

POLISHING UNIT **SHINE**

 **INSTRUCTION AND MAINTENANCE MANUAL**



1. DESCRIPTION

SHINE is a machine suitable to carry out grinding and polishing operations of the metals in the dental field. It has been expressly designed with dual speed option in order to avail of low average (1.400 rpm) working condition assuring a good removal effect without overheating the surfaces and of a high-average speed (2.800 rpm) assuring a perfect polishing.

Abrasive grinding wheels, brushes and felts can be inserted on the cone-shaped spindle. Plastic splash protection guards are recommended avoiding the residues to be propelled outside.

An electromagnetic safety switch prevents the machine from starting up accidentally after a voltage drop. In addition to this, it is necessary to wear individual protection devices such as glasses, gloves and mask to protect your eyes from the rebound of shavings, your hands from the possibility to touch accidentally the parts in motion and your breathing apparatus from the possibility to inhale dust particles.

2. TECHNICAL REFERENCE REGULATIONS AND TEST PROCEDURES

The polishing unit is mass-manufactured by DENTALFARM in compliance with technical and safety rules in force, as provided for by the 2006/42 EEC Community Directive on machinery.

Careful inspection and full routine testing is carried out singularly on each machine which is furtherly tested by an automatic test installation assuring compliance with the fixed limits.

3. GENERAL PRECAUTIONS

- Read carefully the present manual before carrying out any starting, operating or maintenance operation on the machine
- Safety of the User depends on the skill ability, on the good sense and on the caution when using the machine; for this reason, it is of utmost importance to know in detail the allocation and the function of all the controls
- The final User of the machine is a skilled and well trained professional and not merely an occasional worker
- Check regularly the parts which tend to wear out due to the specific working conditions
- Do not tamper the electrical wiring system of the machine
- The built-in safety mechanisms shall in no way be removed or modified
- Do not allow unauthorised persons to try to repair the machine
- Do not utilise petrol, solvents or any other inflammable fluids to clean some parts of the machine – use exclusively non-toxic and non-inflammable products available on the market for this specific purposes.

4. INSTALLATION INSTRUCTIONS



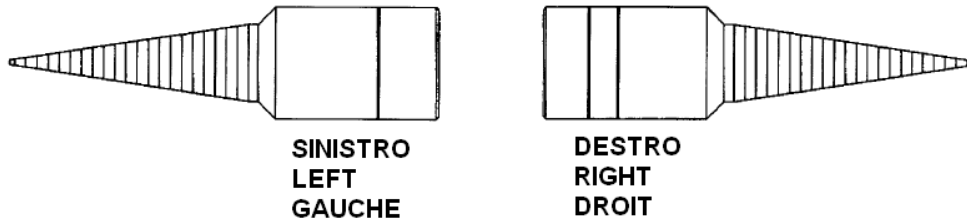
Installation of this machine is quite easy but it must be carried out paying utmost attention in order to avoid any mistake which may originate problems during operation, inconvenience or even damages.

1. Place the machine on a suitable support table, in a stable position
2. Connect the feeding cable to an approved 220v AC - 50Hz socket with ground connections
3. Place aside the two splash guards



We remind that the working process originates dust particles which in no way must be either inhaled or freely wasted; some particles may be propelled outside and there are some parts in motion which can not be fully covered. **Pay always utmost attention and fit yourself with adequate individual protection systems.**

4. Assemble the cone-shaped spindles, complying with the preset position (left – right)



5. Pressure-insert the necessary rotating instruments.

5. INSTRUCTIONS FOR USE

1. Press the white electromagnetic switch placed on the base to switch on the machine
2. Select the required speed
3. Slightly approach the pattern to the rotating tool



The rotating tools are the only parts susceptible to cause damages, therefore utmost care must be paid during operation. Never bring your hands too close to the parts in motion and avoid grinding too small components which are particularly hard to be hold and they could get entangled or forced in such a way to endanger your fingers.

4. When you have finished to work, push the proper switch to switch off the machine; the motor is no more fed but the shaft will continue turning for a few seconds due to the inertial force.

6. MAINTENANCE

ATTENTION:

Before carrying out any maintenance operation inside the machine or any technical to the connections, disconnect the electric cable from the socket; in such a way the machine will be completely insulated from the electric wiring system.

If you still have any doubts, difficulties or any possibility of mistake, contact our Technical Service to avoid any risks or damages.

Replacement of the worn out rotating instruments

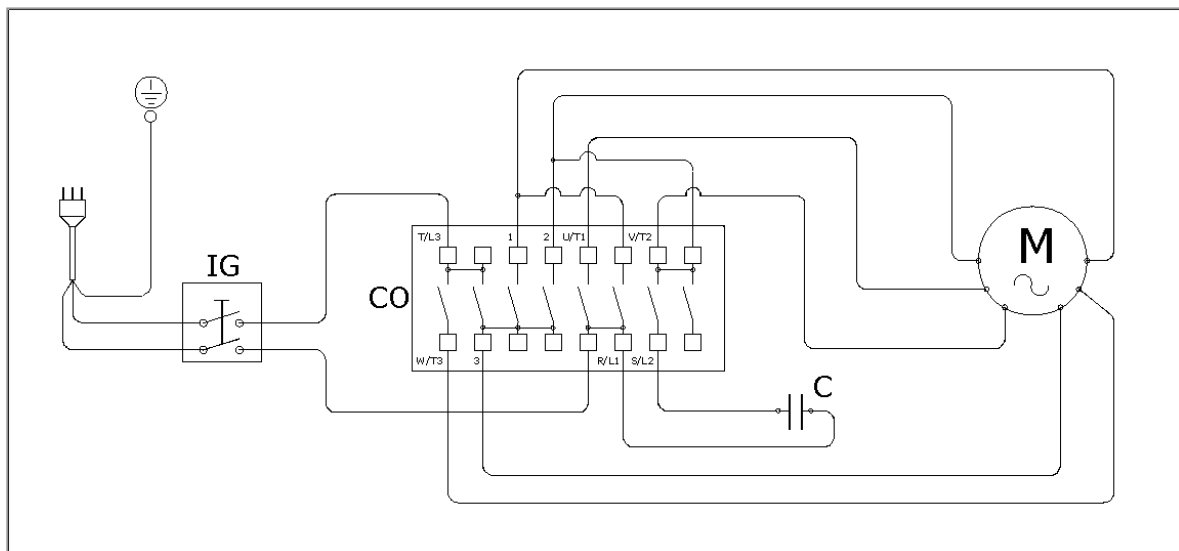
When it is necessary to replace the instruments fitted on the cone tips, it will be necessary to press slightly behind the metallic ring inside the discs, so as to release it from the connection point. If this operation results to be difficult, even in consideration of the position and due to the reduced room available, we recommend to turn the extraction levers of the spindle and work more safely and in a more comfortable way by grasping the parts themselves.

Lubrication or bearing replacement

The driving shaft revolves on shielded and protected bearings which lubricated with grease. Usually it is not necessary to restore the grease since the specific type of bearings has a long-life period of usage. In case the quantity of daily work and the effort requested to the machine excessively wear out the bearings, you can proceed as follows:

1. rotate the pin unlocking levers and remove them
2. unscrew the three screws fixing the shield (first the right, then the left one)
3. grease or replace the bearing
4. reassemble.

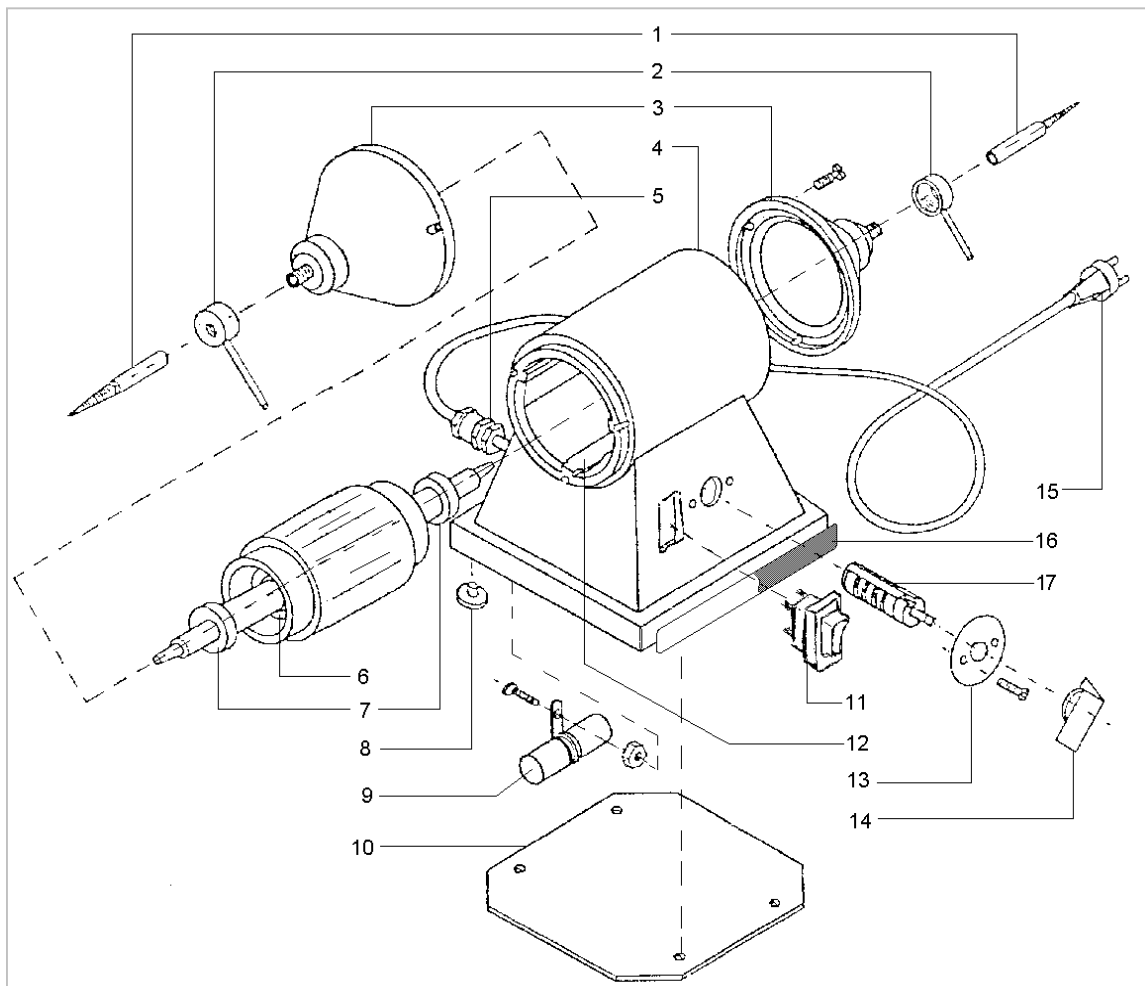
7. WIRING DIAGRAM



Symbol	Description
IG	Main switch
CO	12A - 8 contact change-over switch
C	450v 25 μ F motor starting up condenser
M	230v 50/60Hz 500W motor

8. EXPLODED DRAWING AND SPARE-PART LIST SHINE (A5201)

NO.	CODE	DESCRIPTION
1	5201014	RIGHT CONE-SHAPED SPINDLE
1	5201015	LEFT CONE-SHAPED SPINDLE
2	5201013	SPINDLE RELEASE LEVER
3	5201011	SHIELD
4	5201010	BODY
5	5101024	FAIRLEAD
6	5201017	ROTOR
7	5201019	SHIELDED BEARING
8	5101025	PROTECTION FEET
9	5201018	CONDENSER
10	5201012	CLOSING SHEET
11	5101022	BIPOLAR SWITCH
12	5201016	STATOR
13	5201021	SWITCH FRAME
14	5201022	SWITCH LEVER
15	5101023	ELECTRIC CABLE
16	5201001	SHINE MARK LABEL
17	5201020	ELECTRIC CHANGE-OVER SWITCH



TECHNICAL SPECIFICATIONS

Description	
Width	420 mm (600 mm with splash guards)
Depth at the base	205 mm (290 mm with splash guards)
Height	250 mm (280 mm with splash guards)
Net and gross weight	9,0 kg – 10,3 kg
Line voltage	230 v AC – 50/60 Hz
Running voltage	230 v AC
Absorption	500 W
Tool min diameter hole	5.0 mm
Tool max diameter hole	11,0 mm

10. DEMOLITION AND WASTE DISPOSAL

According to International regulations, this unit has been classified as AEE (electric and electronic device, whose correct operation depends on electric currents and electromagnetic fields) and as a consequence, at the end of its lifetime, it can not be treated as normal waste material but it must be disposed separately, complying with the Directive 2002/96/CE.




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