CONTACT INFORMATION

For sales, service, warranty and part orders, please call

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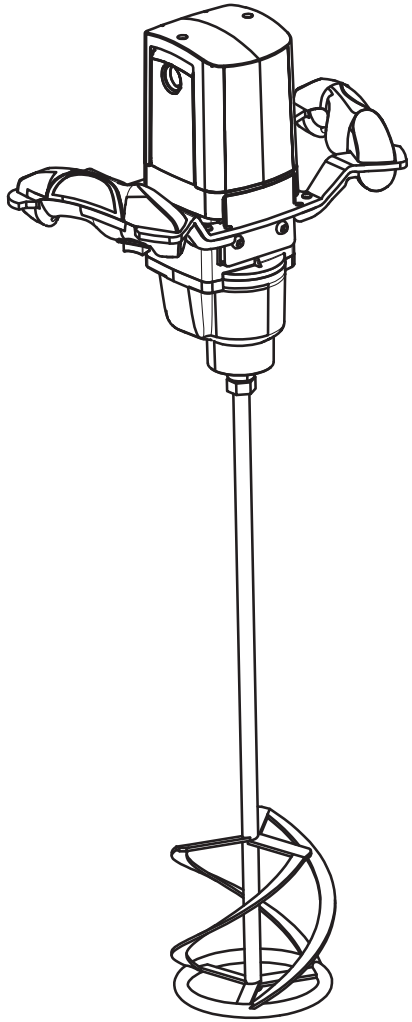
CHINA	**TEL** 18951118278 **EMAIL** sales@makinex.com.cn **ADDRESS** Suzhou Industrial Park Xinghai Street on the 16th Jinying Pioneering Park, 2nd Floor, Area C	**TEL** 18951118278 **EMAIL** sales@makinex.com.cn

Or your nearest MAKINEX distributor

We have very knowledgeable, experienced staff to assist you with help and advice.

ELECTRIC MIXER



ELECTRIC MIXER

MS-M-AU

MS-M-EU

MS-M-UK

MS-M-US

Technical Data

Model		
Power input	1800w	1900w
No-load speed 1st Gear	150-300min^{-1}	150-300min^{-1}
2nd Gear	300-650min^{-1}	300-650min^{-1}
Tool Fitting	M14	M14
Whisk – ϕ	160mm	160mm
Weight	8.0kg	8.0kg
Class of protection	II/⧈	II/⧈

Control Elements

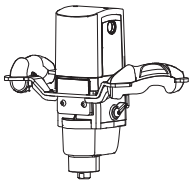
1. Switch / regulator
2. Arresting pin
3. Ventilation holes
4. Tool mount
5. Speed selector switch
6. Supplementary handle
7. Flat open-end wrench
8. Whisk

Not all of the accessories illustrated or described are included as standard delivery.

Safety Precautions

Safe work with the instrument is only possible after you read thoroughly this manual for use and maintenance and observe precisely the here specified instructions.

- Observe also other safety directions that are a part of each instrument delivery.
- Check the flexible lead and plug before each use of the instrument. Have the faults removed by an expert.
- The instrument should not be operated in damp, wet premises; during a rain, fog and snow in the open, and in environment with a risk of explosion.
- Before putting the plug in the mains socket the switch should be in the “off” position.
- Take care of long hair and fashion accessories, work in properly buttoned-up clothes, without freely flowing parts.
- Secure the vessel with the mixed substance against moving on the floor.
- Always direct backwards the flexible lead from the instrument, flexible lead should not be exerted by tensile stress and should not lie on or pass over sharp edges.
- Take care that you take a safe and firm stand at work.
- Use the supplementary handle.
- Consider possible reaction torque.

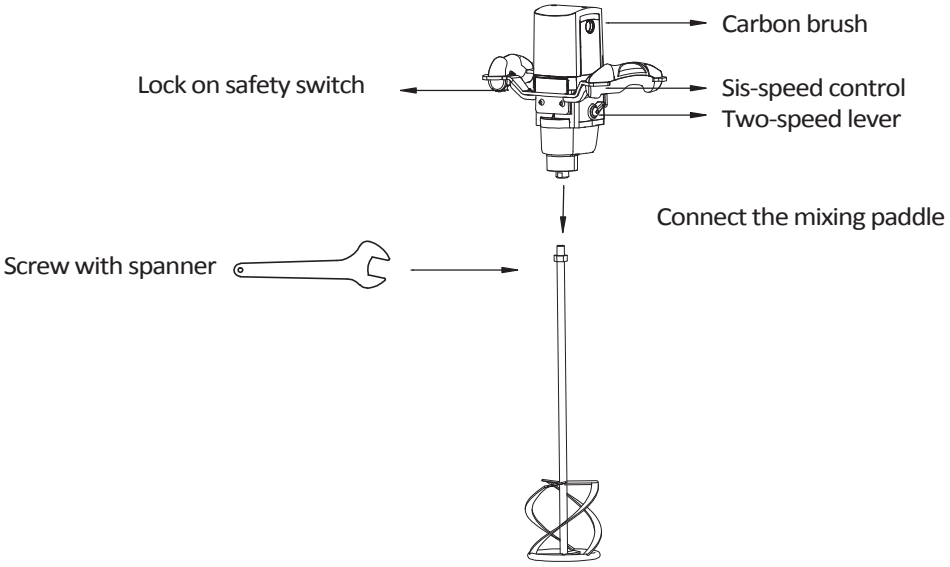


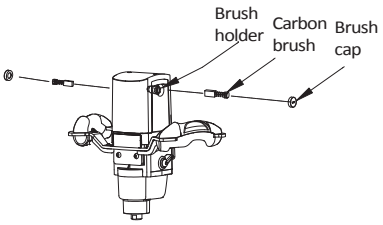
Mixer X 1

Paddle X 1

Wrench X 2

Carbon brush X 2





* Replace the carbon brush
1.) Take straight screwdriver to screw out the brush cap.
2.) Take out the waste carbon brush.
3.) Put the new carbon brush into the brush holder inside.
4.) Take straight screwdriver to tighten the brush cap.

* Attention !
If you can not turn the two speed lever, just set up the paddles and rotate them gently. Never try to force to turn the lever or disassemble the machine !

Starting Operation and Use

Improper use may damage the instrument.

Observe therefore these instructions:

- Use a tool up to the specified diameter
- Load the instrument in such a way that the speed would not drop considerably or that it would stop.

Check if the data on the rating plate correspond with the actual mains voltage. Instrument scheduled for 110V/230V can be plugged to 110V/220V/240V mains.

Fixing a whisk

Screw tools with thread M 14 x 2 as far as possible in the tool mount and tighten properly with an open-end wrench (22mm) from among the accessories.

Switching on and off

By pressing the switch button the apparatus is brought into operation and it stops when this is relieved.

Permanent run

By pressing the switch button to the stop and simultaneous pressing the arresting pin permanent run is achieved.

By subsequent pressing and relieving of the switch button the permanent run is interrupted.

Unloading the tool (whisk)

Fit a flat open-end wrench (22mm) on the hexagon end of the tool (whisk) and unscrew the tool from the spindle by turning it to the left.

Electronic Motor Control

Starting current limiting

The electronically controlled smooth start takes care that the machine starts without jerk. In this manner, the splashing of thin liquid materials is prevented at the same time when switching on the machine.

As a result of the machine's reduced starting current, a 7.8A fuse is sufficient.

No-load speed reduction

The electronic control reduces the no-load speed of the machine which results in reduced noise and wear of motor and gear.

Speed pre-selection

With the speed control (11), the speed can be continuously pre-selected:
The necessary speed is dependent on the type of material to be mixed. It is recommended that it be confirmed with a practical trial.

Speed selection

Two rpm ranges can be preselected with the speed selector switch (51):

Speed 1 : 150 min^{-1} - 300min^{-1}

Speed 2 : 300 min^{-1} - 650min^{-1}

The necessary speed depends on the type of the material mixed and it is recommended to verify it by a practical test.

Constant Electronics

The constant electronics keeps the speed between no-load and load nearly constant and ensures uniform mixing of the materials.

Electronic overload protection

In case that the machine is extremely overloaded, an electronic overload protection protects the motor from damage. In this case, the motor stops and restarts only after the feeding pressure is reduced, res. After relisf.

Temperature-dependent overload protection

To protect the motor from overheating at extreme permanent load, it is switched off by the protective electronic system when a critical temperature is reached

After a cooling-down period of approx. 3-5 min, the machine is again ready for use and can be fully loaded.

When the machine is warmed by use, the temperature-dependent overload protection reacts earlier as a result.

Storage

The unit should be stored in a dry place where it is protected against freezing.

Environmental Protection

Do not open worn out machines and return to the collection facilities provided for recycling.

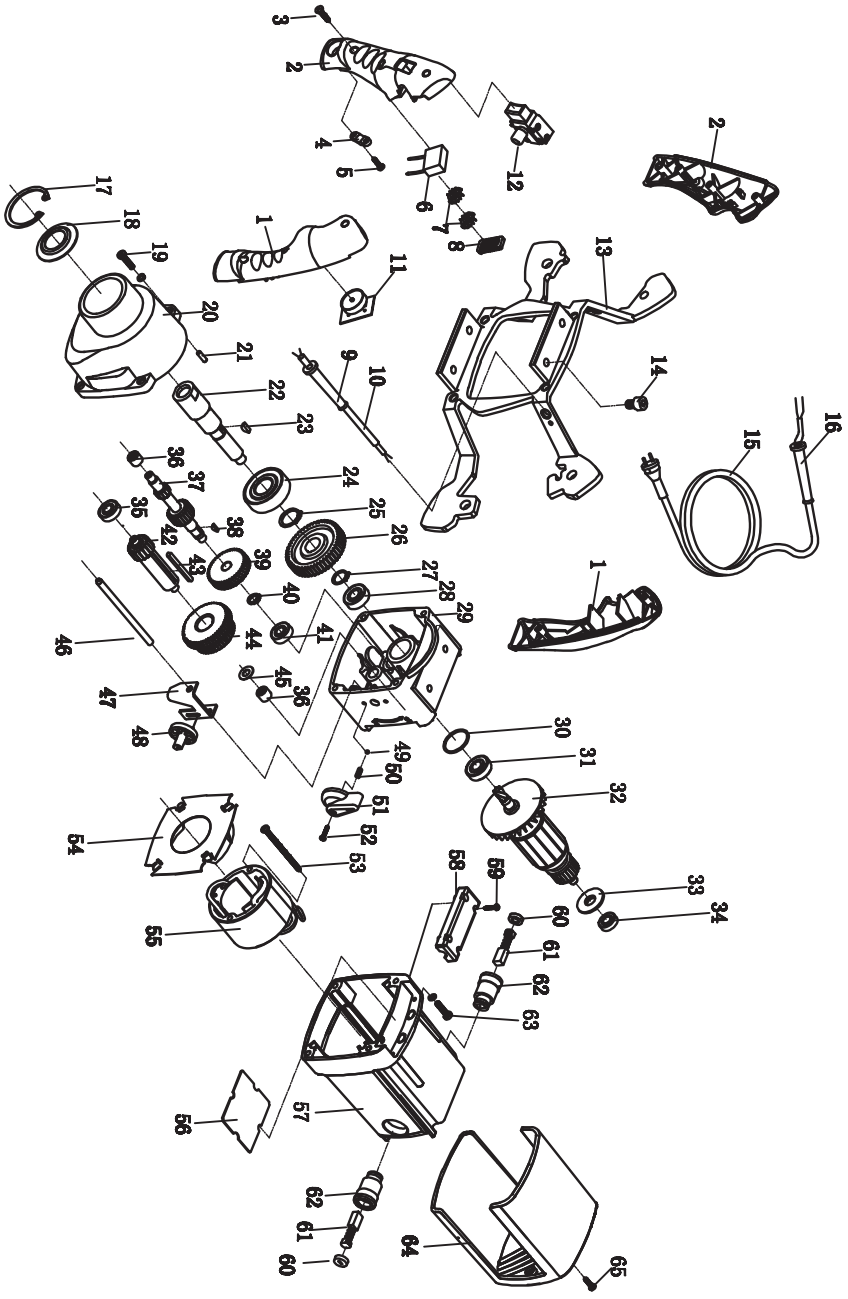
Maintenance

- ☐ The ventilation slots on the motor casing should be cleaned out from time to time.
- ☐ When the carbon brushes are worn out, see the instruction in Page 2 to replace the carbon brush. There is 1 pair replacement carbon brush in the package. For more carbon brush, please purchase from the dealer.
- ☐ After approx. 100 hours of operation, check the motor brushes and replace if necessary. Clean the motor housing.
- ☐ After approx. 200 hours of operation, renew the grease filling in the gearbox.

⚠ To verify that the protective insulation remains intact, the machine must be subjected to a technical safety test afterwards. For this reason, this work must be performed exclusively by a professional electro-workshop.

Guarantee

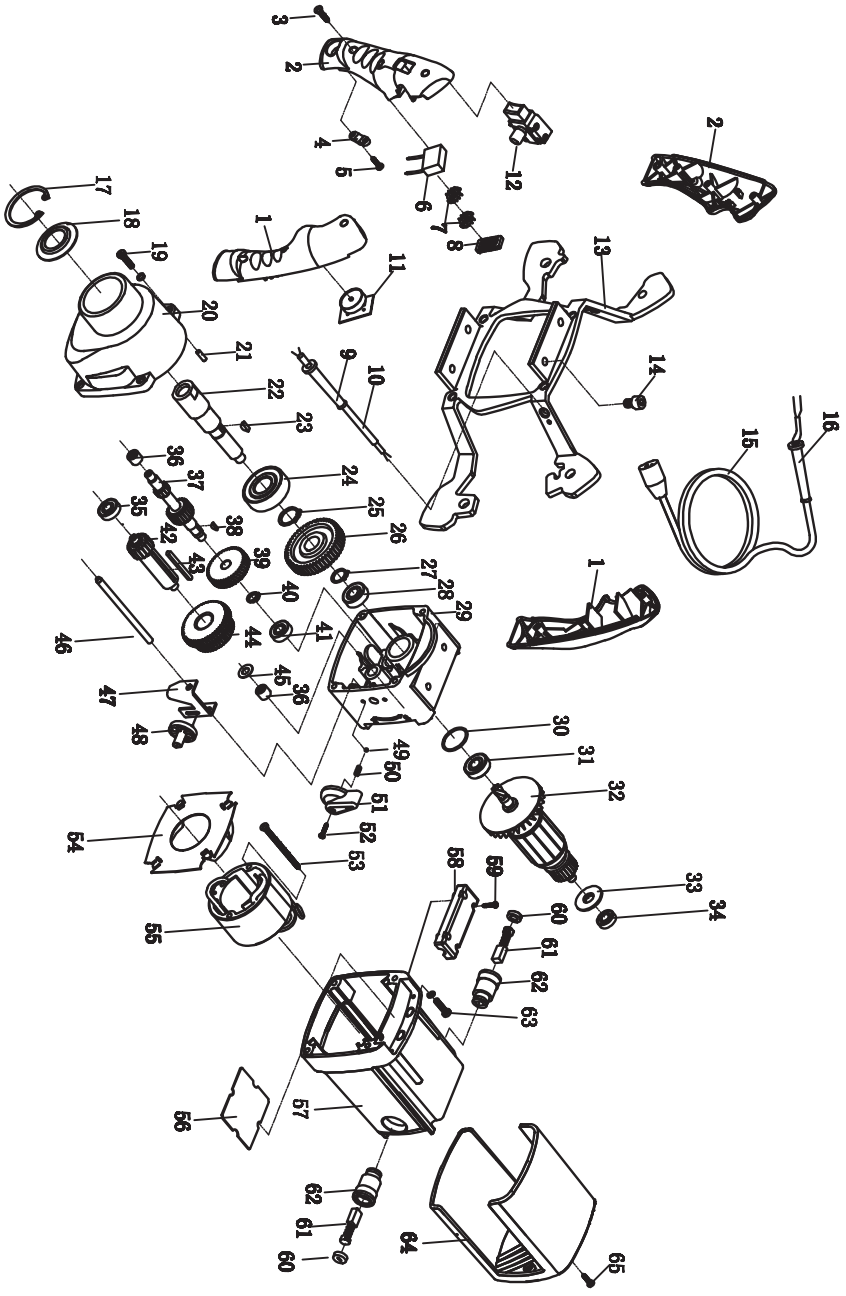
We guarantee appliances in accordance with statutory / country – specific regulations (proof of purchase by invoice or delivery note).
Damage attributable to normal wear and tear, overload or improper handling will be excluded from the guarantee.
In case of product malfunction and issues, please send the machine, undismantled, to your dealer or the Service Center for review.



MAKINEX®

SPARE PARTS FOR 230V

NO	Description	NO	Description
1	Right Handle	34	Bearing 608 Z
2	Left Handle	35	Bearing 608 Z
3	Screw ST3.9X16	36	Needle bearing HK0810
4	Clamp	37	The second active gear shaft
5	Screw ST3.9X12	38	Hemicycle key 2.5X3.7X10
6	Capacitance	39	Motor gear
7	Round inductance	40	Safety ring ℄10
8	The inductance	41	Bearing 698 Z
9	Circuitry board	42	The third active gear shaft
10	Sleeve	43	Parallel key 4X4X45
11	Cable	44	Spindle double gear
12	Switch	45	Flat washer ℄16*8*0.8
13	Steel frame	46	Pivot ℄6*106
14	Screw M8X12	47	Coulisse
15	Cord	48	Partial core + eccentric wheel core
16	Sleeve (Big)	49	Ball ℄4
17	Safety ring ℄47	50	Spring ℄0.5* ℄3.9*L12
18	Dust cover	51	Lever
19	Screw M5X20	52	Screw ST3X16
20	Bearing cover	53	Screw ST5X65
21	Pin 4*12	54	Airguide shim
22	Spindle	55	The stator (including the brush ring)
23	Hemicycle key 4X5X12	56	Soft start plate
24	Bearing 6204 Z	57	Chassis
25	Safety ring ℄20	58	Clamp
26	Spindle gear	59	Screw ST3.5X12
27	Safety ring ℄15	60	Brush cap
28	Bearing 6000 Z	61	Carbon brush 6.5*15*16
29	Gear box	62	Brush holder
30	Sealring ℄28*1.9	63	Screw M5X25
31	Bearing 6001 2RS	64	Rear cover
32	The rotor	65	Screw ST3.5X16
33	M insulation gasket		



MAKINEX®

SPARE PARTS FOR 110V

NO	Description	NO	Description
1	Right Handle	34	Bearing 608 Z
2	Left Handle	35	Bearing 608 Z
3	Screw ST3.9X16	36	Needle bearing HK0810
4	Clamp	37	The second active gear shaft
5	Screw ST3.9X12	38	Hemicycle key 2.5X3.7X10
6	Capacitance	39	Motor gear
7	Round inductance	40	Safety ring ℄10
8	The inductance	41	Bearing 698 Z
9	Circuitry board	42	The third active gear shaft
10	Sleeve	43	Parallel key 4X4X45
11	Cable	44	Spindle double gear
12	Switch	45	Flat washer ℄16*8*0.8
13	Steel frame	46	Pivot ℄6*106
14	Screw M8X12	47	Coulisse
15	Cord	48	Core
16	Sleeve (Big)	49	Ball ℄4
17	Safety ring ℄47	50	Spring ℄0.5* ℄3.9*L12
18	Dust cover	51	Lever
19	Screw M5X20	52	Screw ST3X16
20	Bearing cover	53	Screw ST5X65
21	Pin 4*12	54	Airguide shim
22	Spindle	55	The stator (including the brush ring)
23	Hemicycle key 4X5X12	56	Soft start plate
24	Bearing 6204 Z	57	Chassis
25	Safety ring ℄20	58	Clamp
26	Spindle gear	59	Screw ST3.5X12
27	Safety ring ℄15	60	Brush cap
28	Bearing 6000 Z	61	Carbon brush 6.5*15*16
29	Gear box	62	Brush holder
30	Sealring ℄28*1.9	63	Screw M5X25
31	Bearing 6001 2RS	64	Rear cover
32	The rotor	65	Screw ST3.5X16
33	M insulation gasket		