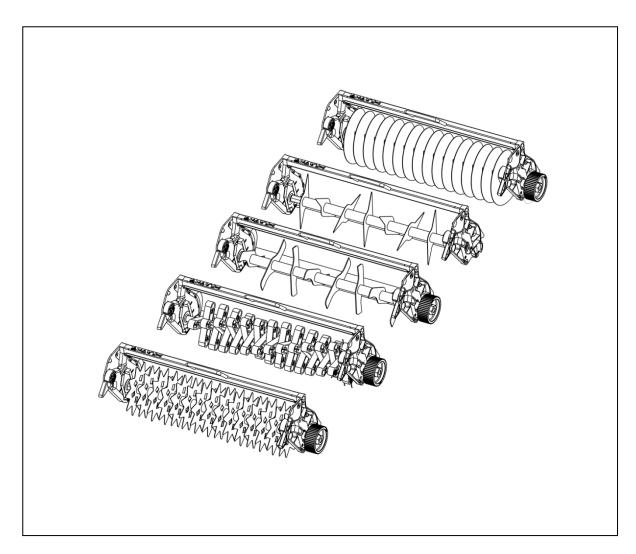


# UltraChange™ Lawn Care Cartridge Range for Stirling 43 and Stirling 51 Cylinder Lawnmowers



# **OPERATOR AND PARTS MANUAL**



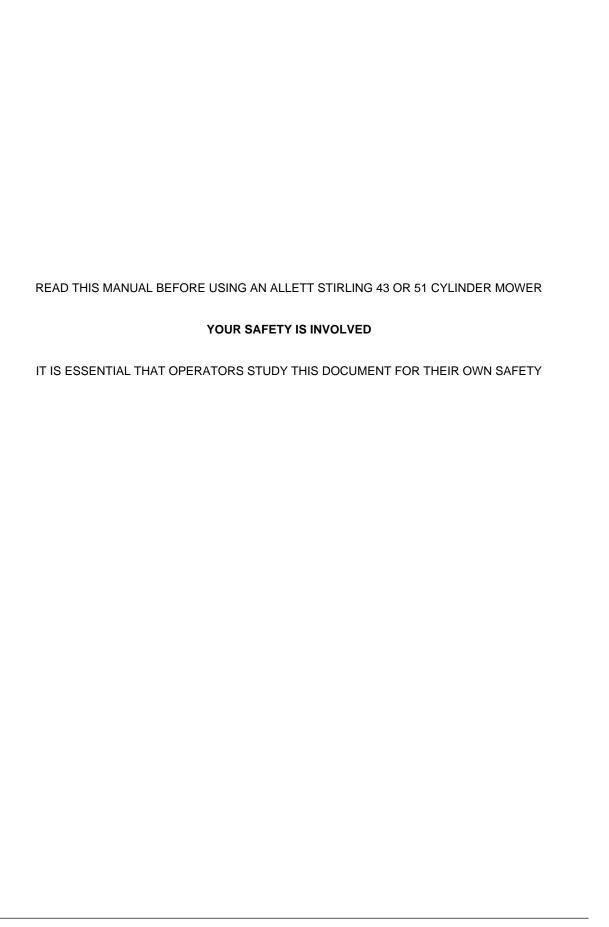
STIRLING 43

STIRLING 51

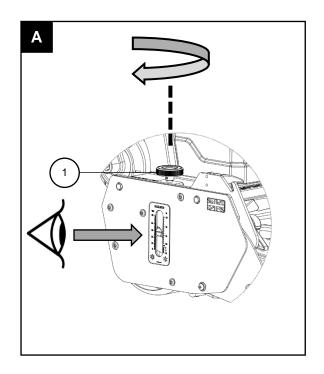
Original instructions: English version

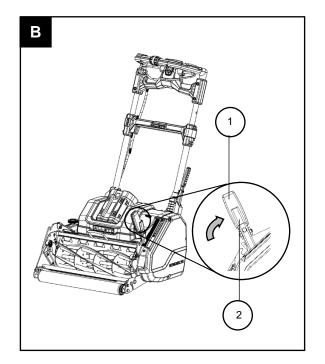
Allett Limited, Regal House, Airfield Industrial Estate, Hixon, Stafford, ST18 0PF, United Kingdom Tel: +44 (0) 1889 271503 sales@allett.co.uk www.allett.co.uk

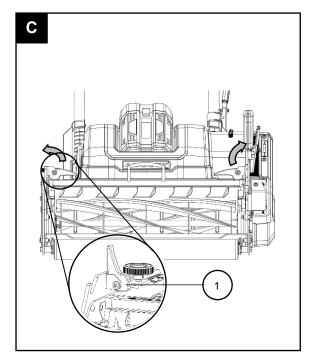
For Allett spare parts tel: +44 (0) 1889 27209

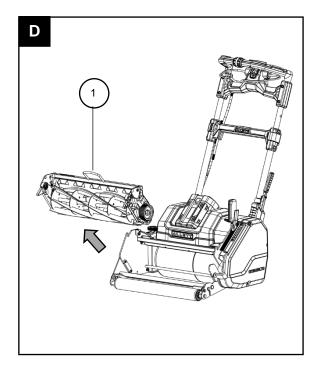


AERATOR CARTRIDGE	
LAWN BRUSH CARTRIDGE	
DETHATCHER CARTRIDGE	•
VERTICUTTER CARTRIDGE	
SCARIFIER CARTRIDGE	









#### INTRODUCTION

Thank you for buying one of our UltraChange™ (UC) lawn care cartridges

This manual gives instructions on the correct assembly and safe use of the product when fitted to your mower.

For best results, the lawn care cartridges need precise control of the working depth. It is recommended that you only use your cartridge in an Allett Stirling mower fitted with a HiteRite™ height of cut control. See A-1.

Using any of the cartridges covered in this manual in a dial adjustment model with 5 pre-set heights will invalidate the mowers guarantee.

Please check our specification information on our website for further details- www.allett.co.uk

Please follow the appropriate instructions and diagrams.

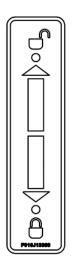
#### **DELIVERED ITEMS**

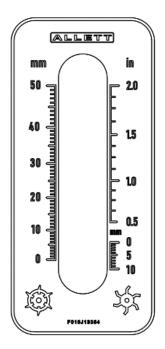
Carefully remove the UC cartridge from its packaging and check for missing or damaged parts.

If parts are missing or damaged, please contact your dealer for assistance.

You may also contact your dealer for service and advice both within and outside the period of guarantee.

# **SAFETY DECALS**





Cartridge securing lever lock

Height of cut / depth of cultivation

	Beware of thrown or flying objects
	Keep bystanders at a safe distance from machine
	General hazard safety alert
Who was a second	Sharp blade(s). Beware of severing toes or fingers.
	Sharp blade(s). Beware of severing toes or fingers.
∰ ပ	Stay clear of rotating parts

#### **CHANGING A UC LAWN CARE CARTRIDGE**

#### To remove a cartridge:

- 1. Remove the grass bag and battery
- 2. Pivot the two cartridge clamps (C1) upwards away from the machine
- 3. Press the release lever on the cartridge securing lever (B1), then pivot it towards the rear of the machine until the latch pin locates in upper slot.
- 4. Pull the cartridge unit out using the handle (D1)

#### To insert a cartridge:

- 1. Make sure the cartridge clamps are pivoted upwards (C1) and cartridge securing lever (B1) is pivoted towards the rear of the machine
- 2. Hold the cartridge unit by the handle and slide it into the mower. There are a pair of guides either side of the chassis to help locate it correctly
- 3. Pivot the cartridge clamps (C1) downwards towards the machine
- 4. Press the release lever on the cartridge securing lever (B1) then pivot towards the front of the machine until the latch pin locates in lower slot. This is tensioning the belt so needs to be done quite firmly

#### USING THE MOWER WITH A UC LAWN CARE CARTRIDGE

See "Setting the Height of Cut" in the mower instructions, then adjust the machine to achieve the required level of aggressiveness and to suit the ground conditions.

Height settings range table:

Cartridge	Height of cut range	Recommended setting
SUREBLADE™ 6-BLADE CYLINDER / REEL	5 mm to 50 mm	25 mm
SUREBLADE™ 10-BLADE CYLINDER / REEL	4 mm to 20 mm	< 20 mm
UC SCARIFIER	0 mm to -10 mm	0 mm to -6 mm
UC VERTICUT	0 mm to -10 mm	0 mm
UC AERATOR	0 mm to -14 mm	-14 mm
UC LAWN BRUSH	0 mm to 10 mm	0 mm
UC DETHATCHER	0 mm to -14 mm	-6 mm to -8 mm

When engaging drive to each lawn care cartridge, tilt the mower back slightly so the blades are just clear of the ground. This will reduce wear on the belts and sprockets. When tilting the mower back stand in the operating position at the rear of the machine and hold the handlebars with both hands. With the cartridge rotating, slowly lower it into work.

Only use the lawn care cartridges in straight lines, turning whilst the blades are engaged may damage your lawn and your mower.

It is recommended that the first pass is shallow - successive passes can be made deeper. If the mower struggles for power or the engine stalls, reduce the working depth by raising the height of cut.

Follow the safety rules and operating information given in the mower instructions.

#### GENERAL ADVICE ON USING THE UC LAWN CARE CARTRIDGES

It is recommended to make successive passes at an angle of 15-20° to the previous one. Use the cartridges little and often, rather than infrequent deep passes.

If passes are made at right angles the turf can be damaged as it opens and separates into cubes.

Debris should be removed from the lawn surface; the Lawn Brush cartridge is useful for collecting any debris that has been missed.

During dry spells or drought stop using the lawn care cartridges to reduce turf stress.

For maximum effectiveness replace worn or rounded blades.

#### **Aerator Cartridge**

Slits soil to ease air and water movement. Has the added benefit of pruning the roots causing vigorous growth and activity.

This cartridge is not powered. Set to full depth, a bag of lawn seed in the grass box will help penetration.

### Lawn Brush Cartridge

This is the most gentle lawn treatment. It is ideal for clearing worm casts and collecting general surface debris.

The lawn brush is useful for covering renovating seed material or to work in top dressing. Top dressing is a predominantly sand and silt/clay mix used for levelling lawns, improving drainage, and stimulating new grass growth.

For general debris collection, set height to 12mm. To remove worm casts, a lower height may be necessary.

#### **Dethatcher Cartridge**

This is the most aggressive treatment and therefore uses the thickest tine.

Dethatching is an intense operation that lifts plant litter and helps remove the densest layers of thatch. This is a destructive operation so it will remove a lot of material. After this treatment the lawn may need top dressing and partial re-seeding. Autumn scarification is generally deeper involving more passes than Spring treatments.

In Spring, a single shallow pass is ideal to remove moss which has been killed with a proprietary moss killer. Also, a shallow Spring pass is useful to prepare the turf for a light top dressing. Optimum conditions for using the dethatcher are when the grass is short [15-20mm] and the soil is slightly damp, but not dry and hard.

Dethatching when the ground is waterlogged may damage the lawn and result in poor collection performance.

#### **Verticutter Cartridge**

Verticutting can be thought of as "Vertical mowing" where thin and closely spaced tines remove lateral growth and moss. This encourages grass to tiller and creates a denser, more regimented sward. The resulting lines left by the action of the blades should grow out within two or three days in the growing season, if not raise the height of cut.

Regular (up to weekly) and shallow in-season verticutting will prevent excessive thatch build up.

#### **Scarifier Cartridge**

The Scarifier cartridge is Allett's most popular cultivation cartridge and is designed to remove thatch, surface debris and dead moss. This cartridge also helps lift lateral growth upright before mowing.

The scarifier has a custom design which helps to keep your lawn surface healthy and disease-free, by allowing air and water to penetrate the soil surface. The machine is designed with rotating tines that pull out the dead grass and moss to enable the passage of nutrients into the soil.

The rotating spring tines are relatively gentle on the lawn and this cartridge can be used most of the year without fear of damage to keep on top of thatch levels as well as being useful to collect up leaves during the autumn. The use of the spring tine allows for safe cultivation where tree roots may be close to the surface. This is the best cartridge for beginners to turf cultivation as it is unlikely to cause damage if set too deeply but will give great results if used regularly.

We suggest scarifying once a month during the mowing season to keep on top of thatch levels.

#### **UC 10-BLADE CUTTING CYLINDER**

UC 10-bladed cutting cylinder (reel) cartridges are also available where the precision finish of a golf or bowling green is required. These are available in 43 & 51 cm widths. This allows mowing at shorter grass heights as low as 4mm but requires regular mowing of 2 or more times per week.

#### **SETTING CYLINDER / REEL BLADES ON CUT**

The blades are correctly set when the cutting cylinder (reel) lightly brushes the bottom blade (bed knife) across the full width as the cylinder (reel) is turned. The blades act like a pair of scissors. As a test, correctly adjusted blades will cut a piece of good quality writing paper (80g/m²) across the width of the blade.

The cutting cylinder (reel) should only be adjusted if the grass is not cut cleanly and evenly.

To set blades correctly on cut:

- 1. Remove battery from machine.
- 2. Tilt the mower back and wedge securely.
- 3. Remove the grass bag.
- 4. Check the cleanness of cut with paper across the cutting width. Always wear gloves.
- 5. Turn the adjuster screws clockwise with a flat bladed screwdriver a little at a time and check the cleanness of cut with a piece of paper as you go along. It may be necessary to only adjust one side to get a nice scissor action.

Note: setting the blades with heavy contact can cause damage to your mower!

#### **STORAGE**

If the mower is to be left standing for long periods, adjust the height of cut so that the tines are clear of the ground.

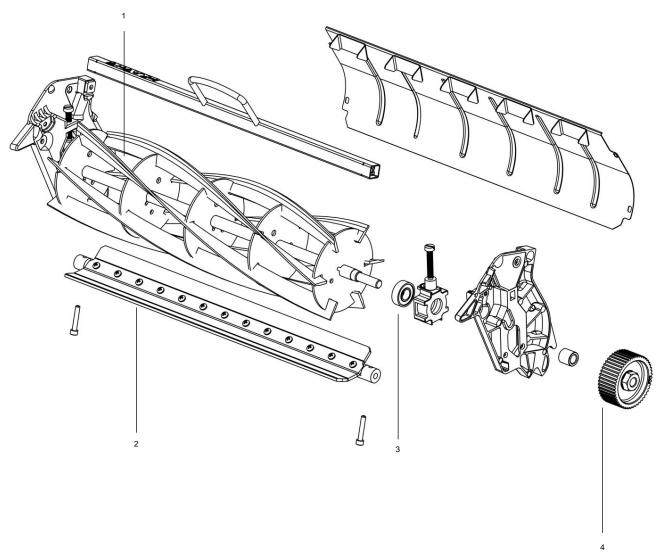
Before storage remove all the debris from the mower and cartridge with a brush and apply a light coating of oil.

A storage stand is available to store up to 3 cartridges, please contact your local dealer for information.

# LAWN CARE CALENDAR

	Aerator	Lawn Brush	Dethatcher	Verticutter	Scarifier
January		Remove leaves			
February	Aerate to improve surface drainage and Oxygen uptake	Break up and disperse worm casts	Remove thatch layer before increasing plant density with new lawn seed		
March	Aerate to improve surface drainage and Oxygen uptake	Remove leaves and worm casts, lightly cover newly planted seeds	Remove thatch layer before increasing plant density with new lawn seed		
April	Aerate to improve surface drainage and Oxygen uptake			Remove lateral growth and encourage grass to tiller	Scarify once a month to remove thatch, debris and moss
Мау	Aerate to improve surface drainage and Oxygen uptake	Remove leaves and worm casts, lightly cover newly planted seeds		Remove lateral growth and encourage grass to tiller	Scarify once a month to remove thatch, debris and moss
June	Aerate regularly except in dry conditions	Add top dressing to low spots and brush in to create a uniform surface		Compliment normal horizontal cylinder mowing with vertical verticutting	Scarify once a month to remove thatch, debris and moss
July	Aerate regularly except in dry conditions			Compliment normal horizontal cylinder mowing with vertical verticutting	Scarify once a month to remove thatch, debris and moss
August	Aerate regularly except in dry conditions	Top dress as needed and brush in to create a uniform surface		Regular verticutting will help reduce the thatch layer	Scarify once a month to remove thatch, debris and moss
September	Aerate regularly except in dry conditions		Remove thatch layer before increasing plant density with new lawn seed	Regular verticutting will help reduce the thatch layer	Scarify once a month to remove thatch, debris and moss
October	If not too wet aerate regularly to help water percolate	Remove leaves and worm casts	Remove thatch layer before increasing plant density with new lawn seed	Compliment normal horizontal cylinder mowing with vertical verticutting	Scarify once a month to remove thatch, debris and moss
November	If not too wet aerate regularly to help water percolate	Remove leaves and worm casts			Scarify once a month to remove thatch, debris and moss
December					

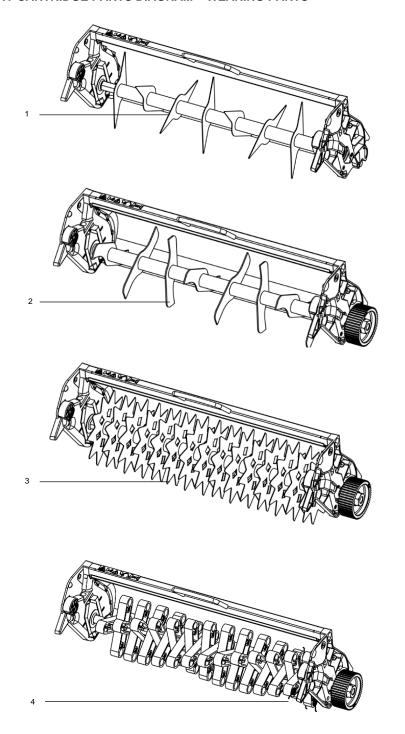
# UC CUTTING CYLINDER / REEL – WEARING PARTS DIAGRAM



NOTE: CARTRIDGE PULLEY CONTAINS A LEFT-HANDED THREAD

ITEM NO.	43 CYL PART NUMBER	51 CYL PART NUMBER	DESCRIPTION	QTY
1	F016A58820	F016A58821	CYLINDER / REEL	1
2	F016J11745	F016J11750	BOTTOM BLADE / BED KNIFE ASSEMBLY	1
3	F016A58741	F016A58741	BALL BEARING	2
4	F016J13223	F016J13223	CARTRIDGE PULLEY	1

# UC ACCESSORY CARTRIDGE PARTS DIAGRAM – WEARING PARTS



ITEM NO.	PART NUMBER	DESCRIPTION	QTY PER 43 UC CART	QTY PER 51 UC CART
1	F016J10246	AERATOR BLADE	7	8
2	F016J10245	DETHATCHER BLADE	7	8
3	F016J10243	VERTICUTTER BLADE	13	15
4	F016T47920	SPRING TINE	44	52

#### **EU Declaration of Conformity**

## UltraChange™ Lawn care cartridge range

This Declaration is issued under the sole responsibility of the manufacturer

We: Allett Ltd

Of: Regal House, Airfield Industrial Estate, Hixon, Staffordshire, ST18 0PF, UK

Declare that the below interchangeable cartridges:

Model name	Machine type	Cutting width	Serial No.
Stirling 43 Aerator Cartridge	UC43A/1	43cm	00001-99999
Stirling 43 Dethatcher cartridge	UC43D/1	43cm	00001-99999
Stirling 43 Lawn Brush cartridge	UC43LB/1	43cm	00001-99999
Stirling 43 Scarifier cartridge	UC43SC/1	43cm	00001-99999
Stirling 43 Verticutter cartridge	UC43V/1	43cm	00001-99999
Stirling 43 10-blade mowing cartridge	UCC4310/1	43cm	00001-99999
Stirling 51 Aerator Cartridge	UC51A/1	51cm	00001-99999
Stirling 51 Dethatcher cartridge	UC51D/1	51cm	00001-99999
Stirling 51 Lawn Brush cartridge	UC51LB/1	51cm	00001-99999
Stirling 51 Scarifier cartridge	UC51SC/1	51cm	00001-99999
Stirling 51 Verticutter cartridge	UC51V/1	51cm	00001-99999
Stirling 51 10-blade mowing cartridge	UCC5110/1	51cm	00001-99999

Conform to the essential requirements of the following Directives and their amendments:

2006/42/EC and have been designed and manufactured to the following standards and their annexes: BS EN 60335-2-77:2010, BS EN ISO 5395-1:2013+A2:2018 and BS EN ISO 5395-2:2013+A2:2017

Technical file compiler: Allett Ltd, Regal House, ST18 0PF

I hereby declare that the equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the Directives.

Place: Stafford, 28/01/2022

Signature:

Austin Jarrett

Position: Managing Director

#### **Allett Domestic Warranty Terms & Conditions**

Allett Ltd guarantees this product against manufacturing defects. We will repair (or replace at our option) if a manufacturing defect occurs within the guarantee period as long as it has not been subjected to rental/hire use.

The guarantee period for domestic use is: 1-year parts and labour

For commercial or non-domestic use, the guarantee period is 60 days.

For the purpose of this guarantee:

Non-domestic use means all other uses including, commercial, income producing, but excluding rental/hire use.

To obtain a repair under this guarantee:

You must contact the place of purchase and report the problem to them. You need to have your proof of purchase and guarantee. If the dealer cannot assist in finding a solution to the problem reported, please contact Allett to report any unresolved issues.

This guarantee does not apply if:

- The product has been resold by original purchaser (this does not apply in the Republic of Ireland), or has been used under hire.
- 2. The product has been modified to change the manufacturers specifications, or if non genuine replacement parts have been fitted.
- 3. If any previous repair was undertaken by anyone other than an Approved Service Agent.
- 4. The fault is due to maladjustment, abuse, neglect or accidental damage.
- 5. The fault is due to lack of lubrication or maintenance.
- 6. Damage to any part, particularly the drive or cutting mechanism has been caused by allowing the product to strike solid objects.
- 7. The product develops a fault due to abnormal use.
- 8. Failure is due to normal wear. The following parts are considered as wearing parts: (their life is dependent on regular servicing, and they are not therefore, normally covered by the guarantee. Examples of wearing parts are as follows cutting cylinder & bottom blade, cylinder, roller, drive belts & cables, bearings, chains & sprockets, plastic drive gears, pulleys, any friction related parts, and other parts what have contact with the ground Any of the above parts replaced without prior authorisation will be rejected in the first instance.)

Serviceable parts life is dependent on regular servicing, and they are not therefore normally considered by the guarantee. The cost of routine maintenance of the product is not covered by the guarantee *unless an Allett Service Contract is undertaken* 

It is in your best interest to follow the operating instructions for your lawnmower as a properly cared for product should give many years of excellent service cutting grass.

Always insist on genuine Allett spares or parts. Any non-genuine parts fitted within the Warranty period will result in your manufacturing Warranty becoming null and void. Any damage caused to the product through the fitting of parts not made or approved by Allett is not covered by the guarantee.

Any defective part replaced on Allett machines shall not exceed the remainder of the existing warranty period on any Allett product. Unless agreed in writing by Allett After Sales Manager or Allett Sales Manager.

Travelling costs must have prior authorisation from Allett After Sales Manager/Allett Sales Manager for any claims to be processed. Claims submitted without written prior authorisation will be rejected in first instance. Any mileage claims will be credited @0.50 pence per mile. With no exceptions

Your statutory rights are not affected by this guarantee.

When the time comes to dispose of this product, please consider the environment and take it to a recognised recycling facility.