mm (30")	750mm (30")
leg height adjustment increments	25mm (1")	25mm (1")
Gas-strut auto re-set protection	□	□
Shear-pin protection	□	□
Standard 'Euro' point	□	□
Wide 'Delta' point	□	□
Wear shin	■	■
Vibration unit		
Hydraulic drive	□	□
540 PTO drive	—	—
1000 PTO drive	—	—
Rear packers		
600mm (24") Consolidator	□	□
600mm (24") Ridge packer	□	□
600mm (24") Shark-fin packer	□	□
600mm (24") Flat roller	—	—
Rear scrapers	■	■
Dimensions		
Machine weight*	3,900kg	4,400kg
Transport width	2.52m - 2.83m (8' 3" - 9' 3")	2.52m - 2.83m (8' 3" - 9' 3")
Transport height	2.1m (6' 10")	2.1m (6' 10")
Requirement		
Minimum tractor horse power	180hp	240hp

■ Standard Equipment □ Optional Equipment — Not available * Dependent on specification

GROUND-BREAKING
PRODUCTIVITY

McConnel's largest and most productive deep soil conditioners with working widths up to 5.0m. They are ideal for improving drainage, relieving compaction, and delivering greater crop yields.

The machines are exceptionally robust with a redesigned steel frame, gas-strut breakaway legs, and a fast and effective folding mechanism.



KEY FEATURES

Created for large-scale farmers, the Shakaerator 4000 and 5000 heave and aerate the soil without mixing topsoil and subsoil.

- Nitrogen gas-strut breakaway legs improve performance over the ground and reduce downtime by flexing and then automatically resetting on contact with a hard object
- Heavy-duty two piece frame for exceptionable durability
- Mounted and trailed machines available

Available with a choice of Ridge packer, Shark-fin and Consolidator rollers.



DISCAERATOR

CULTIVATION
DISCAERATOR 3000

DISCAERATOR 3000	
MODEL	3000
Main frame	
Working width	3.0m (13' 1")
Frame type	Rigid frame
Attachment - 3pt. linkage	CAT III
Working depth range	Max 400mm (16")
Depth adjustment increments	25mm (1")
Road lighting kit	■
Legs and points	
Number of legs	5 or 7
Leg spacing	600mm or 430mm
Leg length	750mm (30")
leg height adjustment increments	25mm (1")
Gas-strut auto reset protection	■
Shear-pin protection	□
Standard 'Euro' point	■
Wide 'Delta' point	□
Wear shin	■
Discs	
508mm Concave & Serrated	■
Disc Angle	15° (opposed)
Shock-absorbing mountings	■
Disc Configuration – First row	6 discs @ 500mm
Disc Configuration – Rear row	11 discs @ 250mm
Rear packers	
600mm (24") Consolidator	□
600mm (24") Ridge packer	□
800mm (32") Ridge packer	□
600mm (24") Shark-fin packer	□
Rear scrapers	■
Options	
Stock Seeder Unit	□
Dimensions	
Machine weight*	2,450kg
Transport width	3.0m (9' 11")
Transport height	1.6m (5' 3")
Requirement	
Minimum tractor horse power	180hp

■ Standard Equipment □ Optional Equipment — Not available * Dependent on specification

SINGLE PASS SOLUTION

An outstanding single-pass deep soil cultivator, the Discaerator 3000 incorporates surface trash and stubble; heaves and aerates the soil; and then consolidates the surface for a weather-proof finish – saving time, money and fuel consumption.

Equipped with two rows of shock-resistant concave discs which break up clods to create a fine tilth, the Discaerator delivers the perfect conditions for crop establishment.

KEY FEATURES

Created for farmers and contractors, the machine has a productive 3.0m working width and features a choice of five or seven subsoiler legs and packer rollers.

- Available with the Stocks Turbojet Seeder Unit which can be factory-fitted for convenience
- Rear roller can be adjusted backwards, providing room for seed to be placed in front of the packers

The Discaerator is available with a choice of Ridge packer, Shark-fin, and Consolidator rollers.





McCONNEL **DISCAERATOR**

CULTIVATION
DISCAERATOR 4000/5000/6000

DISCAERATOR 4000/5000/6000			
MODEL	4000	5000	6000
Main frame			
Working width	4.0m (13' 1")	5.0m (16' 5")	6.0m (19' 8")
Frame type	2-piece folding	2-piece folding	2-piece folding
Attachment - trailed	Drawbar	Drawbar	Drawbar
Working depth range	500 mm (20")	500 mm (20")	500 mm (20")
Depth adjustment increments	25mm (1")	25mm (1")	25mm (1")
Road lighting kit	■	■	■
Legs and points			
Number of legs	7 or 9	9 or 11	11 or 13
Leg spacing	570mm (7 leg) - 445mm (9 leg)	555mm (9 leg) - 455mm (11 leg)	545mm (11 leg) - 460mm (13 leg)
Leg length	750mm (30")	750mm (30")	750mm (30")
leg height adjustment increments	25mm (1")	25mm (1")	25mm (1")
Gas-strut auto re-set protection	■	■	■
Mechanical shear-pin protection	□	□	□
Standard 'Euro' point	■	■	■
Wide 'Delta' point	□	□	□
Wear shin	■	■	■
Discs			
508mm Concave & Serrated	■	■	■
Disc Angle	15° (opposed)	15° (opposed)	15° (opposed)
Shock-absorbing mountings	■	■	■
Disc Configuration – First row	9 discs @ 500mm	11 discs @ 500mm	13 discs @ 500mm
Disc Configuration – Rear row	17 discs @ 250mm	21 discs @ 250mm	25 discs @ 250mm
Rear packers			
600mm (24") Consolidator	□	□	□
600mm (24") Ridge packer	■	■	■
600mm (24") Shark-fin packer	□	□	□
600mm (24") Flat roller	—	—	—
Rear scrapers	■	■	■
Dimensions			
Machine weight*	6,700 - 6,900kg	TBC	TBC
Transport width	2.85m (9' 4")	2.85m (9' 4")	2.85m (9' 4")
Transport height	3.2m (10' 6")	3.7m (12' 1")	TBC
Requirement			
Minimum tractor horse power	250hp (7-leg builds)	300hp (9-leg builds)	350hp (11-leg builds)

■ Standard Equipment □ Optional Equipment — Not available * Dependent on specification

**SAVES TIME
AND MONEY**

For those seeking the best in productivity, McConnel can offer the Discaerator in working widths up to 6.0m.

KEY FEATURES

Designed for large-scale farmers and contractors, these machines deliver all the labour and time-saving benefits of single-pass cultivation with exceptional working widths.

- Hydraulic depth adjustment allows operators to change leg depth from the comfort of the cab
- Heavy-duty folding mechanism ensures fast, easy transition to and from transport mode



Available with a range of leg configurations and packer options.





CULTIVATION

VIBRATILTH 300/400 CLASSIC

VIBRATILTH 300/400 CLASSIC		
MODEL	300 CLASSIC	400 CLASSIC
Main frame		
Working width	3.0m (9' 10")	4.0m (13' 1")
Frame type - rigid	1-piece frame	1-piece frame
Attachment - 3pt. linkage	CAT II	CAT II
Working depth range	150mm-250mm (6"-9")	150mm-250mm (6"-9")
Road lighting kit	—	—
Legs and points		
Number of legs	6 or 8	8 or 10
Leg spacing	500mm (6 leg) - 375mm (8 leg)	500mm (8 leg) - 400mm (10 leg)
Leg length	600mm (24")	600mm (24")
leg height adjustment increments	Variable	Variable
Gas-strut auto re-set protection	—	—
Shear-pin protection	■	■
Standard 'Euro' point	■	■
Wide 'Delta' point	□	□
Wear shin	■	■
Vibration unit		
Hydraulic drive	—	—
540 PTO drive	□	□
1000 PTO drive	□	□
Rear packers		
600mm (24") Consolidator	—	—
600mm (24") Ridge packer	—	—
600mm (24") Shark-fin packer	—	—
600mm (24") Flat roller	—	—
Rear scrapers	—	—
Dimensions		
Machine weight*	950kg	1,100kg
Transport width	3.3m (10' 10")	4.3m (14' 1")
Transport height	1.6m	1.6m
Requirement		
Minimum tractor horse power	150hp	180hp

■ Standard Equipment □ Optional Equipment — Not available * Dependent on specification

POWERFUL COMBINATIONS

A compact cultivation tool that is designed to work in combination with other machinery, the Vibratilth is light, simple-to-use and helps operators expand their functionality.



KEY FEATURES

Available in 3.0m and 4.0m working widths, the Vibratilth has been designed to work in combination with such devices as power harrows and rotavators, for effective single-pass soil cultivation.

- Front or rear mounting options
- Low tractor horsepower requirements

The Vibratilth is compatible with a wide range of secondary machinery, boosting productivity.