

# 400W LAWN RAKER

■ STOCK No.74058

■ PART No.LR400

### INSTRUCTIONS •

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS TOOL.



#### **GENERAL INFORMATION**

This manual has been compiled by Draper Tools and is an integrated part of the product with which it is enclosed and should be kept with it for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.



## **400W LAWN RAKER**

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## **DECLARATION OF CONFORMITY**

We

Draper Tools Ltd. Hursley Road, Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. England.

Declare under our sole responsibility that the product:

Stock No. :- 74058.

**Part No. :-** LR400.

Description: 400W Lawn Raker.

To which this declaration relates is in conformity with the following directive(s) 98/37/EC, 89/336/EEC, 73/23/EEC & 2000/14/EC.

JOHN DRAPER Managing Director

05/01/2004



## **SPECIFICATION**

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

Stock No.	74058
Part No.	LR400
Voltage	230V/50Hz
Motor	400W
Raking Width	300mm
Raking Height	0-10mm (approx.)
RPM	2750
Collection Capacity	28Lt
Sound Power Level	92dB(A)
Vibration level	<2.5m/s <sup>2</sup>
Weight	7kg



## **GUARANTEE**

Draper Tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should the machine develop any fault, please return the complete tool to your nearest authorized warranty repair agent or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England. Telephone: (023) 8026 6355.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.



## POWER SUPPLY

#### CONNECTING YOUR MACHINE TO THE POWER SUPPLY: (230V ONLY)

To eliminate the possibility of an electric shock your machine has been fitted with a BS approved, non rewireable moulded plug and cable which incorporates a fuse, the value of which is indicated on the pin face of the plug. If the plug is marked with the symbol and the fuse needs replacing, an approved BS1362 fuse must be used of the same amp rating. If the plug is not marked, a fuse with the symbol, BS Kitemark, or both BS Kitemark, of the same amp rating should be used.

The fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is the same colour as that visible on the pin face of the plug (i.e. red). Fuse covers are available from your Draper Tools stockist.

If the fitted plug is not suitable, it should be cut off and destroyed. \*The end of the cable should now be suitably prepared and the correct type of plug fitted. See below.

#### \*WARNING:

A plug with bare flexible wires exposed is hazardous if engaged in a live power socket outlet.

#### WARNING: THIS APPLIANCE IS DOUBLE INSULATED. (230V ONLY):

The mains lead is coloured Blue - Neutral & Brown - Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue.

The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

#### **EXTENSION LEAD CHART:**

Extension lead sizes shown assure a voltage drop of not more than 5% at rated load of tool.

Ampere rating (on Name plate)	3	6	10	13
Extension cable length (Metres)	Wire Size mm <sup>2</sup>			
7.5	0.75	0.75	1.0	1.25
15	0.75	0.75	1.0	1.5
22.5	0.75	0.75	1.0	1.5
30	0.75	0.75	1.25	1.5
45	0.75	0.75	1.5	2.5

**IMPORTANT:** A residual current circuit breaker (RCD) is recommended to be used for all applications.



## GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

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#### WARNING:

Please read the following instructions carefully, failure to do so could lead to serious personal injury. When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

#### IMPORTANT:

Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

#### 1. KNOW YOUR POWER TOOL

Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

#### 2. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.

#### 3. AVOID DANGEROUS ENVIRONMENTS

Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

#### 4. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

#### 5. STORED TOOLS

When not being used, all tools should be stored in a dry, locked cupboard and out of the reach of children.

#### 6. WEAR PROPER CLOTHING

Do not wear loose clothing, neckties or jewellery (rings, wristwatches) to catch in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

#### 7. USE SAFETY GOGGLES (Head Protection)

Wear CE approved safety goggles at all times. Normal spectacles only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if application is dusty and ear protectors (plugs or muffs) during extended periods of operation.

#### 8. NOISE LEVELS

Some types of machines may have high noise levels when working. In such cases ear protection must be worn.

#### 9. VIBRATION LEVELS

Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health and Safety guide.

#### 10. DUST EXTRACTION

If your tool is fitted with a dust extraction fitting, always ensure that it is connected and being used with a dust extractor. Vacuum cleaners can be used if suitable for the material being extracted.

#### 11. PROTECT YOURSELF FROM ELECTRIC SHOCK

When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). If you are using a power tool in extreme conditions (e.g. high humidity or generating metal dust), always use an RCD (residual current device) at the power socket.

#### 12. STAY ALERT

Always watch what you are doing and use common sense. Do not operate a power tool when you are tired or under the influence of alcohol or drugs.

#### 13. WHEN WORKING OUT OF DOORS

Only use extension leads designed for that purpose.

#### 14. ACCESS TO MAINS SOCKET

If a stationary machine is fitted with a moulded plug and cable, the machine should not be positioned so that access to the mains socket is restricted.

#### 15. DISCONNECT POWER TO THE TOOL

When not in use, before servicing and when changing accessories such as cutters, etc.

#### 16. AVOID ACCIDENTAL STARTING

Make sure the switch is in the OFF position before plugging the machine into the power supply.

#### 17. NEVER LEAVE MACHINE RUNNING UNATTENDED Turn power off. Do not leave machine until it comes to a complete stop.

#### 18. DO NOT ABUSE THE CORD

Never carry the tool by the power cable or pull it from the socket. Keep the power cable away from heat, oil and sharp edges. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid hazard.

#### 19. NEVER STAND ON TOOL

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials above or near the tool, so that it is necessary to stand on the tool to reach them.

#### 20. CHECK DAMAGED PARTS

CHECK DAMAGED PARTS

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be repaired properly or replaced by an authorized service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

#### 21. KEEP GUARDS IN PLACE

And in working order.

#### 22. MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grips on the tool clean, dry and free of oil and grease.

### 23. USE RECOMMENDED ACCESSORIES

Consult the owners manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

#### 24. REMOVE ADJUSTING KEYS AND WRENCHES

Form a habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

#### 25. SECURE WORK

Use clamps or  $\,$  a vice to hold work. This frees both hands to operate the tool.

#### 26. DO NOT OVERREACH

Keep proper footing and balance at all times.

### 27. USE RIGHT TOOL

Do not force the tool or attachment to do a job for which it was not designed.  $\,$ 

#### 28. DO NOT FORCE TOOL

It will do the job better and safer at the rate for which it was designed.

#### 29. DIRECTION OF FEED

Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

#### 30. WHEN DRILLING OR SCREWING INTO WALLS

Always make sure there is no danger of hitting any hidden power cables, water or gas pipes in the wall.

#### 31. HAVE YOUR TOOL REPAIRED BY A QUALIFIED PERSON

This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

#### IMPORTANT NOTE:

Residual Risk. Although the safety instructions and operating manuals for our tools contain extensive instructions on safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!



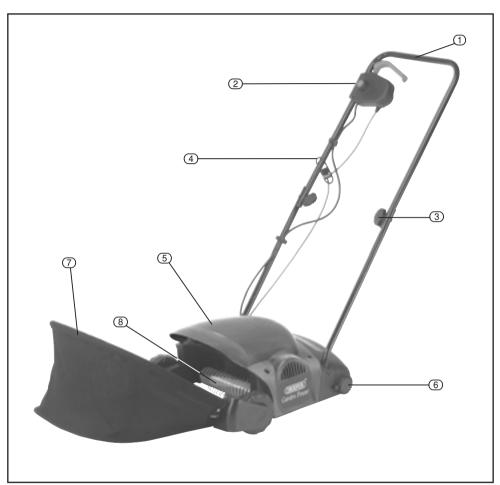
## ADDITIONAL SAFETY RULES FOR LAWN RAKERS

- Always disconnect you lawn raker from the electrical supply before cleaning, inspecting or adjusting any part of it, or if the supply cable has become damaged or entangled.
- To protect your feet, always wear sturdy shoes or boots. Freshly cut grass is damp and slippery. Do not rake barefoot or in open sandals.
- Always check that your lawn raking path is clear of all sticks, stones, wire or other debris. Contact with such debris may damage your raker and could be thrown by the drim
- 4. Wear long trousers to protect your legs from any debris left on the lawn raking path that may be thrown by
- Do not use your raker in the rain and do not allow it to get wet. Avoid using the raker on wet grass if possible.
- 6. Before using your raker visually inspect the rake drum and rotating parts for damage.
- Keep children, animals and other adults at least 6m (20ft) away from the raking area.
- 8. Start your raker carefully with feet well away from the tines
- When the motor is running the safety distance, given by the handle, must always be maintained.
- Do not leave your raker unattended whilst it is connected to the electrical supply.
- Never allow people unfamiliar with these instructions to use the raker.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- 13. Under no circumstances should you attempt to turn your raker over on to its side whilst the motor is still running, or attempt to stop the drum, always allow it to completely stop on its own.
- 14. If the drum strikes an object, release the switch lever at once, disconnect your raker from the electrical supply and when the drum is stationary, turn your raker on to its side and examine the drum and tines for damage. Repair or replace any damaged parts before restarting and operating the raker.
- Always disconnect your raker from the electrical supply before lifting or carrying.

- 16. Allow the drum to stop, if the raker has to be tilted up for transportation when crossing surfaces other than grass.
- 17. Do not tilt the raker when starting the motor. (The only exception is when the raker will not start due to longer grass, in which case do not tilt it more than absolutely necessary and lift only the part which is away from the operator)
- 18. Do not pull your lawn raker towards you or walk backwards when raking.
- 19. Walk never run.
- 20. Always rake across the face of slopes, never up and down. Exercise extreme caution when changing direction on slopes. Do not rake excessively steep slopes and always wear non-slip footwear.
- 21. Rake only in daylight.
- Never use the raker without the collection bag in place.
- 23. Switch the motor off and wait until the drum comes to a complete stop before removing the collection bag.
- 24. Switch the motor off and disconnect from the power supply, wait until the drum comes to a complete stop before unclogging the times.
- 25. Switch the motor off and disconnect the power supply, wait until the drum comes to a complete stop before making any height adjustment.
- 26. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- 27. If the raker should start to vibrate abnormally switch the motor off, wait until the drum comes to a complete stop, disconnect the power supply and check immediately for the cause. Vibration is generally a warning of trouble.
- 28. The tines on the raker drum are sharp and can lacerate (cut) skin tissue. Care should be taken when doing any repair work on or around the raker drum.
- 29. Do not use solvent or cleaning fluids to clean your raker. Use a blunt scraper to remove grass and dirt. Always disconnect from the electrical supply before cleaning.



## GETTING TO KNOW YOUR LAWN RAKER



- (1) Handle
- 2 Switch with safety button
- (3) Handle locking knobs
- (4) Cable hook

- (5) Deck
- 6 Adjustable Roller
  - (7) Collection bag
  - (8) Rake drum

**UNPACKING:** After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the lawn raker and contact the dealer from whom it was purchased.

The packaging materials (plastic bags, polystyrene etc.,) must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.



## **ASSEMBLY**

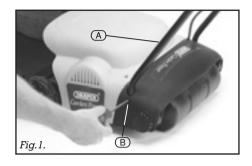
**NOTE:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

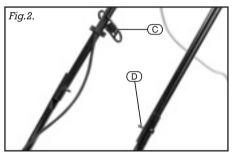
HANDLE ASSEMBLY: (Figs. 1-3.)

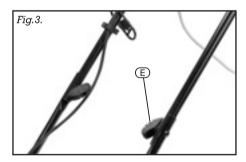
Insert the short end of each handle (A) into the rear of the raker deck so the concave side of the handle is innermost.

Once the handles are in position lock with the self tapping screw (B), however do not over tighten as this will damage the plastic.

Ensure the cable restraint  $\bigcirc$  is positioned over the handle below the switch before the two halves are assembled. Push the bolts  $\bigcirc$  through the top handle from the inside so the square shoulder engages with the hole in the handle. Make sure the motor lead is inside the handles and feed the bolt through the lower handle. Secure with the two locking knobs (E).

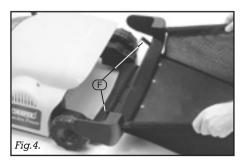








The grass collection bag comes preassembled, simply hook the brackets (F) onto the front of the lawn raker body.





## **OPERATION AND USE**

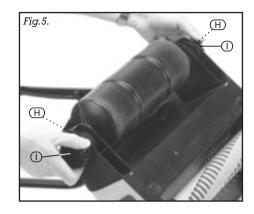
**NOTE:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

#### ROLLER HEIGHT ADJUSTMENT: (Fig. 5.)

Adjustment should be carried out on both sides simultaneously to ensure ease and accuracy.

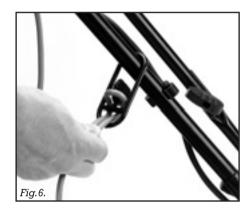
Press buttons (H) and hold. Rotate adjustment knobs (I) and release buttons (H) to lock into one of the three height positions.

To ensure an even height, please make sure that both sides are set to the same position to produce a better result.



#### CABLE RESTRAINT: (Fig.6.)

Hook the cable into the restraint to protect the lead from accidental damage.



**NOTE:** Draper Tools recommends that the Lawn Raker is used with a Residual Current Device (RCD).

#### TRIGGER SWITCH: (Fig. 7.)

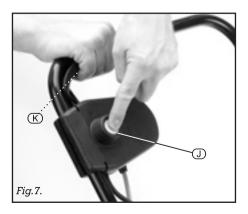
Adjust the roller height as required.

Fit the collection bag and connect the lawn raker to a suitable power supply.

The lawn raker is equipped with an electrical safety switch to protect against accidental starting.

To start the raker depress and hold the safety button (J) on the switch box. Pull the switch lever (K). The raker will start. Release button (J).

To stop the raker release the lever (K).





## **OPERATION AND USE**

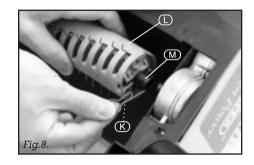
## DRUM REPLACEMENT: (Fig.8.) NOTE:

Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

Remove 'R' clip (K) and slide the rake drum (L) to the left. When the drum is clear of the drive shaft (M), move the drum out to allow it to slide out of the hub.

Insert the replacement and align the two holes to lock it onto the drive shaft with the 'R' clip.

Do not operate the lawn raker with the 'R' clip removed.





# MAINTENANCE AND TROUBLE SHOOTING

#### MAINTENANCE

Inspect the raker before each use for damaged or loose parts.

Clean the raker after each use and make sure the tines on the drum are still sharp. If the tines are blunt have them sharpened before the next time the raker is used.

Protect the tines against rusting by covering them with oil or rust inhibitor when the raker is stored for the winter.

FAULT	REMEDY	
Raker will not start	Check power supply.     Check the plug fuse and replace if necessary.     With the raker disconnected from the power supply check the drum rotates. If the drum does not move freely, contact a service repair agent.	
Raker vibrates in use	Stop using immediately.  Disconnect the raker from the power supply, wait until the drum has stopped and then check to see if the drum bolts are loose, tighten if necessary. If the drum bolts are already tight contact a service repair agent.	
Raker does not pick up debris	<ol> <li>Collection bag is full. Empty bag.</li> <li>Grass is wet. Wait until the grass has dried.</li> <li>The tines are clogged with grass cuttings, etc.         Disconnect the raker from the power supply and clean the drum.     </li> <li>Damaged tines. Replace as required.</li> </ol>	



## **OPTIONAL ACCESSORIES**

Complete Drum & Tines Stock No.74902 Part No.YAGP01



# 400W Lawn Raker & 1300W Lawn Scarifier

Stock Nos.74058 & 74059 Part Nos.LR400 & LAS1300

**ADDENDUM** 

07/2007

#### - IMPORTANT:

This sheet contains information that has changed since the instruction manuals were printed. Please read this sheet carefully **before** using the instruction manual or operating the product.

This document serves as an addendum to 74058 LR400 400W Lawn Raker and 74059 LAS1300 1300W Lawn Scarifier instruction manuals. It contains information relating to the power cable type and design supplied with these products.

The mains supply power cable currently is a BS moulded plug design with 12M of cable terminating with a euro plug. Connection between the cable and machine must be made prior to connecting the BS moulded plug in to the residual current device (RCD). Ensure the cable from the machine is held in place approx. 200mm after the euro connection over the cable hook provided. This helps to prevent inadvertent disconnection of the euro connector during use.

#### - NOTE:

The change of cable design does not effect the power supply information in the instruction manual.



## THE TOOL COMPANY

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YOUR DRAPER STOCKIST

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