



Instruction Manual

MINI MONTOR mobile 1 P

Order No. 0 006 700

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Tips on using the manual

Congratulation on the purchase of this device. Please pay attention to the operating instructions, to be able to use the handpiece effectively - about all - safety.

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The symbols used in the manual have the following meaning:

Working and operating processes which must be observed to the letter to exclude any risk to persons.



Working and operating processes which must be observed to the letter to avoid any damage to the device.

Technical information to which the device operator must give special attention.



The illustrations and diagrams are numbered in sequence within each chapter. Some of these illustrations have keys. References to illustrations within the text e. g. (5.1/2) have the following meaning:

5.1 = Figure 5.1

2 = Position 2 in the key to the figure.

Please feel free to call our customer service department at any time should you encounter technical problems which are not dealt with in this manual:

Telephone: 0 22 04 / 8 39 - 0

Telefax: 0 22 04 / 8 39 - 60

Internet: www.joke.de

3 Safety instructions

This device has been built according to the latest technical standards and generally accepted safety regulations. Nevertheless, it can constitute danger to life and limb for operator or third parties and a hazard to the device itself or other equipment during use.

1. Only use the device if in perfect working order and for its intended purpose. You must always pay attention to the instruction manual and safety instructions therein and be aware of the risks! Repair any faults which could affect the device's safety immediately by yourself or have these repaired.

The unit is designed exclusively for grinding work with the tools listed and approved in the joke catalogue for Surface Finishing. Any other use will be deemed to be contrary to its intended purpose. The manufacturer cannot be held liable for any resulting damages. The risk is borne solely by the user. Correct use also includes compliance with the instruction manual and an observation of the care and maintenance conditions.

2. Keep the instruction manual handy at the device's place of use.
3. Pay attention to and observe generally applicable statutory and otherwise binding regulations relating to accident prevention and environmental protection in addition to the information provided in the instruction manual!
4. All personnel commissioned to work on or with the device must have read this instruction manual, and particularly the safety instructions chapter, before starting work. This applies especially for personnel who only work with the device occasionally.
5. Stop the device immediately should you notice changes to the device or its operating behaviour that are relevant to its safety. Have these remedied before restarting work.
6. Do not carry out any modifications, additions or conversions to the device! This also applies to the installation and adjustment of safety equipment.
7. Spare parts must meet the technical requirements specified by the manufacturer. This can only be guaranteed with original joke spare parts.
8. Any work on/with the device may only be carried out by qualified, appropriately trained and authorised personnel. Pay attention to minimum statutory age limits!
9. Wear safety goggles when working with the belt grinder.
10. Personnel undergoing training or in a general apprenticeship should only be allowed to work with the machine under the constant supervision of an experienced operator!
11. Restrain from any type of work that could jeopardise your safety.
12. The device may only be used if all protective and safety equipment is in place and in proper working order.
13. Do not leave the device unattended when switched on!
14. Stop and secure the device immediately in the event of malfunctions! Faults must be remedied at once.
15. Take care that the device does not come into contact with inflammable material, liquids and gas.

16. A slight increase in temperature of the control unit may occur while the battery is being charged.
17. It is normal for the surface temperature of the handpiece to be 10 - 20° C higher than room temperature. 60° C may be reached inside the motor. These celsius values should not be exceeded depending on the working conditions. The device must be immediately switched off if the handpiece or motor overheats.
18. Avoid direct sunlight and hot air flows from air conditioning systems.
19. The ventilation slots on the side of the control unit must not be covered; otherwise the warmed air inside the device cannot escape.

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Warranty/identification

joke Technology GmbH warrants the correct manufacture of every joke product which is delivered in accordance with the terms of contract and delivery.

This warranty does not cover damages caused by normal wear and tear, incorrect handling, negligent use, the fitting of non-original spare parts, inadequate care and/or a failure to comply with this technical manual.



The device may only be used by appropriately trained personnel. If it is not, all warranty claims will be forfeited according to the terms of delivery.

Device identification

The manufacturer's code and type code, CE label and series number can be found on the handle sleeve.

Waste disposal

Ensure that the device is properly disposed of and is on no account committed to the domestic waste. .



5 Purpose

The Mini MONTOR mobile 1 P grinding, milling and polishing system is used in tool making and mould building and in mechanical workshops for fine surface finishing.

The Mini MONTOR mobile 1 P set provides you maximum mobility during daily work. Well protected in the hard-shell aluminium case, the grinding device can be taken anywhere. Large workpieces can be processed directly on site.

The environment-friendly Ni-Mh storage battery allows a working time of up to 140 minutes. It allows simultaneous charging and working with no trouble at all.

The mobile system features clockwise and anticlockwise running and infinite speed control. The switch for speed control also functions as the on/off switch.



Fig. 5.1 Overview complete set

- 1 - MPC20-W control unit
- 2 - Special tool
- 3 - TRC02 handpiece rack
- 4 - Handpiece with MPH33 micromotor
- 5 - TPF30 on/off foot switch
- 6 - Mains cable
- 7 - Bag
- 8 - ACP01 power supply unit/charger

6 Technical data

Mobile 1 P Set	
Speed	1,000 - 33,000 rpm
Motor	carbon brush motor
Dimension handpiece	Ø 25 mm x 143 mm
Weight handpiece	180 g (with cable)
Weight control unit	300 g
Collet	Ø 3.0 mm (Ø 2.35 mm and Ø 3.175 mm in stock)
Colour	white
Storage battery type	Ni-Mh
Working time	max. 90 min.
Charging time	60 min.



The mobile grinding device is supplied ex-works with a Ø 3.00 mm collet (order no.: 0006704). Collets of Ø 2.35 mm (order no.: 0006705) or Ø 3.175 mm (order no.: 0006706) are also available on request!

7 Use for the first time

Connect the controller (5.1.1) to the power supply unit/charger (5.1.8) and to the mains cable (5.1.6) and connect to the mains supply and fully charge (charging time during first charging operation: approx. 3 hours). The handpiece must not be used during the first charging operation. The ON/OFF switch must be set to OFF.



On first start-up before first use and after charging, it is essential to run the handpiece in. This is performed by allowing the handpiece to run idle for around 30 minutes (at a speed of between 15,000 and 16,000 rpm).

Operation use

1. Stand the control unit at a suitable safe, dry place. The ambient temperature should be between 0° and +40° C and relative humidity should be between 10 and 85 %.
2. Once the control unit has been fully charged, remove the charger. Connect the hand-piece to the controller (7.1.3).
3. Select the handpiece rotation direction with FWD/REV (7.1.1).
4. The device is switched on and off at the speed controller (7.1.2). The operating mode is apparent from the LED control indicator (7.3.1).
5. The speed can also be set using the speed controller (7.1.2).
6. Select hand or foot operation at the H/F switch (7.2.2).
7. If you wish to adjust the speed using the foot switch, connect the foot switch to the controller(7.2.1) and set the H/F switch (7.2.2) to F. Determine the desired maximum (7.1.2) speed. The foot pedal can now be used to adjust the speed up to the preset max. value.



The max. speed for the MPH33 handpiece is 33,000 rpm.



- 1 - FWD/REV switch
- 2 - Speed controller and at the same time ON/OFF switch
- 3 - Handpiece connection

Fig. 7.1 Controller front view



- 1 - Foot pedal connection
- 2 - Hand/foot operation selector switch
- 3 - Power supply unit/charger connection

Fig. 7.2 Back view control unit



- 1- LED control indicator

Fig. 7.3 LED control indicator

Connecting the handpiece



Never open the handpiece when the motor is running!

The MPH33 micromotor handpiece is factory-fitted with a protective pin (7.4.1) to protect the collet.



Fig. 7.4 changing tool

Replace the tool with the protective pin by rotating the front section of the handpiece clockwise. The spacer can now be easily removed. Insert the desired tool. Subsequently rotate the front section of the handpiece anticlockwise until engaged. The handpiece can now be connected to the control unit.

Collet change

The handpiece is equipped with a \varnothing 3.0 mm collet, which is exchanged using the special tool included in the scope of delivery. Firstly, the front head of the handpiece must be screwed off the motor. Next, mount the chuck key on the collet, simultaneously insert the special tool into the carrier and rotate according to the illustration in figure 7.6.



Fig 7.5 Special tool for collet change

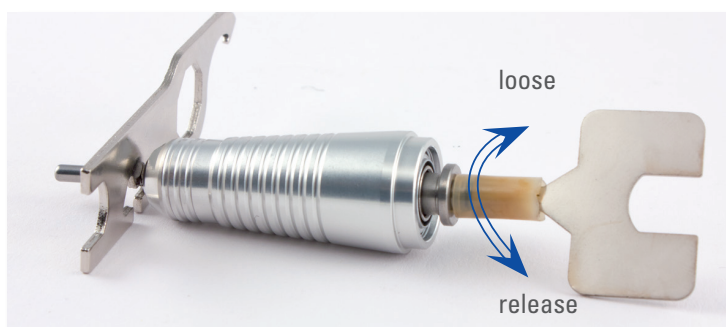


Fig. 7.6 Collet change

Recharge the battery

1. Switch the device off (7.1.2).
2. Connect the power supply unit/charger to the control unit (7.2.3) and the mains cable (5.1.6) to the charger and the mains supply. Charging takes approx. 1 hour.

Replace a discharged battery with a new one when the battery no longer has sufficient capacity. The Ni-Mh battery can be recharged approx. 500 to 1000 times, depending on working conditions. It is then possible to work continuously for 140 minutes and for approx. 180 minutes with pauses.

It is possible to continue operating the grinding device when the power supply unit and the mains cable are directly connected to the control unit.



Only recharge the battery when completely discharged! This increases battery service life.

Remove the power supply unit after charging. A constantly connected power supply unit markedly reduces battery life.

Maintenance/care

Control unit

The control unit is maintenance-free. Only clean it with a dry, soft cloth.

Handpiece

Pay attention to cleanliness of the thread turns when changing the handpiece.

Clean the contact surface when changing the tool.

Pay attention to utmost cleanliness when changing the collet and only use the keys provided.

Motor

All the micromotor bearings are encapsulated and lubricated for life.

Troubleshooting

Device	Description	Cause and solution
Handpiece	Battery is charged but motor does not run.	<ul style="list-style-type: none"> • Reconnect the connecting cable to the control unit • Motor cable is faulty; replace motor cable • Motor is faulty; send in to joke for repair • Collet open; close collet.
	Motor suddenly stops during work.	<ul style="list-style-type: none"> • Hand/foot switch is set to „H“; select „F“.
	Foot pedal does not work.	<ul style="list-style-type: none"> • Hand/foot switch is set to „H“; select „F“ • Foot pedal is faulty; check or have it repaired • Foot pedal is faulty; check • Foot pedal has no connection; renew connection • Battery discharged; recharge or replace battery.
	Motor stops every 2 to 3 seconds or does not run at full power.	<ul style="list-style-type: none"> • Battery faulty; replace battery.
	Battery is charged, but motor does not run or keeps stopping.	<ul style="list-style-type: none"> • Battery faulty; replace battery. • Speed controller is deactivated; activate controller. • Motor cable is not properly connected; connect cable.
Battery	Battery is not re-charged or battery is charged but motor does not run.	<ul style="list-style-type: none"> • Fuse in the power supply unit/charger is blown; replace power supply unit. • Power supply unit cable is faulty; replace cable. • No power supply unit cable connection; check connection. • Speed controller is faulty; replace controller. • Not a standard charger/power supply unit; only use an original power supply unit/charger.

9**To**

joke Technology GmbH
 Service-Departement
 Fax: +49 (0) 22 04 / 8 39 - 60

**Sender:**

Company

Name/Departement

Customer No.

Street

Postcode, Town/City

Please send us the spare parts drawing and parts list for the following equipment:

as a printout (see address overleaf),
 by Fax,
 as a pdf file to my e-mail address.

Set MINI MONTOR mobile 1 P	Order No. 0 006 700	<input type="checkbox"/>
Mobile control unit MPC20-W	Order No. 0 006 713	<input type="checkbox"/>
Handpiece MPH33	Order No. 0 006 711	<input type="checkbox"/>
Spannzange Ø 3.00 mm	Order No. 0 006 704	<input type="checkbox"/>
Collet Ø 2.35 mm	Order No. 0 006 705	<input type="checkbox"/>
Collet Ø 3.175 mm	Order No. 0 006 706	<input type="checkbox"/>
Power supply/charging device ACP01	Order No. 0 006 714	<input type="checkbox"/>
Foot controller TPF30	Order No. 0 006 701	<input type="checkbox"/>
Handpiece tray TRC02	Order No. 0 006 702	<input type="checkbox"/>
Hard-shell aluminium case	Order No. 0 006 703	<input type="checkbox"/>

Date

Signature



Brilliant solutions for perfect surfaces

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