



Read and fully understand the instructions before operating the Portek RufCut

# CE portek.co.uk

# Wheeled Brushcutter

**Operators Handbook** 

## **Before you start**

# READ AND UNDERSTAND THIS MANUAL FULLY BEFORE OPERATING THE RUFCUT



The Powerstrim Rufcut is a high-speed, fast cutting power tool, special safety precautions must be observed to reduce risk of personal injury. Read this manual carefully. Be familiar with the controls and the proper use of the unit. Know how to shut if off quickly.

This graphic accompanied by the words **WARNING** and **DANGER** highlights an act or a condition which can lead to SERIOUS INJURY



#### ALWAYS WEAR EYE AND EAR PROTECTION.

Always **TURN OFF ENGINE** and make sure the brushcutter head has stopped before cleaning, removing or adjusting line.

**DISCONNECT** spark plug lead before cleaning or essential maintenance to the RufCut.

WARNING! Never modify this brushcutter in any way.

Improper use of any brushcutter can cause SERIOUS OR FATAL PERSONAL INJURY.

The engine exhaust from this product contains chemicals to cause cancer, birth defects, or other reproductive harm.

Specifications, descriptions and illustrative material in this manual are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

Proper safety precautions must be observed. Like all equipment this unit must be handled carefully **DO NOT EXPOSE YOURSELF TO DANGER**. Follow these general rules. Do not permit others to use the Rufcut unless they are thoroughly responsible and have read, and understand the machine manual and are trained in its operation.

Always wear safety goggles for face protection. Dress properly, do not wear loose clothing or jewellery that could become caught in moving parts of the unit. Safe, sturdy, steel toe cap non skid footwear should always be worn. Long hair should be tied back. Legs and feet be covered to protect from flying debris during operation.

#### ALWAYS WEAR SAFETY CLOTHING IN CONJUNCTION WITH HAND, EYE, HEARING AND FOOT PROTECTION TO HSE/EN SPECIFICATIONS - SEE PAGE 6



### Important safety information

Before use, inspect the entire machine for loose parts (nuts, bolts, screws etc) and any damage. Repair or replace as necessary before using this machine.

**DO NOT USE** any attachment with this power head other than the ones recommended by Portek. Serious injury to the operator or bystanders could result as well as damage to the machine.

Keep the handles free from oil and fuel



Do not smoke while mixing fuel or filling tank.

Do not mix fuel in an enclosed room or near open flames. Assure adequate ventilation.



Always mix and store the fuel in a properly marked container that is approved by local codes and ordinances for such usage.

Never remove the fuel tank cap while the engine is running.



Never start or run the engine inside a closed room or building. Fumes from the exhaust contain dangerous carbon monoxide.

Never attempt to make engine adjustments while the unit is running. Always make engine adjustments with the unit resting on a flat, clear surface. **REMOVE SPARK** 



Do not use the unit if it is damaged or poorly adjusted. Never remove the machine's guard.

Inspect the area to be cut and remove all debris that could become entangled in the nylon cutting head. Also remove any objects that the unit may throw during cutting.



Keep children away. Onlookers should be kept at a safe distance from the work area, at least 15metres/50 feet.



Do not use this unit for any job other than those for which it is intended as described in this manual.

Do not overreach. Keep proper footing and balance at all times. Do not run the unit while standing on a ladder or on any other unstable footing location.

Keep hands and feet clear of the nylon cutting head while unit is in use.

Do not use this type of machine for sweeping away debris.

Never leave the machine unattended

Do not use the unit when you are tired or under the influence of medication, drugs or alcohol.



**NEVER** use a damaged strimmer head. If a stone or any other obstacle is hit, stop the engine and check the nylon cutting head. A broken or unbalanced nylon cutting head must never be used.

#### FOLLOW INSTRUCTIONS FOR CHANGING ACCESSORIES.

Do not store in a closed area where fuel vapours can reach an open flame from hot water heaters, furnaces etc. Store in a locked, well ventilated area only.

Use only PORTEK equipment parts when servicing the unit, this will ensure safe and proper performance of your product. These parts are available from your dealer. The use of any other accessories or attachments may cause a potential hazard to the user, damage to the machine and void this warranty.

When refuelling, be sure to stop the engine. **NEVER** refuel when the engine is running or has overheated. When gasoline spills, be sure to wipe it up completely and properly dispose of those materials before starting the engine.

Stay clear of other workers or bystanders by at least 15 metres/50 feet.

Whenever approaching an operator of the machine, carefully call his attention and confirm the operator stops the engine. Be careful not to startle or distract the operator which can cause an unsafe situation.

Never touch the nylon cutting head whenever the engine is running. If it is necessary to adjust the protector or nylon cutting head, be sure to stop the engine and confirm that the nylon cutting head has stopped running.

The engine should be turned off when the machine is moved between work areas.



Be careful not to hit the nylon cutting head against stones or the ground. Unreasonable rough operation will shorten the life of the machine as well as create an unsafe environment for yourself and those around you.

Pay attention to loosening and overheating of parts. If there is any abnormality of the machine, stop operation immediately and check that machine carefully. If necessary, have the machine serviced by an authorised dealer. Never continue to operate a machine which may be malfunctioning.

In start-up or during operation of the engine, never touch hot parts such as the muffler, the high voltage wire or the spark plug.

After the engine has stopped, the muffler is still hot. Never place the machine in any places where there are flammable materials (dry grass etc) combustible gasses or combustible liquids.

#### AFTER USE

Clean the machine completely, especially the fuel tank, its surroundings and the air cleaner.

Pay special attention to operation in the rain or just after the rain as the ground may be slippery.

If you slip or fall to the ground or into a hole, release the throttle lever immediately.

Be careful not to drop the machine or hit it against obstacles.

Before proceeding to adjust or repair the machine, be sure to stop the engine and detach the spark plug cap from the spark plug.

When the machine is placed in storage for a long time, drain fuel from the fuel tank and carburettor, clean the parts, move the machine to a safe place and confirm that the engine is cooled down.

Make periodic inspections to assure safe and efficient operation. For a thorough inspection of your machine, please contact a dealer.

Keep the machine away from fire or sparks.



## WARNING: The cutting area is still dangerous while the machine is coasting to a stop.

#### CONTENTS

Important safety instructions	2 - 6
Specifications	7
Assembly of RufCut	7
Powerstrim mulching head and adjusting line	9
Operation	12
Exploded drawings	16
Maintenance and Warranty	18
Troubleshooting and spare parts	19
Certificate of conformity	20

# <sup>6</sup> Safety Equipment Requirements

### **Essential Equipment for Your Protection**

The Rufcut Wheeled Brushcutter complies with all current safety standards. For your safety You must wear full protection as specified below.



### Head, eye and hearing protection

Eye protection to EN166 – B Hearing protection to EN 352-1: 2002 Face protection visor recommended



### Hand protection

Gloves to EN 12477:2001



### Foot protection

Boots to EN 20345:2011



### Leg protection

Sturdy full length trousers - ideally to EN381 standard

### **Specifications**

Drive system	Automatic centrifugal clutch; Spiral bevel gear; flexible shaft	
Reduction ratio	17:22	
Max vibration level:	7.0m/s <sup>2</sup>	
Sound pressure level (LpA):	90dBA	
Sound power level (LwA):	109.6dBA	
Sound power level guaranteed (LwA):	112.1dBA	
Max speed cutter head:	6000 min-1	
Blade rotation direction	Clockwise seen from above	
Type of handle	Double handle	
Engine	Single cylinder Air-cooled 2 stroke petrol	
Capacity	52cc	
Maximum power output	<1.42 kW	
Carburettor	Float type	
Ignition	Non-contact electronic ignition	
Starting method	Recoil type 'pull' starter	
Fuel mixture	25:1 - petrol:oil mixture	
Fuel tank capacity	1.21	
Weight of complete unit	17kg	
Strimmer head supplied	PowerStrim 6 Mulching Head	
Toolkit	Funnel, tools and fuel container	

### **RufCut box contents**

2 stroke petrol engine mounted in frame with control handle

Powerstrim6 Mulching Head with adaptor washers

2 x wheels with solid tyres

Steel axle complete with washers, spacer, circlips and retaining nuts

Toolkit - allen keys, spark plug spanner, screwdriver, funnel, mixing container

## **Setting up**

### Assembly

8

The RufCut is supplied partly assembled - to get started please follow the instructions below:

**1. Remove items from the box** and check the contents. The engine is already mounted in the frame. Place frame and engine in upright position.

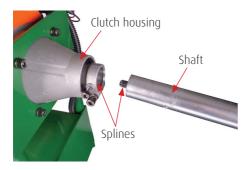
**2. Assemble the handle** by rotating and inserting into frame; use the bolts and dome nuts  ${\bf A}$  to secure.



#### 3. Install the brushcutter shaft

Remove the allen screws from the clutch housing.

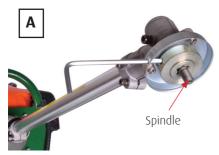
Insert the brushcutter shaft into the clutch housing - you may need to rotate the shaft to allow the splines to engage. Align the hole in the brushcutter arm with the small allen screw and tighten. **DO NOT OVERTIGHTEN** 





## **Brushcutter Head**

#### 4. Fitting the cutting head and stoneguard



With the unit tipped up remove the shaft nut from the spindle and lock the gearbox with allen key.



Keeping the shaft locked tighten with tube spanner supplied - remember left hand thread!



Line can be adjusted/changed by loosening/ tightening allen clamp screw.



Fit the aluminium boss and replace shaft nut - left hand thread! (You will not need the plastic adaptor washers).



Screw on the plastic line hub, left hand thread!



Fit the stoneguard with allen bolts and the side locating screw into the head housing. Clamp the rubber shim supplied between shaft and bracket.



#### 5. Fitting the axle and wheels

Tip the unit to access the frame to insert the axle.

Take the axle with the welded washer at the right hand side (looking from the front of the RufCut) and push through as shown, then twist to insert the other end through the framework.



#### 6. Fitting wheels - Right hand wheel looking from front.

Use the washer, spacer and circlip on the right hand side, slide on wheel then use a washer and large locknut to retain wheel. Note: you may need to use a pair of pliers/ mole grips to prevent the axle from turning when tightening the nyloc nut.





## Setting up <sup>11</sup>

#### 6. Fitting wheels - Left hand wheel looking from front.

Install the circlip into the groove on the left hand side then, slide on wheel then use a washer and large locknut to retain wheel. Note: you may need to use a pair of pliers/ mole grips to prevent the axle from turning when tightening the nyloc nut.



RIGHT

STRAIGHT

LEFT

# <sup>12</sup> Setting up

#### Throttle cable and switch wire routing

Secure the cable onto the frame with cable ties. The cable should be taken around the outside of the frame away from the fuel tank and carburettor, giving a sweeping curve to ensure free movement of the cable. After positioning the cable remove the screw holding the carburettor cover in place. It hinges down making access easier. Reassemble at the end of assembly/setup.

Insert the threaded throttle cable and screw into plate **1**. When adjusted the outer cable sheath must be secured in position by tightening the locknut against the metal securing plate. When the outer sheath is positioned, the cable can be slotted through the metal fixing on the carburettor **2**.



Push the switch wires together from the trigger assembly and those from the engine, black to black, red to red. Push firmly together and fix securely to frame. Use electrical tape around the join for extra moisture protection.

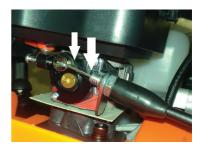






#### Adjusting the carburettor

There are two adjustments which you may need to make. Firstly adjust the outer cable by threading in or out. The position of this can be checked by operating the throttle trigger. When the trigger is in the maximum "on" position the carburettor should rotate so that the plastic (small arrow on picture) touches the "stop" below the adjuster thread (large arrow on picture). It should not strain the carburettor. Adjust as necessary then lock the outer sheath with the locknut. The second adjustment which may need altering is the idle speed. This is done by the adjusting screw visible in the picture on right.



This has been factory set, so further adjustment will only be necessary as part of ongoing maintenance and should be done by a competent person.



#### Preparing the fuel

Use the mixing container supplied to mix the petrol and 2 stroke oil (see specifications) in the ratio of 25:1. Fill the fuel tank of the Rufcut (do not overfill).

#### Starting

To prime the engine with fuel press the flexible plastic bulb several times to pump the fuel into the carburettor





Move the red lever up to set the choke to enable easier starting especially in cold weather. Once engine is running move lever into the run position.

On the handle slide the STOP button to the right to allow the machine to run.



Keeping a firm grip on the RufCut and keeping away from the brushcutter head, pull the starter cord to start the RufCut. When you pull the starter grip, do not wrap the starter cord around your hand.



Do not let the grip snap back, but guide the starter cord to rewind it properly. Failure to follow this procedure may result in injury to your hand or fingers and may damage the starter mechanism.

Once the engine is running, move the choke lever back to run position.





Adjust the handle for comfort and for use on sloping ground





Flexible handle to allow working on a slope and comfort of operator

# **Operation**<sup>15</sup>





**NEVER** use a damaged strimmer head. If a stone or any other obstacle is hit, stop the engine and check the nylon cutting head. A broken or unbalanced nylon cutting head must never be used. ALWAYS stop the engine before inspecting any damage. If in doubt seek expert advice before using the RufCut or starting work again.



Do not overreach. Keep proper footing and balance at all times. Special care must be taken in slippery conditions (wet ground, snow) and in difficult, over-grown terrain. Watch for hidden obstacles such as tree stumps, roots and ditches to avoid stumbling. For better footing, clear away scrub and cuttings. Be extremely cautious when working on slopes or uneven ground.



If the vegetation being cut or the surrounding ground is coated with a chemical substance (such as an active pesticide or herbicide), read and follow the instructions and warnings that accompanied the substance at issue.

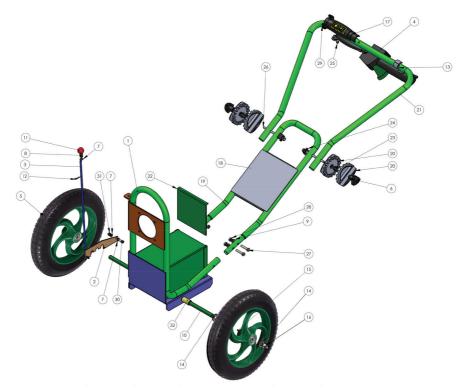


NEVER use the RufCut without the stoneguard fitted and adjusted correctly

**ALWAYS** WEAR SAFETY CLOTHING IN CONJUNCTION WITH HAND, EYE, HEARING AND FOOT PROTECTION TO HSE/EN SPECIFICATIONS - SEE PAGE 6

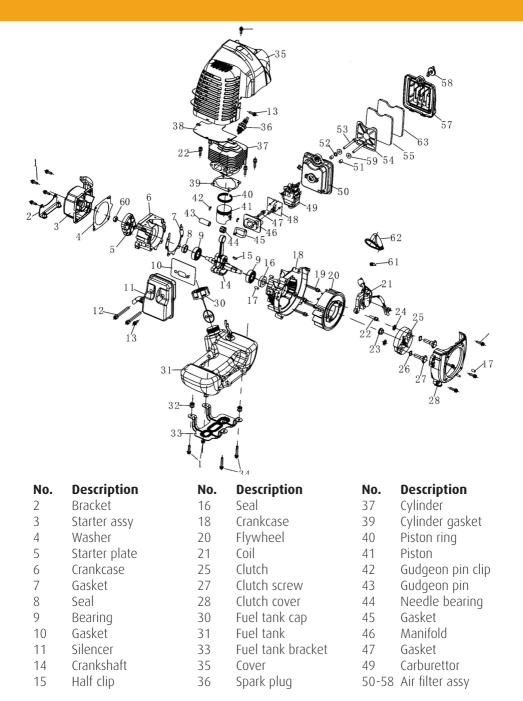


# <sup>16</sup> Framework assembly



No.	Description	Qty.	No.	Description	Qty.
1	Motor Chassis Assy	1	17	Hand Grip Top	1
2	Latch	1	17a	Hand Grip Bottom	1
3	Actuator Rod	1	18	Logo Panel	1
4	Controls	1	19	Chassis Extension	1
5	Wheel	2	20	Adjusting Plate	4
6	Hand Wheel	2	21	Handlebar	1
7	Washer	4	22	Tool Box Lid	1
8	Spring	1	23	Spring	2
9	Washer	8	24	Lock Saddle	2
10	Spindle	1	25	Nut	2
11	Adjusting Knob	1	26	Bolt	2
12	R Clip	1	27	Bolt	4
13	Control Packer	2	28	Nut	4
14	Washer	4	29	Screw	2
15	Circlip	2	30	Bolt	1
16	Nut	2	31	Nut	1
			32	Spacer	1

### Engine breakdown drawing



17

18

The RufCut will provide reliable performance and service if maintained regularly.

The following intervals apply to normal operating conditions. If you are using the RufCut in very dusty conditions, adjust accordingly.

Please contact your Portek Dealer if in any doubt.

		befor	after	after	if pro	if dar	if req
Complete Dufcut	Visual inspection (condition, leaks)	Х		Х			
Complete RufCut	Clean		Х				
Controls	Check	Х		Х			
Air Filter Element	Clean						Х
All Filler Element	Replace					Х	
Fuel tank	Clean				Х		Х
	Electrode gap 0.025" (0.635mm)				Х		
Spark plug	Replace every 100 operating hours						
	Visual inspection	Х		Х			
Brushcutter head	Replace					Х	
	Tighten	Х		Х			
All screws/nuts and fixings for tightness	Check	Х					

finishing work or daily

e starting work

each refueling stop

maged

quired

oblem

#### Warranty

Warranty for your Rufcut is 12 months for domestic use and 3 months for any commercial or contractor use. Please retain your proof of purchase for any warranty claim.



WARNING! Operating problems are often due to causes that the user can fix. Therefore check the product using this section to eliminate these simple issues. In most cases the problem can be solved quickly.



WARNING! Only perform the steps described below! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified specialist if you cannot solve the problem yourself! IF IN DOUBT SEEK EXPERT ADVICE

Problem	Possible Cause	Remedy	
	Not enough fuel in fuel tank	Add fuel	
	Primer bulb has been not pressed at cold start	Press the primer bulb and restart	
Cannot start RufCut	Spark plug is wet	Remove spark plug and dry	
	Spark plug is damaged	Replace spark plug	
	Spark plug connector lose	Check and secure	
	Spark plug gap incorrect	Set gap to 0.025" (0.635mm)	
	Fuel is low	Fill with fresh fuel to correct 25:1 ratio	
RufCut stops	Head is overloaded/blocked	Turn off RufCut, remove obstruction	
	Brushcutter head lines worn	Replace lines	
Poor cutting performance	Material being cut is not suitable for head	Choose different head unit	
Excessive vibration	Bolts/nuts are loose	Check and tighten	
Excessive smoke	Wrong fuel mixture	Drain fuel and replace	

#### Spare parts

A full range of spares are available. Please contact your Portek Dealer to request replacement parts.

### <sup>0</sup> Declaration of Conformity

#### EC Declaration of Conformity

Portek Ltd, Bryn Hall, Knolton Bryn, Overton on Dee,Wrexham, LL13 OLF declare that, in accordance to the following directives,

2006/42/EC (Machinery Directive) 2004/108/EC (EMC Directive) 2000/14/EC (Noise Emissions Directive) 97/68/EC (NRMM Emissions Directive)

the "Rufcut" has been designed to comply with the relevant sections of the below  $$\rm BS\ EN\ ISO\ standards:-$ 

12100-2: 2003 14121-1: 2007 13857: 2008 953:1997 + A1: 2009 1037: 1995 +A1: 2008 11806-1: 2011

The unit complies with all applicable Essential Requirements of the Directives.

Declaration made by Hugh David on 26/05/2016.

Dand



Portek Ltd. Bryn Hall, Knolton Bryn Overton-on-Dee Wrexham, LL13 0LF Tel: 01234 889 454 Fax: 01234 889 464

General enquiries Email: info@portek.co.uk