# English



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# Operating Instructions C3-Master



We are pleased that you decided to buy a highly developed piece of equipment from SCHICK and would like to wish you every success when working with your new C3 Master motor unit.

We wrote these operating instructions to enable you to get accustomed to your new piece of equipment and to provide you with the correct operating and maintenance instructions.

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- 1. Safety information
- 1.1 Ascertain that your mains supply coincides with the data on the rating plate.
- 1.2 C3-Master units are not suitable for the following applications:
  - in areas where there is a risk of explosion
  - for medical applications
  - for working on moist materials
- 1.3 Ensure that all regulatory requirements are observed during use
  - always wear protective glasses
  - provide enough light at the working place - use dust suction
- 1.4 Under no circumstances should the motor handpiece be cleaned with compressed air.
- 1.5 Before putting the handpiece down, always insert a rotary instrument or the pin, supplied with the unit, into chuck.

## Caution:

- When using rotary instruments, do not exceed the maximum speeds laid down by their manufacturer.
- When operation with left-hand rotation, the collet may loosen when there is a high load.
- Repairs and other technical procedures must only be carried out by suitable qualified personnel, authorized by SCHICK.
- SCHICK do not guarantee the C3 Master unit should it not have been used in accordance with the operating instructions.

2. Range of applications

The C3 Master unit is designed for universal use in dental laboratories when trimming crowns and bridges, respectively acrylic and light chrome cobalt dentures.

With its speed range from 1.000 - 50.000 rpm the SCHICK C3 Master - unit allows to work all dental materials.

The motorhandpiece is ergonomical, small shaped and runs smoothly, thus eliminating user-fatigue and making it economical to use over long periods. The progressive processor controller constantly monitors the unit for overloading. A second thermal fuse, which is independent of the computer, provides further protection. Thus the C1 Master - unit offers a maximum of safety.

Conditions of environment:

- interior 5° 40° C.
- up to 2,000 meter over sea level

Categorie of overvoltage: II Grade of pollution: 2



WEEE-Reg.-Nr. DE 78620387



Accessories:

digital indicator article no. 6380

NH / DNH riveting hammer (1) article no. 1850 twin riveting hammer (2) article no. 1860

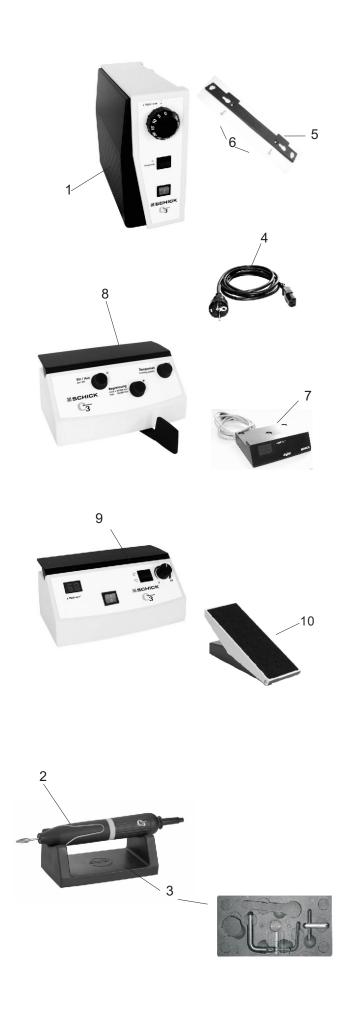




C3-Master motor with INTRAmatic-coupling article no. 7000/03



C3/SK C3/SK C3/MH	complete knee controller 1 motorhandpiece and cable 2 handpiece rack - with two keys for changing chuck 3	article-no. 7005 7035 7050 9127				
	mains cable 4 suspension strip 5 screws - 2 pieces - 6	2160 5614 3170				
C3/SK-D C3/SK-D	with digital indicator complete knee controller with attachment for digital indicator 1	7005/1 7035/1				
С3/МН	motorhandpiece and cable 2 handpiece rack - with two keys for changing chuck 3	7050 9127				
	mains cable 4	2160				
	suspension strip 5 screws - 2 pieces - 6	5614 3170				
	digital indicator 7	6380				
C3/SF	complete	7010				
C3/SF	foot controller 8	7040				
C3/MH	motorhandpiece and cable 2 handpiece rack - with two	7050 9127				
	keys for changing the chuck 3 mains cable 4	2160				
C3/SF-D C3/SF-D	with digital indicator complete foot controller with attachment	7010/1				
_	for digital indicator 8	7040/1				
C3/MH	motorhandpiece and cable 2 handpiece rack - with two	7050 9127				
	keys for changing the chuck 3	9121				
	mains cable 4	2160				
	digital indicator 7	6380				
C3/ST	complete	7015				
C3/ST	control unit table top model 9	7045				
C3/MH	motorhandpiece and cable 2	7050 6371				
	dynamic foot-switch 10 handpiece rack - with two	9127				
	keys for changing the chuck 3					
	mains cable 4	2160				
spare parts						
	Chucks: Standard: Ø 2,35mm Optional: Ø 3,00mm	6642 6643				
	chuck key counter stay wrench motor cable complete	4115 6223 7250				



# 5. Setting up

Operating the different versions Cruising system and operating with digital indicator see discription on page 6

# all versions

- 5.1 Ascertain, that your mains supply coincides with the data on the rating system.
- 5.2 Flug the mains cable 9 into the unit 1 and into a mains socket.
- 5.3 Flug the motor cable 3 into the socket 2 on the rear of the unit (quarter-turn catch).
- 5.4 Place the handpiece on the rest 8 supplied with it.

# knee controller version only

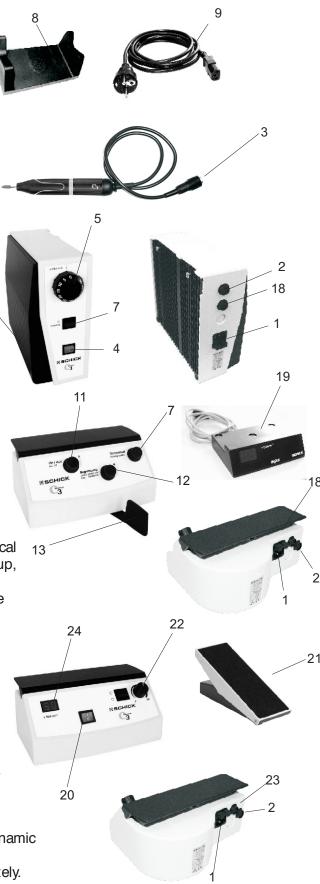
- 5.5 Press the mains switch 4 on the front of the unit. The control lamp will come on. The unit is switched. off by pressing the mains switch 4 again.
- 5.6 Set the speed controller 5 to the desired speed. The set speed can be reached right away by pressing the knee controller 6. The speed controller is provided with a mechanical locking which only allows speeds up to 40.000 rpm unless the segment 5 is operated deliberately. To reach speeds > 40.000 rpm press segment 5 whilst turning speed controller.

# foot controller version only.

- 5.5 Press the mains switch 11 on the front of the unit. The LED will flash up. The unit is switched off by pressing the mains switch 11 again.
- 5.6 The speed can be varied progressively between 1.000 - 50.000 rpm by moving the foot pedal 13. For your safety the unit is provided with a mechanical speed limitation 12. If the red warning light lights up, up to 50.000 rpm have been enabled. If the red warning light at the limiting switch is not lit up, the RPM's are limited to a maximum of 30.000.

# bench controller version only

- 5.5 Plug the dynamic foot-switch 21 into the socket 23 on the rear of the unit (quarter-turn-catch).
- 5.6 Switch on the mains switch 20 on the front of the unit (the control lamp lights up). The unit is switched off by pressing the mains switch 20 again.
- 5.7 Set the speed control knob 22 to the desired speed. (see digital display 24) The motor can be switched on or off by moving the pedal and the speed can be varied progressively up to the set speed.
- 5.8 The bench unit can also be operated without the dynamic foot-switch. Set the speed control knob 22 to the desired speed. The motor will begin to run immediately.



6. Function of Cruising Speed Control - Tempomat

Your C3 Master knee/foot-controller is equipped with a cruising speed control -Tempomat-. This extended control system enables the operator to select and store a given speed. A considerable facility for maintaining a constant speed f. e. for work underneath the microscope or for extensive work.

Cruising speed control 7 switched 'on'

- yellow LED is shining
- each speed which is kept more than 1 sec. is stored
- without pressing the knee/foot controller the motor is running with the speed stored
- by operating the knee/foot controller again or by pressing the switch 7 the stored speed is canceled
- to select a new speed please operate the knee/foot control again until the desired speed is reached and keep the control for about 1 sec. at this speed; the new speed then is stored.

A stored speed can be canceled by switching off the cruising speed control (yellow LED not shining).

Operating the unit with a digital display

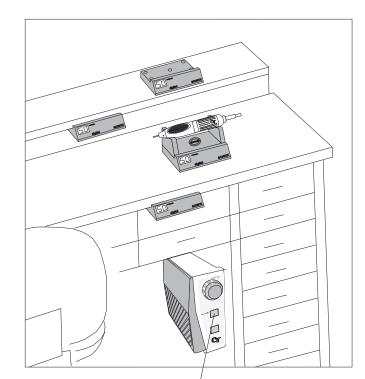
knee and foot models only

Insert the plug on the digital display 19 into the socket 18 in the rear of the unit. When the unit is switched on, the digital speed indicator shows the pre-selected maximum speed. Once the motor is running, the actual speed of the motor is displayed.

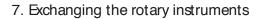
To save space, the digital speed indicator can be placed under the handpiece rack or, if required, adhered to a bench top with double-sided adhesive tape.

#### table top unit

into the table top unit a digital display is integrated the display operates in the same way as described above.



7



The chuck is opened, respectively, closed by turning the outer sleeve 13 of the handpiece.

## Caution:

Only ever exchange the rotary instrument with the motor switched off!

With regard to the precision and service-life of the chuck, an instrument must always be inserted into it - even when the handpiece is not in use.

auf

zu

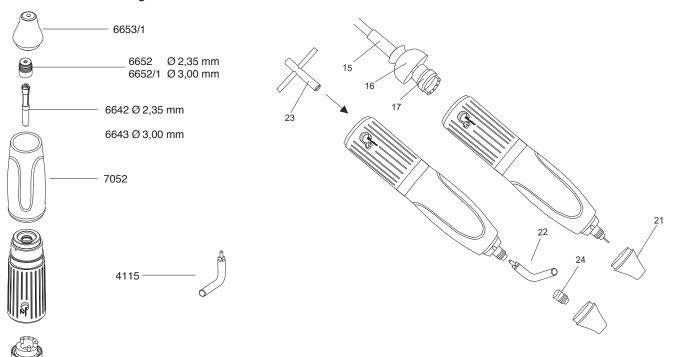
13

- 8. Replacing the chuck
- 8.1 Remove the motor cable 15. To do so unscrew the cap 16 from the motor and loosen the cable by pulling out the plug-in seal 17.
- 8.2 Open the chuck and withdraw the rotary instrument. Unscrew the end of the handpiece 21 (right-handed thread).
- 8.3 Remove seeling cap 24
- 8.4 Use a number 6223 wrench 23 to hold the motor end of the spindle. Engage the triangular section of the chuck with a No. 4115 chuck tool 22. To prevent the chuck becoming distorted, an instrument shank or the pin supplied must always be inserted into it. Hold the number 6223 23 wrench tightly and turn the chuck tool anti-clockwise to unscrew the chuck completely the chuck has a right-handed thread!
- 8.5 Clean the chuck, grease it lightly and place it in the spindle. Use the tools to screw the chuck in clock-wise and as far as possible as described in section 8.4, and tighten it slightly.

Replace the plug-in seal 17 and screw the cap 16 back into place. Screw the sealing cap 24 and the end of the handpiece 21 on again.

#### Please note:

The tools 22 and 23 are to be found in the base of the handpiece rest!



## 10. Possible faults

Should the handpiece be overloaded, respectively, jammed, for safety reasons the unit will switch itself off.

- Release knee/foot switch and operate it again; the unit is ready for use immediately

bench controller version only

- When using the bench version without a pedal switch, the speed control knob should be turned to "0", when the desired speed is selected again; the unit is ready for use immediately.

- When using the bench version with a pedal switch it should be released and operated again; the unit is then ready for use again.

all versions

if the unit should not be running after doing as described above the 2 fuses have to be checked and eventually exchanged.

The fuses (2x T2AH250V/2x T4AH100V-115V) are to be found at the rear of the unit beneath the socket 1.

#### 9. Care and maintenance Caution: Do not clean your C3 Master motorhandpiece with compressed air!

7250

6223

Chuck: should be cleaned and re-greased once in a while, depending on how dirty it is.

As C3 Master units have no commutators, carbon brushes or ventilation parts, no further maintenance is required. 11. Technical Data

Dimensions:	Width Height Dept	C3/SK 107mm 243mm 253mm	C3/SF 225mm 110mm 170mm	C3/ST 225mm 110mm 170mm		
Weight		3,7 kg	3,0 kg	2,9 kg		
C3/MH Length 158mm Weight 240g Power Supply: AC 220-240V 115V 100V Nominal frequency: 50/60Hz Power input: 270W Type: C3 Master						
Speed range: Torque max.: Safety class:	1.000 7,8 N I	) - 50.000 mi Icm	' 6	-	ith the current VDE (German ical technicians) regulations nd suppression.	
The oscillation total value during operation is below 2,5m/s² (EN 28662).				These operating instructions should be readily accessible and are best kept close to the unit itself.		
			t F	hat a proper repair	ke this opportunity to advise you service and suitable qualified ed for such highly developed	
12. Declaration of Conformity				SCHICK guarantees to carry out perfect repairs using original spare parts.		
We, SCHICK GmbH Lehenkreuzweg 12 88433 Schemmerhofen						
declare herewith, that the product						
C3 Master installations consisting of C3 Motorhandpiece 7050 connected with C3 Control unit 7035, 7040 and 7045						
is in conformity with the following provisions of Directive:						
2006/42/E 2014/30/E	<b>`</b>	achinery direc V directive)	tive)			
Name and add person in char		Wolfgang S Lehenkreuz 88433 Sche		1	Subject to technical modification without prior notice	
		.0010			manufacturer:	
Schemmerhofen, February 2016					SCHICK DENTAL	
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