2.2 CUFT 65L CEMENT MIXER

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Easum

WHEELBARROWS & CEMENT MIXERS

Parts Description



1. Cement Mixer Bowl

- 2. Tipping Arm Handles
- 3. Motor Cover
- 4. Motor Mount
- 5. Wheels
- 6. Upper "L" Frame
- 7. Middle "L" Frame
- 8. Front "L" Frame
- 9. On/Off Switch

Tools Required for Assembly

- 8mm, 10mm, 12mm, 14mm, 17mm
 Pliers
 & 19mm spanners (open or ring)
 Malle
 - Mallet or Hammer

- Ratchet
- 10mm, 13mm, 14mm & 17mm

Socket (recommened but not required) Note: If you have access to an impact driver this will help reduce the assembly time.

Specifications

Nominal Voltage	230-240Vac, 50Hz
Power Output	367W
Capacity: Gross Bowl Volume Unmixed Dry Volume Mixed Wet Volume	85 Litres (3cf) 65 Litres (2.2cf) 42 Litres (1.5cf)
Bowl Mouth Diameter	420mm
Bowl Speed	28 RPM
Motor Speed	1440 RPM
Net Weight	62kg

General Safety Rules

WARNING: Read all safety warnings and instructions. Failure to follow warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference

The term "power tool" in the warnings refers to your mains-operated (corded) cement mixer.

1. Work area safety

- Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- Do not operate power tools in explosive atmospheres; such as the presence of flammable liquids, gases or dust. *Power tools create sparks which may ignite the dust or fumes.*

- Keep children and bystanders away while operating a power tool. Distractions may cause you to lose control.
- This power tool is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the power tool.

2. Electrical Safety

- Power tool plugs must match the outlet. Never modify the plug in anyway. Do not use any adaptor plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
- Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock. around these items
- Do not expose power tools to rain and wet conditions. water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- when operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- To reduce the chance of electric shock, the manufacturer recommends the use of a residual current device with a rated residual current of 30mA or less at all times.

3. Personal Safety

• Stay alert, watch what you are doing and use common sense when operating the power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat and hearing protection used for appropriate conditions will reduce personal injury.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting the power source, picking up or carrying the tool.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewellery or long hair can be caught in moving parts.

4. Power tool use and care

- Use the correct power tool for your application. The correct power tool will enable you to do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with this switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignments or binding of moving parts, breakage of parts and any other conditions that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Additional Safety Rules For Cement Mixers

- Read and understand the owner's manual and labels affixed to the mixer. Learn its application and limitations as well as any specific potential hazards peculiar to it.
- Do not operate the mixer while under the unfluence of drugs, alcohol, or any medication that could affect your ability to use it properly.
- Check your mixer before turning it on. Keep guards in place and in working order. Form a habit of checking to see that keys and adjusting wrenches are removed from the tool area before turning it on. Replace damaged, missing or failed parts before use.
- Always wear safety goggles and/or face shields. Any mixer may throw foreign objects into the eyes. This can cause permanent eye damage. Everyday eyeglasses only have impact resistant lenses. They are not safety glasses.
- Improper use of extension cords may cause ineffecient operation of the mixer which can result in overheating. Be sure the section of extension cord is enough to allow sufficient current flow to the motor. Avoid the use of free and inadequately insulated connections. Connections must be made with protected material suitable for outdoor use.
- Check that the electric circuit is adequately protected and that it corresponds with the power, voltage and frequency of the motor.
- Check that there is a ground connection. Prevent body contact with grounded surfaces; pipes, radiators, ranges, and refrigerator enclosures. Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the mixer.
- The mixer is not to be towed by any vehicle.
- Do not overload the bowl. It will do a better and safer job at its designed rate. Don't use the mixer for a purpose for which it was not intended.
- Do not attempt to unload the materials until the mixer has stopped. Keep hands away from all moving parts.

- This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the application safely.
- Young children should be supervised to ensure that they do not play with the power tools.
- Check the power cord. Never use a faulty or damaged power cord.
- If the power cord is damaged take the mixer to an authorised service centre for repair or replacement.
- Never attempt any repairs yourself, always take it to an authorised service centre for repair or parts replacement.
- Keep the cement mixer and your work place clean of debris and any unnecessary objects.
- Keep the area free of tripping hazard.
- Persons working with the machine should not be distracted
- Perodically check that all nuts, bolts and other fixings are properly tightened.
- Adjustments, measurements and cleaning jobs are to be performed only when the motor is switched off and the mains plug removed.
- When you leave your workplace, switch off the motor and pull out the power plug.
- It is imperative to observe the accident prevention regulations in force in your area as well as all other generally recognised rules of safety.
- Never use the cord for any other purpose other than that for which it is intended.
- This tool complies with the pertinent safety regulations.
- Electrical repairs are to be carried out only by qualified electricians at authorised service centres, using original replacement parts. The user may suffer an accident if this condition is not observed.
- Always switch the mixer on, when the bowl is empty, before loading the unit with mixing materials.
- Do not place the shovel into the bowl while it is rotating

- The tyre are not for highway service. Do not over inflate tyre. Be sure to only inflate tyre to recommended PSI level.
- Maximum tyre inflation + 32psi.

Α	Upper "L" Section	1 Unit
В	Middle "L" Section	1 Unit
С	Front "L" Section	1 Unit
D	14" Pneumatic Wheels	2 Units

E	Bearing Arm Housing (neck)	1 Unit
F	13 Teeth Pinion and Shaft	1 Unit
G	Frame Arm Mount	1 Unit
Н	Handles	2 Units

	Rear Pulley Cover	1 Unit
J	Front Pullley Cover	1 Unit
К	Cover Support	1 Unit
L	Motor Mount	1 Unit
М	Motor Mount Clamp	1 Unit
Ν	14" Pulley	1 Unit
0	VEE47 Pulley Belt	1 Unit

Ρ	Bowl	1 Unit
Q	1/2 HP Motor w/ bore Pulley	1 Unit
R	Bowl Shaft	1 Unit
S	Bowl Shaft Cap	1 Unit
Т	Bearing Arm Bowl Section Cap	1 Unit

U	M10x22 Hex Head Bolts	8 Units
V	M12x25 Hex Head Bolts	4 Units
W	M10x25 Hex Head Bolts	10 Units
Х	M10x40 Hex Head Bolts	4 Units
Y	M8x25 Hex Head Bolts	4 Units
Z	Thin Packing Washers	6 Units
AA	Thick Packing Washers	4 Units
AB	Split Pins	4 Units
AC	Small Thin Packing Washers	2 Units
AD	8mm Retainer Screws	5 Units



1. Upper "L" Frame

Ensure that you are working on a clean flat surface. A drop sheet may be useful to ensure parts are not damaged or lost during assembly.

Take the Upper "L" section (A) and Middle "L" Section (B) and lay on side. Using the bolt (U), insert the bolt through the hole, slide on the washer and then attach the nut to the end,

Repeat this step three more times and tighten all bolts using a 17mm socket and 14mm spanner.



2. Lower "L" Frame

Take the Front "L" Section (C) and place next to other end of Middle "L" Section.

Using the bolt (U) insert the bolt through the hole, slide on the washer and then attach the nut to the end.

Repeat this step 3 more times and tighten all bolts using 17mm socket and 14mm spanner.

The mixer frame is now complete.



3. Wheel Attachment

Slide a Thin Packing Washer onto the axle, then grab a Wheel (D) and slide it onto the axle.

You need to reduce the space between the wheel and the hole where the split pin goes; so using a small thin Packing Washer (Z), place this onto the axle.

Then take a Split Pin (AB) and slide it through the hole. With pliers bend the split pin to secure the wheel to the axle.

Repeat the above steps for the other wheel.









Take the Pinion & Shaft (F) and slide a Thin Packing Washer (AA) onto the shaft.

Then slide the shaft into the Bearing Arm Housing Section (E).

Now grab a Thick Packing Washer (AA) and Thin Packing Washer (Z) and slide them onto the end of the shaft.

The aim is to reduce any gap between the Bearing Arm Housing Section and the split pin hole (more packing washers can be applied if required).

Now insert a Split Pin (AB) through the hole and with pliers bend the split pin to secure.







5. Bowl Asssembly

Take the bowl (P) and place facing down, then take the Bowl Shaft (R) and insert by threading it onto the bowl.

Please note that it is a reversed thread so wind the shaft counter clockwise to tighten.

Now take the Bowl Shaft Cap (S) and insert onto shaft with flat side towards bowl.

Thin Packing Washers (Z) may need to be inserted onto the shaft for correct teeth engagement.

Then place the Bearing Arm Housing Section onto the shaft of the bowl.

The Shaft has been inserted fully when the teeth of the bowl and the teeth of the pinion are 2/3 engaged upon contact.

Insert Thick Packing Washers (AA) and several Thin Packing Washers (Z) onto the shaft, the aim is to reduce any gap between the Bearing Arm Housing Section and the split pin holes.

Insert Split Pin (AB) and using pliers bend split pin ends to secure.

Then insert Bearing Arm Bowl Section Cap (T) onto the end to cover washers and split pins.















6. Handles

Take a Handle (H) and line the holes in the handle up with the holes in the Bearing Arm Housing Section.

Ensure that the handle arm points outwards.

Using bolt (V) insert it through the top hole from the back of the Bearing Arm Housing Section and through the handle then slide on the washer and nut. Place another bolt through the bottom hole and apply washer and nut.

Grab the other Handle (H) and attach it to the other side of the Bearing Arm Housing Section, using bolts (V).

Then tighten up all the bolts with a 17mm spanner and 14mm socket.







7. Bearing Arm

With assistance from a friend or lifting aid, lift the bowl and place the Bearing Arm Housing Section onto the top of the Upper "L" section.

Cover the top of the Upper "L" Section in a heavy layer of grease to eliminate traction.

Then place the Frame Arm Mount (G) over the top of the bearing Arm Housing Section.

Using bolt (W) insert it through the top and slide on the washer and nut underneath. Repeat this three more times.

Now tighten up all 4 bolts using a 17mm socket and 14mm spanner.



8.Rear Pulley Cover

Take the Front Pulley Cover (J) and Cover Support (K).

Now grab a bolt (W) with washer already on and insert it through the inside of the Front Pulley Cover (J) and then through the Cover Support (K) and finally through the Frame Arm Mount bracket then hand tighten the nut.

Then insert bolt (W) with the washer through the inside of the Front Pulley Cover, then through the welded bracket on the Upper "L" section.

Repeat this step for the other side, then tighten up all 6 bolts using a 12mm spanner and 13mm socket.



9.Pulley

Take the Pulley (N) to slide onto the shaft. When sliding Pulley onto shaft ensure that the two flat surfaces on the shaft line up with the two bolts on the Pulley Hub.

Once the Pulley is on the shaft grab an 8mm spanner and tighten the bolts up to secure Pulley to shaft.











10.Motor Mount

Take the Motor Mount (L), Motor Mount Clamp (M) and 4 bolts (X).

Sit on one of the tyres and rest the Motor Mount (L) on your knee, now take the Motor Mount Clamp (M) and insert a bolt (X) through the Motor Mount into the Motor Mount Clamp, slide on washer and nut.

Insert the remaining three bolts and tighten the nuts by hand.

Move the motor mount up the "L" section until it sits just below the Pulley cover.

Now slightly tighten up the 4 bolts using a 14mm spanner and 17mm socket. Do not tighten completely just enough to stop the motor mount from slipping down the "L" section frame.



11.Motor

Place the Motor on the motor mount with the motor pulley in line with the larger pulley.

Insert bolt (Y) through holes in base of motor and through inner holes of Motor Mount. Slide on washer and nuts. Repeat step three more times to secure motor to motor mount.

Then take the Pulley Belt (O) and slide if onto the large Pulley, then place around the smaller motor pulley.

Slide the motor until the belt is in line with both pulleys.

Tighten the bolts connecting the motor to motor mount using a 12mm spanner and 13mm socket.





12.Motor Alignment

Using a mallet or hammer lightly tap the motor mount down the "L" frame to achieve belt tension.

Once the belt is taught across both pulleys with the minimum 20mm free play (ensure Pulley Belt is not over tightened as this may cause damage to the motor) tighten up the 4 bolts using a 14mm spanner and 17mm socket.





13.Front Pulley Cover

Take the Rear Pulley Cover (I) and use the small clips on the inside of the Cover to clip it to the Front Pulley Cover (J).

Using the retainer screws (AD) fasten the Pulley Covers together by inserting two screws on either side with one on top.

Your Cement Mixer Is Now Complete



Maintenance

- Clean the cement mixer after each use
- Remove dust and dirt frequently. Cleaning is most effective with a rag or soft brush. Wear safety glasses whilst cleaning to avoid injury.
- If the belt on the pulley becomes loose this can be tightened by untightening the bolts on the Motor Mount Clamp and allowing the Motor Mount to move down the shaft of the "L" section. Once the belt is tensioned again you can tighten up the bolts.

Prior to First Use

- Lubricate the tilting shaft via the grease nipple in the Frame Arm Mount and apply grease to the gear of the Bearing Arm Housing Section prior to the first operation and then at regular intervals.
- The two main drive shafts (located in Bearing Arm Housing Section) are fitted with pre-packed sealed ball bearings. These should be inspected at regular intervals to ensure free rotation. These bearings should be replaced if the operation becomes noisy or the shafts do not rotate freely.

Operation

Turning the Cement Mixer On and Off

NOTE: The On/Off switch for the cement mixer is a single On/Off rocker switch located on the side of the motor cover.

- 1. To turn on the Cement Mixer, press the portion of the switch marked "I".
- 2. To turn off the Cement Mixer, press the portion of the switch marked "O".
- 3. If the On/Off switch at any time fails to operate correctly as above, turn off and disconnect the power supply. Have the mixer checked at an authorised service centre.

WARNING: Check the drive belt tension every 20 hours of operation to ensure it is tight

WARNING: 10 amp heavy duty safety extension cord must be used.

IMPORTANT: Always switch on the motor before loading the mixer.

IMPORTANT: Ensure the tyres are both adequately and evenly inflated before loading

- 1. Ensure the Cement Bowl is in the upwards position and the mixer is on a stable and relatively level ground surface.
- 2. With your hands, and bystanders well away from all moving parts, press the 'ON' but-ton to start the cement mixer.
- 3. Load the bowl with the suggested mixture as stated on the bag of cement for the job being performed
- 4. Ensure when loading the bowl the shovel or method of loading DOES NOT enter the mouth of the turning bowl.
- Do not ever place your hand inside the rotating bowl also never use a poker to free clogged mixture inside a rotating bowl. Always turn off the mixer to clear any unmixed or clogged mixture in the bowl.
- 6. Do not overload the mixer.

Emptying the Cement Mixer

NOTE: The operator should stand on the right hand side of the bowl (when facing the mouth of bowl) so as to pull the handles towards the operator to ensure full control. Do not attempt to lift and push the handles away from the oppposite side.

- 1. The cement mixer must be left running while emptying.
- 2. Turn the cement bowl in the downwards position by taking hold of the near side (closest) tilting handle and with a pulling action start rolling the bowl towards the empty position. Do not lean across the mixer to grasp both tilting handles.
- 3. As the second handle comes into reach hold both handles firmly to continue the roll of the bowl to the empty position.
- 4. Ensure to turn off the mixer when not attended. Do not leave the mixer running when unattended.

Cleaning

- After every mix it is advisable to clear any build-up of cement from the mixing paddles inside the bowl. If left to dry the cement can be externely difficult to remove without damage to the bowl.
- After the last mix it is advisable to wash and clean all cement build up from both inside and outside the bowl before the cement fully sets. Avoid hitting the bowl with any objects and pay particular attention to build-up of cement around the lip of the bowl.
- After cleaning the bowl the cement mixer should be stored in the downwards position to ensure all water is drained from the bowl.

General Inspection

- Regularly check that all the bolts and nuts are tight as they may vibrate loose over time.
- Ensure tyres are inflated equally.
- Inspect the power cord and plug for any signs of damage and have any repairs performed by an authorised service centre before use.
- Inspect any extension cables for damage before use witht the appliance.

Repairs

Only an authorised service centre should replace the power cord, drive belt or effect other repairs

Power Cord

If the power cord of this cement mixer is damaged it must be replaced by an authorised service centre or similarly qualified person to avoid a hazard.

