Instruction manual

ORIGINAL INSTRUCTIONS

For your personal safety, READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.



BUCKET MIXER

Version:20140209

SPECIFICATIONS

Voltage	See machine nameplate	
Power Input	750W	
Power Output	3/4 HP	
No Load min ⁻¹	65	
Motor	AC Induction Motor, Class F, Duty Type: S3-50%	
Maximum Capacity	50 L	
Protection	IP 44	
Net Weight	32kg (68.2Lbs) Include Bucket	

GENERAL SAFETY INSTRUCTIONS



WARNING! Read all safety warnings and all instructions. Failure to follow the

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 mainsoperated (corded) power tool or battery-operated (cordless) power tool.

1) WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2) ELECTRICAL SAFETY

Power tool plugs must match the outlet.
 Never modify the plug in any way. Do not

use any adapter plugs with earthed (grounded) power tools.

Unmodified plugs and matching outlets will reduce risk of electric shock.

- b. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. 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.
- e. 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.
- f. If operating a power tool in a damp location is unavoidable, use an earth leakage circuit breaker. Use of an earth leakage circuit breaker reduces the risk of electric shock.

3) PERSONAL SAFETY

- a. a) Stay alert, watch what you are doing and use common sense when operating a 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.
- b. b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dustrelated hazards.

4) POWER TOOL USE AND CARE

a. Do not force the power tool. Use the correct

- **power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. Store idle power tools out of the 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.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. 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.

5) SERVICE

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Symbols used in this manual

V.....volts A....amperes Hz.....hertz W.....watt ~....alternating current n_o.....no load speed min⁻¹.....revolutions or reciprocation per minute warning of general danger.class II tool ..with electrical earth ...read these instructions always wear eye protection .alwavs wear a dust mask.



..wear safety-approved hard hat



do not dispose of electric tools, accessories and packaging together with household waste material

ELECTRICAL CONNECTIONS

NOTE: The plug supplied on your tool may not fit into the outlet you are planning to use. Your local electrical code may require slightly different power cord plug connections. If these differences exist refer to and make the proper adjustments per your local code before your tool is plugged in and turned on. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having equipment grounding conductor and a grounding plug. The

plug must be plugged into a matching outlet that is properly installed and grounded

in accordance with all local codes and ordinances. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

If power cord is worn or cut, or damaged in any way, have it replaced immediately by a qualified electrician. If the grounding instructions are not completely understood, or if you are in doubt as to whether the tool is properly grounded check with a qualified electrician or service personnel.

WARNING: Do not permit fingers to touch the terminals of plug when installing or removing the plug from the outlet to avoid injury or possible death from electrical shock.

Save these Instructions

WARNING: If not properly grounded, this tool can cause an electrical shock, particularly when used in damp locations, in proximity to plumbing, or outdoors. If an electrical shock occurs there is the potential of a secondary hazard.

MOTOR SAFETY PROTECTION

- 1. Connect this tool to a power source with the appropriate voltage for your model and a 16-amp branch circuit with a 16-amp time delay fuse or circuit breaker. Using the wrong size fuse can damage the motor.
- If the motor won't start, turn the switch "OFF" 2. immediately and unplug the tool.

- 3. The motor is equipped with an overload protection device. If the motor suddenly stalls while operating, press the "OFF" switch and unplug the tool to reset the machine's overload protection. Plug the machine back into the outlet. The motor may now be restarted.
- **4.** Fuses may "blow" or circuit breakers may trip frequently for the following reasons:
 - **a.** Motor Is Overloaded-Overloading can occur if you feed too rapidly or make too many start/stops in a short time.
 - b. Line voltages should not be more than 10% above or below the nameplate voltage. For heavy loads, however, the voltage at motor terminals must equal the voltage specified for your model.
- 5. Most motor troubles may be traced to loose or incorrect connections, overload and low voltage (such as small size wire in the supply circuit) or to overly long supply circuit extension cable. Always check the connections, the load, and the supply circuit whenever the motor doesn't work well. Check wire sizes and length with the Wire Size Chart.

WIRE SIZES

NOTE: Make sure the proper extension cord is used and is in good condition. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burnout, use the table below to determine the minimum wire size (A.W.G.) extension cord.

Wire Size Chart

Total Extension Cord Length (feet/meters)	Cord Size (AWG)			
25 ft / 8m	16			
50 ft / 15m	12			
100 ft / 30m	10			
150 ft / 45m	8			
200 ft / 60m	6			

SPECIFIC SAFETY RULES

Always start, run, and run down machine with agitator inside the mixing container (bucket) and with the motor head lock closed. Agitator may cause danger.

Never attempt to raise the motor head while it is running. Severe danger will result.

Do not use this machine to mix any solvents or solvent-containing substances with a flash point below 22 degrees Celsius. An explosive condition may result.

Never reach into the mixing container with your hands or insert any tools or foreign objects while mixing.

Never run the machine with the safety cover removed.

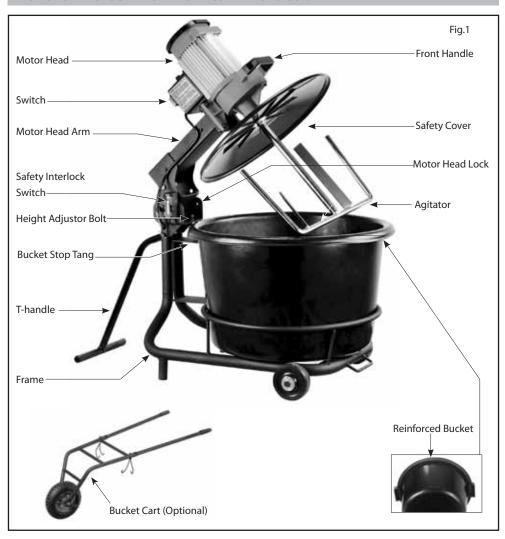
DUTY CYCLE

This machine is rated for short-term operation. The cycle is 5 minutes on and then at least 5 minutes off.

ASSEMBLY

Unpacking and Checking Contents

FUNCTIONAL DESCRIPTION AND RECOMMENDED USE:



This machine is designed specifically for mixing liquids and powder based building products such as cement, paints, plaster, mortar, adhesives, epoxy resins and similar substances. The machine mixes independently and the operator is only required to load and unload the machine and turn it on and off. The agitator is capable of mixing a variety of media. It is powered by a single phase induction motor with start-up capacitor. It has a relay-type "fail safe" on / off switch which will not restart in the event of a power failure and subsequent return of power.

An optional bucket cart is available to assist in moving heavy loads.

UNPACKING

WARNING: To reduce the risk of injury from unexpected starting or electrical shock, do not plug the power cord into a power source outlet during unpacking and assembly. This cord must remain unplugged whenever you are working on the tool.

Your tool is shipped complete in one box.

- Remove the tool and all loose parts from the carton.
- Place all parts on a secure, stationary work surface and look the machine over carefully.

NOTE: Before beginning assembly, check that all parts are included. If you are missing any part(s), do not assemble the machine. Sometimes small parts can get lost in packaging material. Do not throw away any packaging until tool is put together. Check packaging for missing part(s). A complete parts list (Repair Parts) is at the end of the manual. Use the list to identify the number of the missing part.

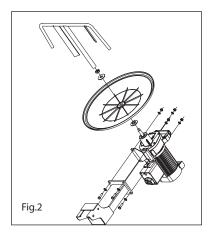
WARNING: If any parts are missing do not operate your Electric Mixer until the missing parts are replaced. Failure to do so could result in possible serious injury.

LIST OF CARTON CONTENTS

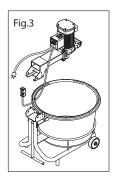
- Frame
- 2. Bucket
- 3. Motor Head Assembly
- 4. L-Clevis Pin with Spring Cotter Pin
- 5. Safety Cover with Spacer, Washer and Nut
- Agitator
- 7. Instruction Manual

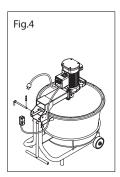
TO ASSEMBLE, BEGIN WITH THE MOTOR HEAD

1. The top handle is left folded down in the package. Rotate the top handle to its correct position and tighten. See fig.2



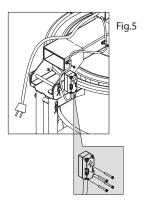
- 2. Place the spacer on the motor spindle with the lip facing outwards. Place the safety cover in place followed by the flat washer and nut. Tighten with a wrench. (When tight, the safety cover will still be free to rotate).
- **3.** Thread on the agitator. (final tightening will be done by the machine when running).





- **4.** Place the arm in the cradle on the frame and align with the hole.
- 5. Slide the L-clevis pin in position and lock with the spring cotter pin. Place the lock knob into its position on the cradle. See figs.3 & 4

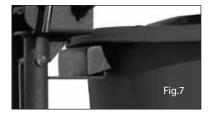
6. Place the safety interlock switch in position on the cradle and attach with the four screws provided. See fig.5.



With the steel reinforced bucket for use with the optional bucket cart, Place bucket into frame with one of the handles to the right of the stop lug. (This will prevent the bucket from spinning during operation and will still allow the cart hooks to engage the handles). See fig.6



When using a non-reinforced 65L bucket, the handle must engage the bucket stop tang directly. See fig.7



Note: The optional bucket cart may only be used with the steel reinforced bucket.

MOTOR HEAD HEIGHT ADJUSTMENT

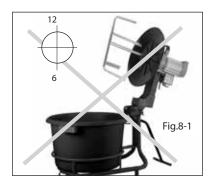
The motor head height is set at the factory, but if it needs adjustment, simply loosen the lock nut on the bottom and adjust the bolt to achieve the desired height. Then retighten the lock nut.

OPERATION

The motor produces a lot of torque, which will spin the bucket. Ensure that the bucket is properly in place with one of the two handles either to the right of the bucket stop tang or with the handle egaging the bucket stop tang.

NOTE: When lowering the agitator into the bucket, it will only clear the edge of the bucket if the agitator is in the 9 and 3 o'clock positions. If it is in the 12 and 6 o'clock position, the agitator will not be able to clear the edge of the bucket. See fig. 8 & See fig. 8-1.





Always insert the agitator into the bucket fully and secure the motor arm lock before starting motor.

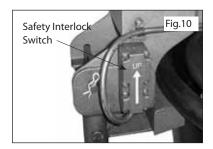
To begin simply press the "ON" switch.

To stop working, press the "OFF" switch. See fig. 9.



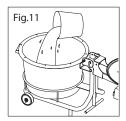
SAFETY INTERLOCK SWITCH

This machine is equipped with a safety interlock switch. If at any time during operation the motor head arm is raised, the motor will automatically stop. The motor head arm must then be closed again and the motor restarted. See fig. 10.



MIXING POWDER BASED MEDIA

Follow the instructions on the package for the media being used. For most powder-based media, it is best to put the water in the bucket first and then add the powder over the safety cover as the machine runs. It will then be centrifugally thrown from the safety cover into the bucket. See figs.11 &12.





MIXING OTHER MEDIA

Add the necessary amount of materials required for the solution.

CAUTION: Take care that the motor does not become overloaded by adding too much material. (If the motor sounds to be slowed dramatically, then it is probably overloaded.)

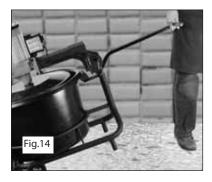
WARNING: Shut down machine before raising motor head.

After the machine has stopped fully, loosen the motor arm lock and raise motor head. Rotate the motor head all the way until the top handle is resting on the ground. Then remove the media as needed. See fig.13.



Always clean agitator after finishing mixing.

Note: This machine has wheels and a built-in T-handle for ease of transport. See fig.14.



Note: The optional bucket cart can be used to easily lift and transport the bucket. The cart may only be used with the steel reinforced bucket. See fig.15.



MAINTENANCE

WARNING: Unplug machine from socket before carrying out any adjustment, servicing or maintenance.

Every 50 hours of operation blow compressed air through the motor while running at no load to clean out accumulated dust. (If operating in especially dusty conditions, perform this operation more often.)

Keep the machine and agitator clean.

The reduction gearbox grease should be renewed after each 100 hours of operation. Entrust replacement of the grease and all repairs to an authorized service agent.

If the replacement of the power supply cord is necessary, this has to be done by the manufacturer or their agent in order to avoid a safety hazard.

WARNING: All repairs must be entrusted to an **authorized service center.** Incorrectly performed repairs could lead to injury or death.

HAND CART ASSEMBLY

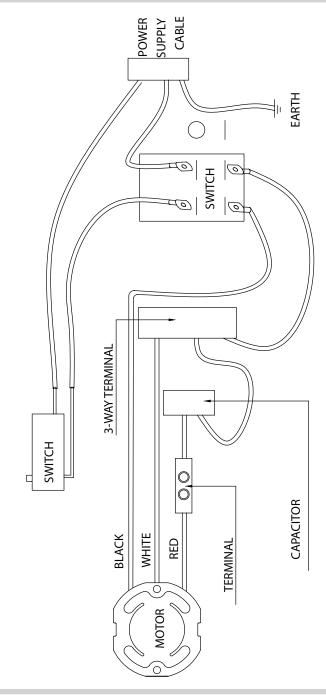
Insert one of the spring cotter pins into the axle.

Insert the axle part way into the frame.

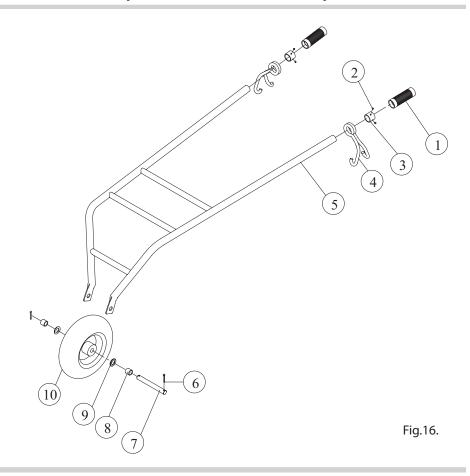
Place one of the spacers onto the axle, followed by one of the flat washers and the wheel.

Fit the remaining washer, then the spacer between the wheel and the frame.

Finally insert the axle fully, followed by the final spring cotter pin. See fig.16.(page 12)



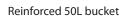
Bucket Cart Exploded View & Parts List (Optional)



No.	Parts Name	Q'TY
1	TAIL HANDLE / REST 1-1/4"	2
2	SET SCREW	4
3	COLLAR	2
4	HOOK	2
5	FRAME	1
6	COTTER PIN 5x32	2
7	AXLE	1
8	SPACER	2
9	WASHER M20	2
10	WHEEL 12"	1

OPTIONAL ACCESSORY

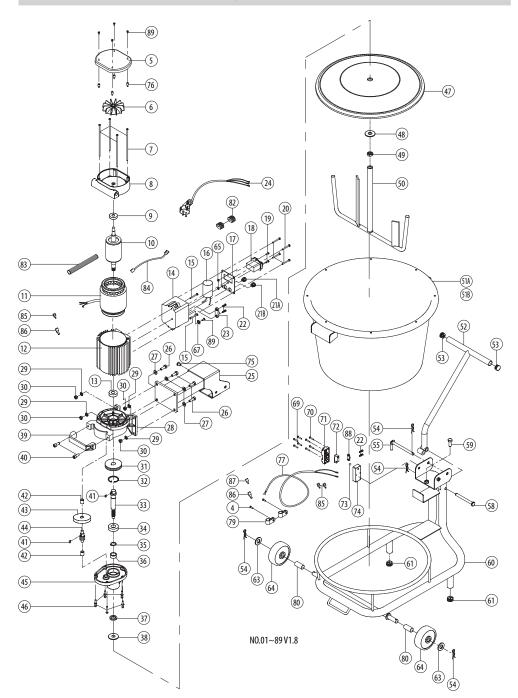






Bucket Cart

Exploded View



Parts List

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1~3	N/A	-	46	SCREW M5 x 25	5
4	SCREW M4 x 8	2	47	SAFETY COVER	1
5	TAIL COVER	1	48	FLAT WASHER Ø14 x Ø32 x 2.5	
6	FAN	1	49	NUT M14 x P2.0	1
7	SCREW M5 x 160	4	50	AGITATOR	1
8	MOTOR TAIL CASTING	1	51A	BUCKET	1
9	BEARING 6201 zz	1	51B	BUCKET	1
10	ROTOR	1	52	T-HANDLE 5/8" (18mm)	1
11	STATOR	1	53	FOOT PLUG 7/8 inch	2
12	MOTOR BODY	1	54	SPRING COTTER PIN SSP-10	4
13	BEARING 6202 zz	1	55	L-CLEVIS PIN ø10	1
14	SWITCH BOX	1	56~57	N/A	-
15	SCREW M5 x 15	2	58	CLEVIS PIN d12 x L100	1
16	CAPACITOR	1	59	HEIGHT ADJUSTOR BOLT M10 x 25	1
17	SWITCH PLATE	1	60	FRAME	1
18	SWITCH	1	61	FOOT PLUG 1 inch	2
19	FLAT HD. SCREW M4 x 16	2	62	N/A	-
20	SCREW M4 x 55	4	63	FLAT WASHER Ø16 x Ø38 x 2.5	2
21A	CABLE GLAND SB6R-3	1	64	WHEEL	2
21B	CABLE GLAND SB7R-3	1	65	NUT M4x8	2
22	SCREW M4 x 14	4	66	N/A	-
23	CORD CLIP	1	67	STAR WASHER M5	1
24	POWER SUPPLY CABLE	1	68	N/A	_
25	ARM	1	69	SCREW M4 x 30	4
26	HEIGHT ADJUSTOR BOLT M8 x 30	4	70	SCREW M4 x 16	4
27	FLAT WASHER Ø8 x Ø16 x 1.5	4	71	SAFETY SWITCH COVER	
28	MOTOR FRONT CASTING	1	72	SAFETY SWITCH	
29	SPRING WASHER M8	4	73	BALL Ø8	
30	NUT M8	4	74	SAFETY SWITCH BASE	
31	OUTPUT GEAR 45T	1	75	SAFETY SWITCH ACTUATOR M8 x 8	
32	CIRCLIP R-42	1	76	STANDOFF (INT/EXT)	
33	OUTPUT SPINDLE	1	77	SAFETY SWITCH HARNESS 1.25 x 2C x 65CM	1
34	BEARING 6004 zz	1	78	N/A	
35	CIRCLIP S-20	1	79	CABLE CLIP	
36	BEARING TLA 2012	1	80	BUSHING Ø16.5 x Ø19 x 38.8	
37	OIL SEAL TC20 x 30 x 5	1	81	BUSHING Ø16.5 x Ø19 x 38.8 N/A	
38	SPACER	1	82	3 WIRE PUSH-IN CONNECTOR	
39	FRONT HANDLE 1211-117	1	83	WIRE SHEATH M8 x 5CM 5	
40	SOCKET CAP SCREW M8 x 16	2	84	WIRE LEAD 16A x 100mm	1
41	PARALLEL KEY 5 x 5 x 10	2	85	TERMINAL-FEMALE 3	
42	BEARING TLA 1015	2	86	INSULATOR SLEEVE 2	
43	INPUT GEAR 72T	1	87	TERMINAL-MALE 1	
44	INTERMEDIATE GEAR PINION 12T	1	88	CORD CLIP	1
45	GEARCASE COVER	1	89	SCREW M4 x 6	5