

# Champion<sup>®</sup>



## CONCRETE MIXER

Models CCM125C & CCM126

Part Nos. 3400840 & 3400842

## OPERATING & MAINTENANCE INSTRUCTIONS



1207

Thank you for purchasing this CLARKE Concrete Mixer.  
Please read this leaflet thoroughly and follow the instructions carefully, in doing so you will ensure the safety of yourself and that of others around you, and you can look forward to the product giving you long and satisfactory service.

## GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as a proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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**When disposing of this product, do not dispose of with general waste. It must be disposed of according to the laws governing Waste Electrical and Electronic equipment, at a recognised disposal facility.**

## GENERAL SAFETY RULES

### WARNING:

**As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator or damage to property may result.**

1. READ AND BECOME FAMILIAR with the entire operating manual. Learn the machine's applications and limitations as well as the specific potential hazards peculiar to it.
2. CHECK DAMAGED PARTS. Before further use of the machine, a guard or other part that is damaged should be checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of parts, mounting, or any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
3. DISCONNECT MACHINE BEFORE SERVICING and when changing accessories such as blades, bits, cutters.
4. KEEP GUARDS in place and in working order.
5. REMOVE ADJUSTING KEYS/SPANNERS etc. Form habit of checking to see that keys and spanners etc. are removed from machine before turning it on.
6. DRUGS, ALCOHOL, MEDICATION. Do not operate the machine whilst under the influence of drugs, alcohol or any medication.
7. NEVER STAND ON THE MACHINE. Injury could occur from a fall.
8. NEVER LEAVE MACHINE RUNNING UNATTENDED. Turn power OFF. Don't leave machine until it comes to a complete stop.
9. ALWAYS REMOVE PLUG from electrical outlet when adjusting, changing parts or working on the machine.
10. ENSURE THE ELECTRIC CABLE is fully protected and there is no danger of damage from equipment or materials. Always Inspect the cable before use, and replace if any damage is apparent.
11. Keep your hands well clear of the rotating drum at all times. NEVER put your hands inside the drum when the machine is switched ON.
12. DO NOT wear jewellery or loose clothing that could be snagged by the rotating drum.
13. **IMPORTANT: DO NOT LOAD THE DRUM WHEN THE MACHINE IS SWITCHED OFF.** Always switch on and ensure the drum is rotating.

## ELECTRICAL CONNECTIONS

### CCM125C

Connect the mains lead to a standard 230 Volt (50Hz) electrical supply through an approved BS1363, 13amp plug or a suitably fused isolator switch.

### CCM126

Connect the mains lead to a suitable 110 Volt (50Hz) electrical supply through an approved plug or a suitably fused isolator switch. If using a portable 110 Volt transformer make sure it has a rated capacity sufficient to take the load of the Motor - See Data Plate.

### Both models:


We recommend that this machine is connected to the mains supply through a Residual Current Device (RCD).

 **WARNING! THIS APPLIANCE MUST BE EARTHED**

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

As the colours of the flexible cord of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect GREEN & YELLOW cord to terminal marked with a letter "E" or Earth symbol  or coloured GREEN or GREEN & YELLOW.
- Connect BROWN cord to terminal marked with a letter 'L' or coloured RED
- Connect BLUE cord to terminal marked with a letter 'N' or coloured BLACK

### CCM125C

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewirable) please note:

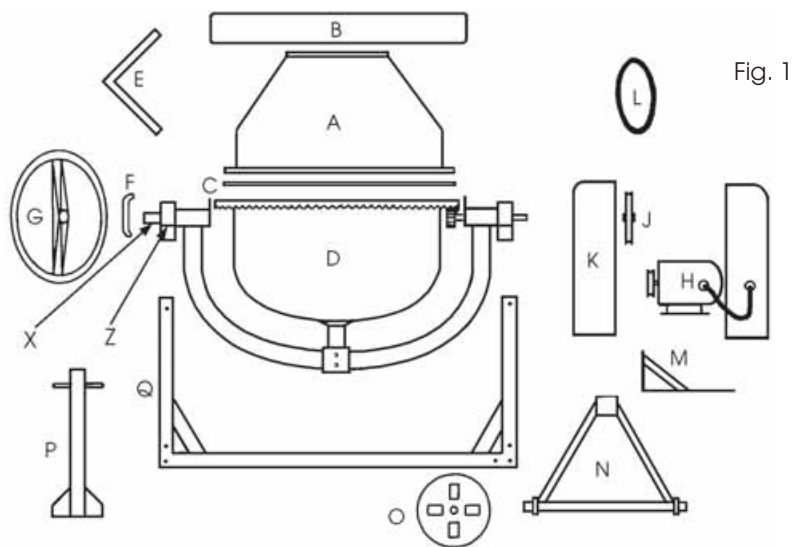
1. The plug must be thrown away if cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.
5. The fuse in the plug must be replaced with one of the same rating (13amps) and this replacement must be ASTA approved to BS1362.

***If in doubt, consult a qualified electrician....DO NOT attempt repairs yourself***

## UNPACKING & PRE-ASSEMBLY CHECK

Remove all components from the packing case and lay them out neatly so that they may be identified and checked for any possible damage during transit.

Should any component be found to be damaged, please contact your Clarke dealer immediately.



Check off the components against the following list, and referring to fig 1.

- A. Upper Drum Section
- B. Drum Collar (2 pcs)
- C. Rubber Sealing Ring
- D. Bottom Drum Assembly
- E. Mixing Blades (2 pcs)
- F. Locking Plate
- G. Hand Wheel
- H. Motor c/w End Cover

- J. Pulley
- K. Motor Cover
- L. Pulley Belt
- M. Motor Mounting Bracket
- N. Axle Assembly
- O. Wheel (2 pcs)
- P. Leg (c/w handle)
- Q. Frame

Also included in the packing case is a 6mm x 345mm steel rod (used for pulley alignment), and a bag containing all nuts, bolts, washers and fixings. (Please refer to the parts list on page 15 for full list).

## ASSEMBLY

- NOTE:** 1. Letters in brackets refer to fig.1  
2. Unless otherwise stated, all nuts, bolts, washers and fixings are supplied.

### IMPORTANT

*For maximum safety and to ensure the adjustments are carried out correctly, assistance should be employed during the assembly operation.*

### 1. The Stand

With the frame (Q) lying on its side, attach the Leg (P) in the manner shown in fig.2, using two M8 x 60 bolts, together with nut, spring and flat washers.

Turn the frame over and attach the axle assembly (N) in the same manner (see fig.2). Slide a wheel on to each stub axle, followed by a large flat washer and locate them using the split pins.

Ensure all nuts are tight before righting the stand.

Fig. 2



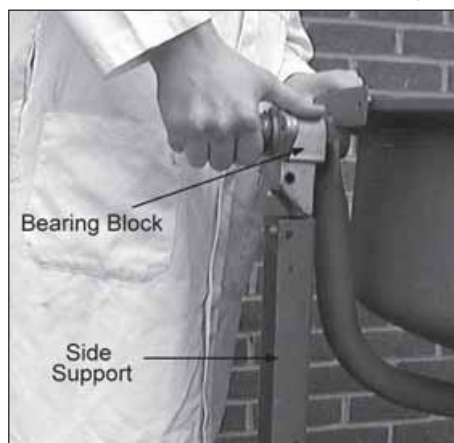
### 2. The Bottom Drum

Carefully, and with assistance, lower the bottom drum assembly (D), on to the side supports of the stand as shown in fig. 3, so that the bearing blocks (Z), slot into the channels provided by the side supports.

The large diameter shaft (X) should be at the LEG end of the stand.

At each side, line up the holes in the side support with those in the bearing block and enter an M8 x 60 bolt with flat washer and secure using a nut and spring washer.

Fig.3

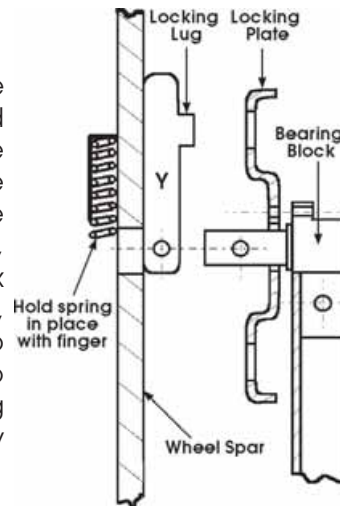


Slide the Locking Plate (F), over the large diameter shaft, at the leg end of the frame, with the rim facing inwards, as shown in Fig.4. (Note that the hole in the Plate is 'notched'. This is to allow the plate to slide over the lugs of the circlip on the shaft). Secure with two M8 x 25 bolts, each with a nut, flat and spring washer.

Fig. 4

### 3. The Hand Wheel

Insert the spring, into its holder, adjacent to the hole in the centre of the wheel spar, and holding it in place with slight upwards pressure of a finger, slide the wheel over the large diameter shaft so that the shaft retains the spring, and the holes in the bracket Y, (Fig. 4), line up with the hole drilled in Insert the M10 x 65mm bolt with flat washer at the bolt head, and screw on two nuts. Screw the first nut up against the bracket firmly, but not so tightly so as to prevent the handwheel from pivoting about the bolt. Lock the nut in this position by screwing up the second nut, tightly.



**NOTE: The handwheel must be allowed to pivot about the bolt so that the lugs on the bracket (Y) can be engaged or disengaged from the slots in the Locking Plate.**

### 4. The Mixing Blades

Bolt the blades in place loosely as shown in fig 5,

Two holes are provided at the base of the drum into which a M6 x 20 bolt may be inserted from the outside. These bolts are provided with a flat and leather washer. The leather washer should be up against the drum. A spring washer and a nut should be threaded on loosely on the inside.

**NOTE: If you have difficulty in correctly positioning the Mixing Blades, it is helpful if you temporarily mount the Upper Drum on top of the Lower Drum, turning it so that the holes for the Upper Blade mounting and those in the Upper Drum, line up.**

Once you are satisfied that the blades are correctly positioned, mark the position of the

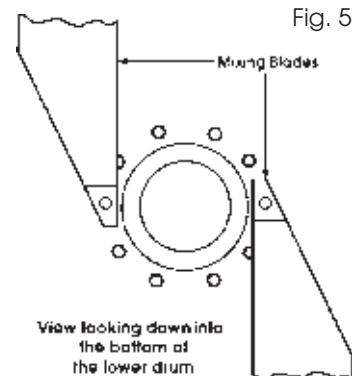


Fig. 5

Upper Drum in relation to the Lower Drum with chalk or something similar, then remove the Upper Drum and loosely bolt on the Mixing Blades as described above.

## 5. The Upper Drum

Apply a film of impact adhesive (not supplied) to the rim of the drum, according to the manufacturers instructions, and ensuring the rim is perfectly clean and flat. Position the rubber seal on to the rim ensuring the holes in the seal and those in the rim of the drum line up, then apply another film of adhesive to the upper surface of the seal.

With assistance, lower the Upper Drum so that it is over the rim of the Lower Drum, but not seated. Rotate it so that the holes in the rim line up, and at the same time, the holes in the upper mountings of the Mixing Blades, line up with those in the drum. When correctly lined up, seat the Upper Drum firmly on to the rim of the Lower Drum.

**NOTE: If you previously marked the position of the Upper Drum, in relation to the Lower Drum, it is a simple matter to realign them.**

Insert a M6 x 16 cross headed screw into each of the holes in the rim together with a flat washer, and secure from below with a spring washer and nut, ensuring the tightening process is carried out progressively.

Secure the Mixing Blades to the Upper Drum by inserting the domed headed bolt, with leather washer, through the hole in the drum, from the outside, ensuring the spur on the underside of the head of the bolt engages in the notch in the hole in the drum. The leather washer should be positioned so that it bears against the drum.

Secure the mixing blade on the inside using a flat washer, spring washer and nut.

Finally, ensure top and bottom Mixing Blade mountings are tight.

## 6. The Motor and Motor Covers

- 6.1 Bolt the Inner Cover (K) to the Bearing Block (Z) using two M8 x 25mm bolts, with flat washers at the bolt heads, within the Inner Cover, and spring washers with nuts to the rear of the Bearing Block. Leave the nuts loose at this stage.
- 6.2 Bolt on the Motor Support Plate (M), as shown in Fig. 6, by inserting four M6 x 65mm bolts, with flat washers, through the holes in the Support Plate (M), the slotted holes in the Inner Cover (K), and the Spacer, which is inserted between the back of the Inner Cover, and the Frame Support (see fig. 6).



The bolts then extend through the Securing Plate, which locates behind the Frame Support, each bolt being secured using a spring washer and nut. The nuts should be left loose at this stage.

**NOTE: The Spacer and Securing Plate are of similar construction, however, the LARGER of the two should be used as the SPACER.**

When all four bolts are fitted, centralise the Inner Cover (K) about its mountings, then fully tighten the two bolts securing it to the Bearing Block (Z).

- 6.3 Slide the Pulley (J) on to the shaft, having lined up the key and keyway, ensuring the grub screw in the hub of the pulley faces outwards (see fig 7). It may be necessary to drive the pulley on to the shaft using a soft faced hammer, until the central boss is roughly flush with the end of the shaft. Lock the pulley in this position by tightening the grub screw.

- 6.4 Manoeuvre the Motor Support Plate (M) upwards as far as possible, and secure this position temporarily, by nipping up two of the four nuts securing it, (do not fully tighten them) with the Support Plate judged to be as near parallel to the ground as possible.

- 6.5 Lower the Motor on to the Plate, and enter the four M8 x 25mm bolts through the slotted holes in the Motor Mounting Bracket and those in the Motor Support Plate, ensuring flat washers are in place against the bolt head. Thread on a flat washer, followed by a spring washer and nut to each of the bolts, from below, leaving the nuts loose.

**NOTE: The Outer Cover, which is attached to the Motor by the power cable, should be suitably supported during this operation.**

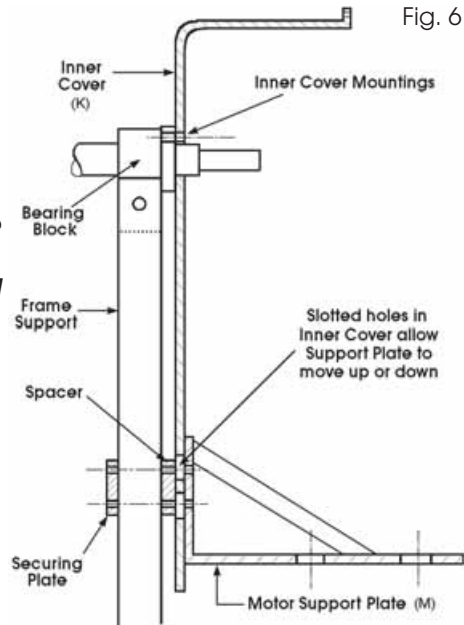


Fig. 6

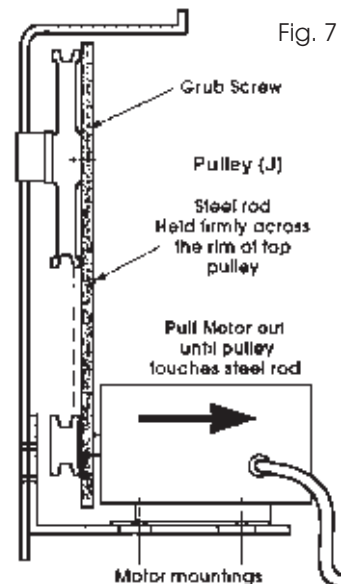


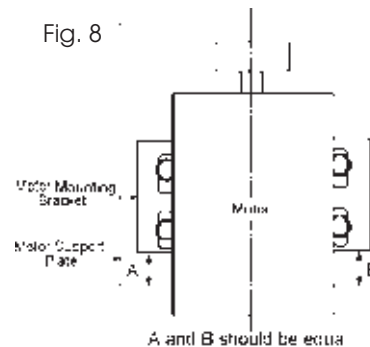
Fig. 7

- 6.6 Push the motor IN slightly and then slide the 6 x 345mm steel rod so that it rests as shown in Fig. 7, firmly across the rim of the upper pulley and in the gap between the motor pulley and the motor housing. The motor pulley should not be in contact with the rod.

Holding the steel rod firmly across the rim of the top pulley, and as near to the centre of the pulley as possible, gently pull the motor outwards again until the back of the motor pulley just comes into contact with it, (the rod), with the rear edge of the Motor as near parallel to the edge of the Motor Support Plate as possible.

(Measure the distance between the back of the Motor Mounting Bracket and the back edge of the Motor Support Plate as shown in fig 8, to ensure the motor is square). Secure the Motor in this position by fully tightening the four mounting bolt nuts.

This adjustment ensures that the two pulleys are in line and it is important that time is taken to ensure it is correct, otherwise premature failure of the drive belt could occur.



- 6.7 Slacken off the two nuts, previously nipped up, which secure the Motor Mounting Plate, then push down on the motor so that tension is applied to the belt. Tension is correct when there is approximately 1/2" movement at the centre of the belt run when using moderate thumb pressure.

The Support Plate should be as near parallel to the ground as possible when making this adjustment.

When satisfied, secure the Motor Support Plate by progressively tightening the nuts behind the Securing Plate, ensuring the Support Plate remains perfectly parallel to the ground.

**NOTE: It is important that the belt tension and pulley alignment are correct, to ensure satisfactory operation of the machine and to prevent excessive wear and premature failure of the drive belt.**

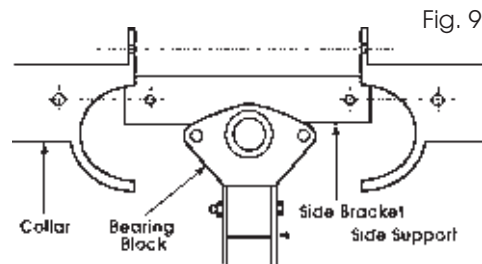
- 6.8 To attach the Outer Cover to the Inner Cover it is first of all necessary to attach the chain, using a cross headed screw, with washer and nut, to the hole provided in the Inner and outer Cover. The Outer Cover is then secured to the Inner Cover using similar cross headed screws with nuts and washers .

**NOTE: The chain is a safety feature to prevent undue strain on the power cable when the outer cover is removed, and it is important that it is attached at all times.**

## 7. Drum Collar

Before the collar is attached, it is strongly recommended that a layer of grease (not supplied) be applied to the underside of the serrated rim of the lower drum.

Attach the Drum Collar in the manner shown in Fig.9. The two halves are bolted together using three M6 x 20mm bolts with a flat washer, spring washer and nut, and each half is secured to a bracket at either side with a single M6 x 10mm bolt with a flat and spring washer.



**NOTE: The Drum Collar is a Safety Feature, and must ALWAYS be in place. DO NOT operate the machine with the Collar removed.**

## MAINTENANCE

### Before each use

Inspect the power cable and ensure it is completely free from damage. Ensure also that it is not in danger of being damaged by vehicles, equipment or other operations taking place in the vicinity.

### Periodically

Inject a few drops of light oil into the oil points, located on top of the Bearing Blocks and rotate the drum to ensure distribution of oil within the bearing surface.

Inspect the paintwork and remove any rust that may be apparent before touching up where necessary, with a rust resistant paint.

It is recommended that the Collar be removed and grease smeared on the serrated underside of the lower rim. Ensure the collar is replaced correctly.

### After each use.

It is strongly recommended that the machine is hosed down thoroughly with clean water, taking care to prevent water from entering the Motor housing by wrapping a polythene sheet or bag over it during the cleaning process.

Turn the drum so that it is face down to allow all water to drain off. Protect it from the elements by covering with a tarpaulin. This is particularly important if the machine is to be stored for a period of time.

## Storage

It is possible to fold the leg and axle assy. beneath the frame by removing their upper mounting bolts, and slackening off the lower mounting bolts so that the leg, or axle assy pivots beneath the frame.

## SPECIFICATIONS

Part Number - CCM125C .....	3400840.
Part Number - CCM126 .....	3400842.
Motor - CCM125C .....	230Volt, 50 Hz, 1phase:
Motor - CCM126 .....	110 Volt, 50 Hz, 1phase:
Motor Power Rating - CCM125C .....	1/3HP:
Motor Power Rating - CCM126 .....	1/3HP:
Full Load Current - CCM125C .....	1.64Amps:
Full Load Current - CCM126 .....	4.2Amps:
Mixing Capacity CCM125C .....	125 litres:
Mixing Capacity CCM126 .....	125 litres.
Drum Speed .....	31RPM:
Dimensions - CCM125C .....	1180x710x1240mm.
Dimensions - CCM126 .....	1220x710x1260mm.
Net Weight .....	63kg:
Sound Power Level - CCM125C .....	91.0dB(LWA).
Sound Power Level - CCM126 .....	92.2dB(LWA).

## SPARE PARTS & SERVICE

Please contact your nearest dealer, or  
CLARKE International, on one of the following numbers.

**PARTS & SERVICE TEL: 020 8988 7400**

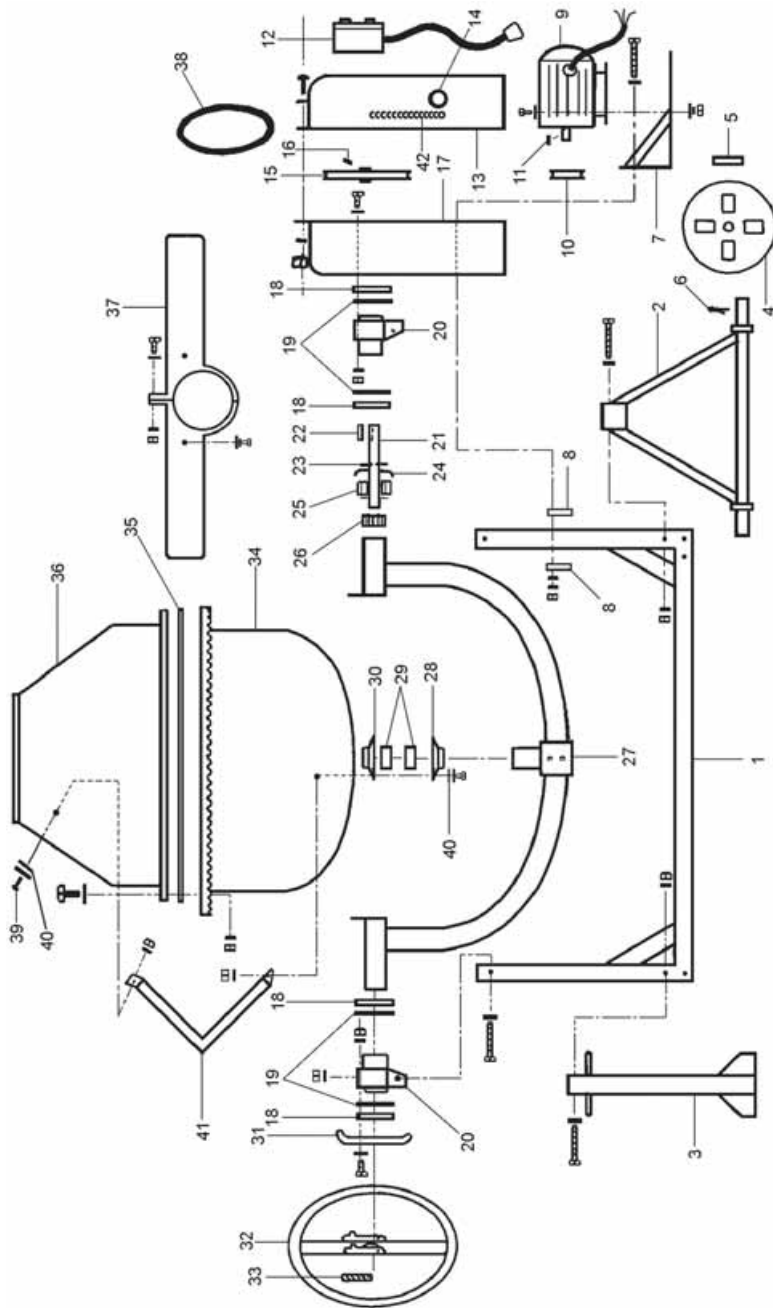
**PARTS & SERVICE FAX: 020 8558 3622**

**or e-mail as follows:**

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

# PARTS DIAGRAM



## SPARE PARTS LIST

No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
1	Frame Assy	1	SD0001	22	Key	1	SD0022
2	Axle Assy	1	SD0002	23	Circlip	1	SD0023
3	Leg	1	SD0003	24	End Cap	1	SD0024
4	Wheel	4	SD0004	25	Bearing Set	1	SD0025
5	Flat Washer	2	SD0005	26	Pinion	1	SD0026
6	Split pin	2	SD0006	27	Yolk Assy	1	SD0027
7	Motor Support Plate	1	SD0007	28	Bearing Plate Lower	1	SD0028
8	Spacer/Plate 6mm	2	SD0008	29	Bearing Set	1	SD00290
9	Motor Assy - 230V	1	SD0009	30	Bearing Plate Upper	1	SD0030
9	Motor Assy - 110V	1	SD0009A	31	Locking Plate	1	SD0031
10	Pulley, Motor	1	SD0010	32	Hand Wheel	1	SD0032
11	Key	1	SD0010	33	Spring	1	SD0033
12	Switch Assy	1	SD0012	34	Lower Drum Assy	1	SD0034
13	Outer Cover	1	SD0013	35	Sealing Ring	1	SD0035
14	Cable Grommet	1	SD0014	36	Upper Drum	1	SD0036
15	Pulley, Drive	1	SD0015	37	Collar Assy	1	SD0037
16	Grub Screw	1	SD0016	38	Drive Belt	1	SD0038
17	Inner Cover	1	SD0017	39	Mushroom Hd Bolt	2	SD0039
18	Circlip	4	SD0018	40	Leather Washer	4	SD0040
19	Flat Washer	4	SD0019	41	Mixing Blade	2	SD0041
20	Bearing Block	2	SD0020	42	Chain	1	SD0042
21	Drive Shaft	1	SD0021				

The following items are the nuts bolts and washers packed separately and which may be locally procured from any Hardware or DIY store, or from your CLARKE dealer quoting the part numbers given.

a.	M5 x 10 Slot Rd Hd	4	3044701	j.	M8 Nut	14	3040601
b.	M6 x 20 Hex Bolt	6	3044501	k.	M10 Nut	1	3040602
c.	M6 x 16 Cross Hd	6	3044705	l.	5mm Flat Washer	4	3040574
d.	M6 x 65 Hex Bolt	4	3044702	m.	6mm Flat Washer	24	3040575
e.	M8 x 25 Hex Bolt	8	7101107	n.	8mm Flat Washer	18	3040576
f.	M8 x 60 Hex Bolt	6	3044703	o.	10mm Flat Washer	1	3044577
g.	M10 x 65 Hex Bolt	1	3044704	p.	5mm Spr. Washer	4	3040595
h.	M5 Nut	4	3040608	q.	6mm Spr. Washer	22	3040581
i.	M6 Nut	16	3040600	r.	8mm Spr. Washer	14	3040582

# Clarke<sup>®</sup> INTERNATIONAL

This is an important document, and should be retained.



## DECLARATION OF CONFORMITY


We declare that this product complies to the following standards/directives:

- 98/37/EEC
- 2000/14/EC
- 73/23/EEC
- 89/336/EEC

Guaranteed Sound Power Level:	CCM125C	CCM126
	91.0 dBL <sub>WA</sub>	92.2 dBL <sub>WA</sub>

Product Description: CONCRETE MIXER  
Model Nos: CCM125C & CCM126

Serial (Batch) No: See product Data Plate

Signed   
L.E. FERGUSSON  
Engineering Manager

**Clarke** INTERNATIONAL  
Hemnal Street, Epping, Essex CM16 4LG

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