



DRAPER[®]

230V/110V

CEMENT MIXERS

01099, 01100, 01102



130
L

160
L

CE

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. 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 the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR: 230V/110V Cement Mixers

Stock No's: 01099, 01100, 01102

Part No's: CM170A, CM170A-110, CH140A.

1.2 REVISIONS:

Date first published December 2017.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://drapertools.com/manuals>

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! – Information that draws attention to the risk of injury or death.

CAUTION! – Information that draws attention to the risk of damage to the product or surroundings.

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In all cases this copyright notice must remain intact.

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DECLARATION OF CONFORMITY ENCLOSED

3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or:

Product Helpline (023) 8049 4344.

A proof of purchase must be provided.

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 period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

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 guarantee period.

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

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

Electric concrete mixers for small to medium building projects. Light and portable and offering a good working height.

4.2 SPECIFICATION

Stock no.	01099	01100	01102
Part no.	CM170A	CM170_110	CM140A
Voltage	230V~50Hz	110V/A.C	230V~50Hz
Drum capacity	160L	160L	130L
Drum opening	360mm	360mm	360mm
DrumSpeed	30rpm	30rpm	30rpm
Sound level.....	60.83dB(A)	60.83dB(A).....	60.83dB(A).....
Sound power.....	80.83dB(A)	80.83dB(A).....	80.83dB(A).....
Weight	64kg	64kg	64kg

4.3 HANDLING AND STORAGE



Warning!

- Wear safety glasses, ear defenders and protective footwear.
- * *Continuous A-Weighted Sound Pressure Level at the workstation in accordance to prEN ISO 15744:1999 and declared according to EN ISO 4871.*
- ** *A-Weighted Sound Power Level in accordance to prEN ISO 15744:1999 and declared according to EN ISO 4871.*

5. HEALTH AND SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE



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.

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.

Keep work area clean: Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.

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.

Keep children away: All visitors should be kept a safe distance from work area.

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

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.

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.

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

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

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.

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.

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.

When working out of doors: Only use extension leads designed for that purpose.

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.

Disconnect power to the tool: When not in use, before servicing and when changing accessories such as cutters, etc.

5. HEALTH AND SAFETY INFORMATION

Avoid accidental starting: Make sure the switch is in the OFF position before plugging the machine into the power supply.

Never leave machine running unattended: Turn power off. Do not leave machine until it comes to a complete stop.

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.

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.

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.

Keep guards in place: And in working order.

Maintain tools with care: Keep tool 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.

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.

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.

Do not overreach: Keep proper footing and balance at all times.

Use right tool: Do not force the tool or attachment to do a job for which it was not designed.

Do Not Force Tool: It will do the job better and safer at the rate for which it was designed.

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.

5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR CEMENT MIXERS

Before starting the mixer:

- Check all machine guards are fitted correctly and in working operation.
- Do not up-end the mixer onto the mouth of the drum whilst the drum is operating.
- Protect any visible power cables against accidental damage, or as potential trip hazards.
- Draper Tools recommend the use of Residual Current Devices on 230V power supplies and with 110V transformer units.

When operating the mixer:

- Ensure unauthorised bystanders and children are kept clear of the mixer when in operation.
- Ensure area around the mixer is kept clear of obstructions that could cause injury.
- Ensure the mixer is placed on level ground before use.

5. HEALTH AND SAFETY INFORMATION

- Ensure familiarity with controls before operating the mixer.
- Replace any worn/damaged safety labelling/information decals.
- Ensure the mixer drum is turning whilst emptying the drum.
- Always ensure the power supply is disconnected before leaving the mixer unattended.
- Do not use the mixer as a wheel barrow.

5.3 RESIDUAL RISK



Warning!

- Although the safety instructions and operating manuals for our tools contain extensive instructions of 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!

5.4 CONNECTION TO THE POWER SUPPLY

Make sure the power supply information on the cement mixer's rating plate is compatible with the power supply you intend to connect it to.

230V Cement Mixer (Stock No's.01099, 01102)

This cement mixer comes supplied with a UK standard 3 pin plug fitted. It is designed for connection to a domestic power supply rated at 230V AC.

If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instruction supplied with the extension lead.

Apart from replacing the fuse in the plug, no other electrical work is recommended on this concrete mixer.

110V Cement Mixer (Stock No.01100)

This cement mixer should be connected to a 110V power supply using the appropriate 16amp plug.

CAUTION: Risk of electric shock. Do not open.

This appliance is supplied with a moulded 3 pin mains plug for your safety. The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS1362 and ASTA or BS Kite marked.



The fuse cover is removable with a small plain slot screwdriver. Ensure the fuse cover is replaced before attempting to connect the plug to an electrical outlet. If the cover is missing, a replacement must be obtained or the plug replaced with a suitable type.

If a replacement plug is to be fitted this must be carried out by a qualified electrician.

The damaged or incomplete plug, when cut from the cable shall be disabled to prevent connection to a live electrical outlet.

This appliance is Class I† and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.

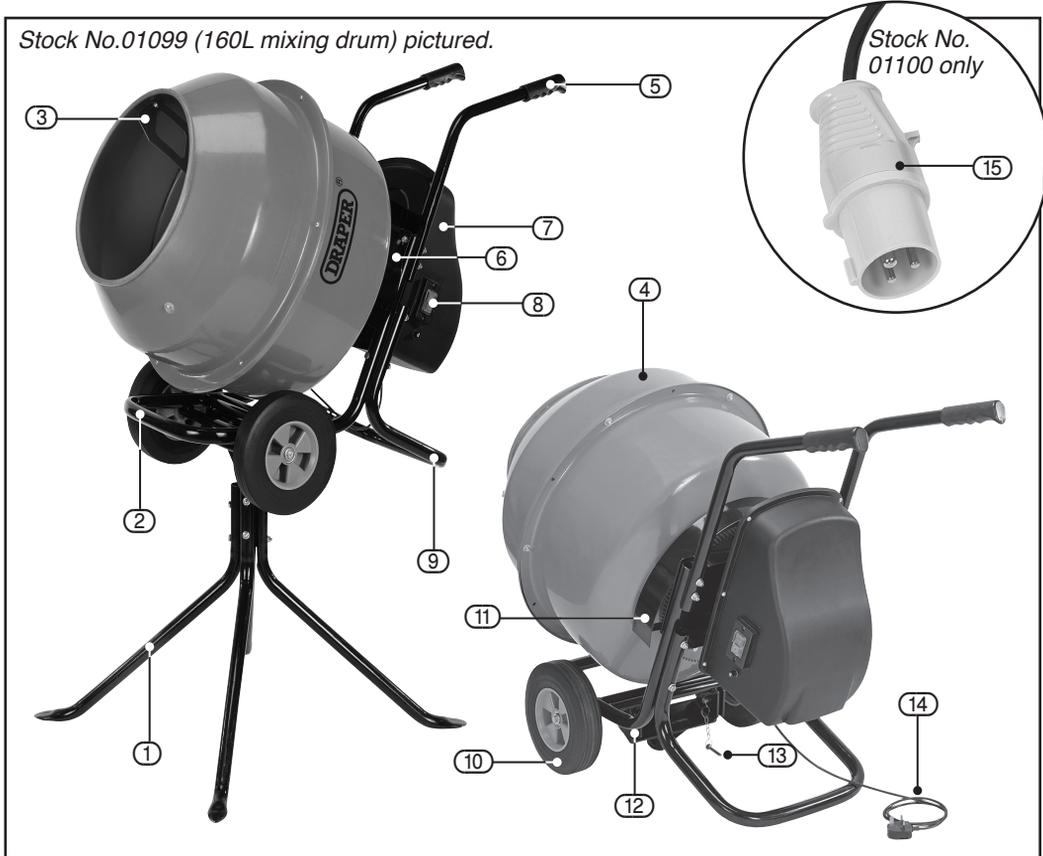
If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instruction supplied with the extension lead.

†Earthed \perp : This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of a failure of the basic insulation.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION

Stock No.01099 (160L mixing drum) pictured.



- ① Support stand.
- ② Front support.
- ③ Mixing blades.
- ④ 130L or 160L mixing drum.
- ⑤ Handle assembly.
- ⑥ Panel board.
- ⑦ Motor housing.
- ⑧ Switch ON/OFF.
- ⑨ Back support.
- ⑩ Wheels.
- ⑪ Drive gear shield.
- ⑫ Pivot bracket.
- ⑬ Safety pin.
- ⑭ 230V Mains lead and plug (230V).
- ⑮ 110V Mains lead and plug (Stock No.01100 only).

7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the product.

The packaging material should be retained at least during the guarantee period: in case the product needs to be returned for repair.



Warning!

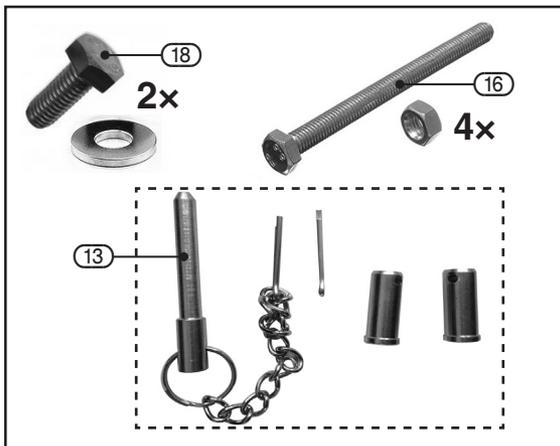
- Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.
- If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

7.2 WHAT'S IN THE BOX – FIG. 1

The mixer is supplied part assembled, as shown in Fig.1. Further construction utilising other supplementary parts and fixings provided is required and is described in the following sections of this instruction booklet.

Supplied fittings:

- (13) Pivot bracket pins/locking fixings.
- (16) M8 × 100mm bolts/nuts.
- (18) M8 × 15mm bolt and washer.



Handles not shown.



FIG.1

8. ASSEMBLY



Warning!

- Failure to follow these instructions may lead to serious injury and could cause premature malfunction of the equipment, which is not covered by the guarantee.

8.1 SUPPORT STAND – FIGS. 2 – 3

- Sort the 4 support legs (1) into two pairs with matching drill holes.

- Attach one pair of legs to the fixing tube (1.1) on opposite sides, fix with the M8 × 100mm bolts/nuts (16), then fix remaining legs.

Note: The fixing holes are at the same distance but different heights, assemble finger tight, when happy that the legs are in the correct sides then finish tightening with a pair of spanners (*not supplied*).

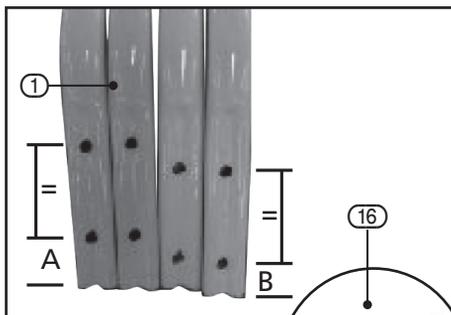


FIG. 2

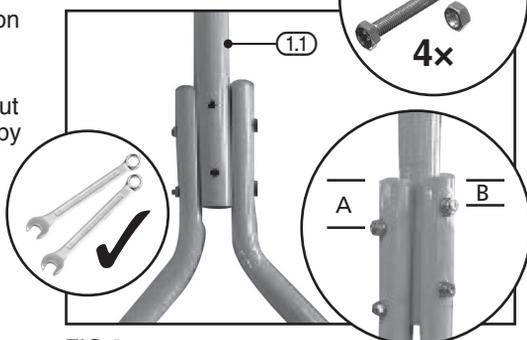


FIG. 3

8.2 ADD PIVOT BRACKET – FIG. 4

Slide the tilt bracket (12) down onto the fixing tube.

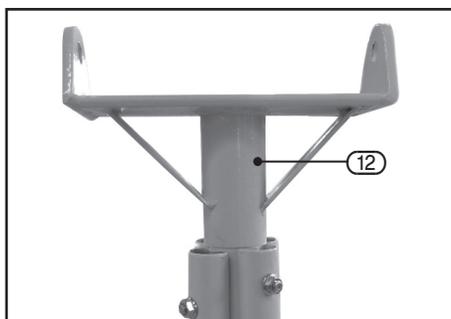


FIG. 4

8. ASSEMBLY

8.3 FRAME ASSEMBLY – FIG.5

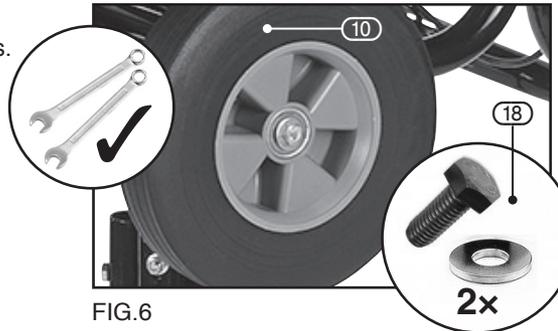
For transportation and delivery purposes, the handle part of the frame section (5) needs to be fitted before use (see Fig.5).

- Re-fit the handle frame to the back support frame using the existing 4 × M8 × 75mm bolts and nuts (17).
- Fasten to finger tightness, then finish tightening with a pair of spanners (*not supplied*).



8.4 INSTALLING WHEELS – FIG.6

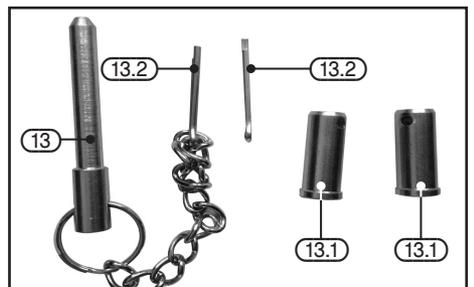
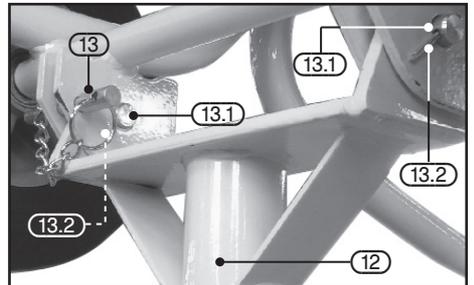
- Slide each of the wheels (10) over the axles.
- Using a spanner (*not supplied*) fasten each wheel in place with a washer and M8 × 15mm bolt (18).



8.5 ATTACH PIVOT BRACKET

– FIGS.7 – 8

- Remove the pivot bracket (12) from the stand and offer it up to the axle bracket on the cement mixer.
- Attach with pivot pins (13.1), then slide split pins (13.2) through to secure the pivot bracket in place.
- The safety pin (13) is inserted through the hole in the bracket to prevent the drum falling forward.



8. ASSEMBLY

8.6 ATTACH SUPPORT STAND AND RAISE MIXER

– FIGS. 9 – 12

Note: The tilt mechanism needs to be locked in position with the chained safety pin (13) before attempting to lift the cement mixer.

- Tip the cement mixer over onto its face.
- Attach the assembled support stand (1) into the pivot bracket (12).
- Stand in front of mixer, holding the handles raise the mixer, ensure that the support feet do not slip on surface.

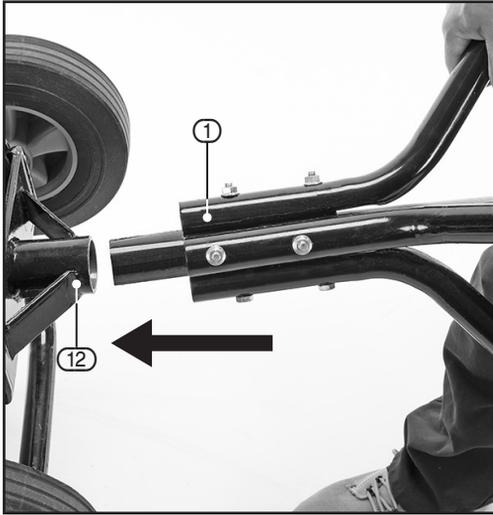


FIG.9



FIG.10



FIG.11



FIG.12

9. OPERATION AND USE



Warning!

- Wear safety glasses, ear defenders and protective footwear.

9.1 WORKING POSITIONS – FIGS. 13 – 14

The safety pin (13) on the chain is used to prevent the drum falling forward from its mixing position (A).

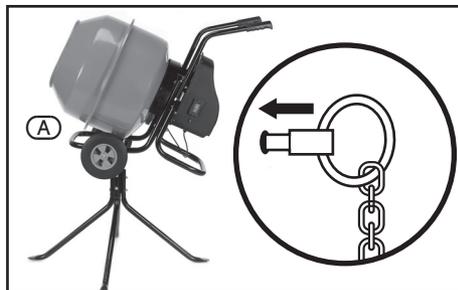


FIG.13

- Remove the pin to empty the drum (B).

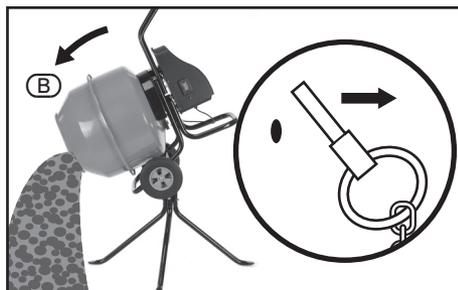


FIG.14

9.2 POWER SUPPLY – FIGS. 15 – 16

Before you connect the equipment to the power supply make sure that the data on the rating plate is identical to the supply voltage.



Warning!

- Always remove the power plug before making adjustments to the equipment.
- Draper Tools recommend the use of Residual Current Devices on 230V power supplies and with 110V transformer units.

9. OPERATION AND USE

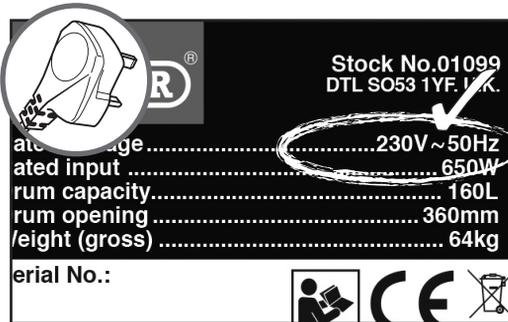


FIG.15 (Example 230V rating label).

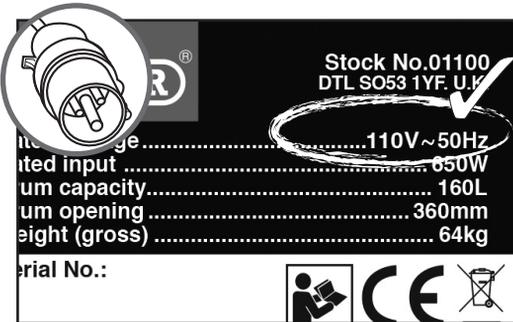


FIG.16 (Example 110V rating label).

9.3 SWITCHING ON – FIG. 17

To switch ON push the green button (8.1), to switch OFF push the red button (8.2). See 'Electrical Safety' for more details of the switch.

The most important thing to remember when using the mixer is that the drum must be rotating **before** loading and should continue to rotate until unloaded.

Never switch the mixer **On** with a load.

- Add half the water needed for the mix into the rotating drum.
- Add the aggregate followed by the cement, then pour in the remaining water.
- Finally, add the sand and leave the mixer to mix.

Once the mix is ready, remove the safety pin (13), keep the drum turning while you tip the drum forward to discharge its contents.

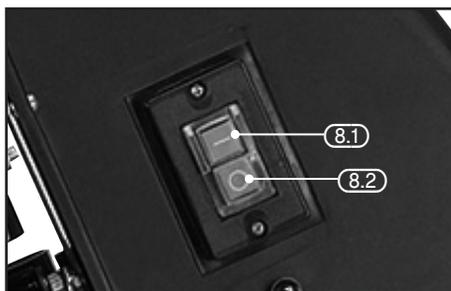


FIG.17



Warning!

- Be careful, use both hands on the handles and be prepared for the transfer of weight as the mix moves to the end of the drum.

9. OPERATION AND USE

9.5 MIXING APPLICATION GUIDE

Application	Quantity ratios		
	Cement	Sand	Aggregate
Basic concreting	1	2	4
Foundation work	1	3	6
Mass rough concreting	1	4	8
Concreting watertight flooring, tanks, pits etc.	1	1.5	3

9.6 CLEANING – FIG. 18

- Once emptied, return the mixer to the upright position.
- At this point it is a good idea to pour the water for the next mix, into the drum. This will help rinse the drum as you use/lay the mixed load.
- Empty out any remaining mix and wash out the rotating drum with plenty of clean water.
- If necessary, add gravel to remove stubborn residue.
- Do not throw bricks into the mixer for cleaning purposes.



FIG.18

10. DISPOSAL



10.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

11. EXPLANATION OF SYMBOLS

11.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Single value noise marking.
(Maximum declared A-Weighted sound power level in decibels).



Wear safety glasses.



Wear ear defenders.



Wear protective gloves.



Wear protective footwear.



Do not abandon into the environment.



Keep out of the reach of children.



Warning!



Class I device.
(Earthed).



WEEE
Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish.

CONTACTS

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E-mail: sales@drapertools.com

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

KCCH1217

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