

**NAME:** Machine for coffee grinding and dosage.

**MODEL:** Series MD

- VERSIONS:**
- MD40
  - MD50/ST
  - MD50/AT
  - MD80

The label illustrated on the cover of this instruction manual corresponds to the identification label placed on the machine Fig. 2.

Label data:

1		
2	3	4
5	6	
7	8	9
10	11	12
13		14

Fig.1

- 1 Manufacturer
- 2 Model and version
- 3 Voltage
- 4 EC conformity mark (if required)
- 5 Serial number
- 6 Machine total absorption
- 7 Boiler data
- 8 Frequency
- 9 Omnipole switch fuse data
- 10 Motor power
- 11 Heater power
- 12 Protection
- 13 Conformity marks
- 14 Year of manufacture

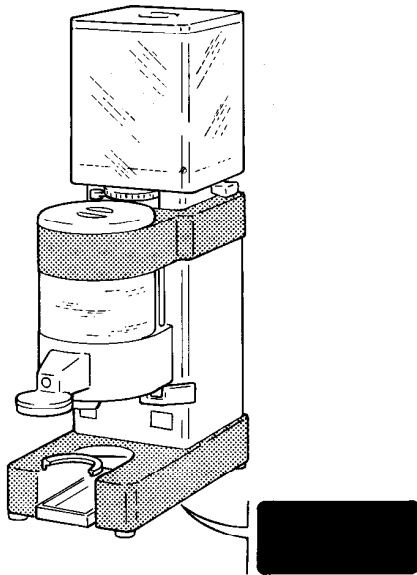


Fig.2

**Symbols**



Warning signal. The instructions which refer to this signal must be followed with great care in order to avoid accidents or damages to the machine.

This manual is an integral and essential part of the product and must be delivered to the user. The warnings contained in this manual must be read carefully, as they supply important indications relative to the safety of installation, use and maintenance. Conserve this manual for further consultation.

## 1. GENERAL SAFETY RULES

- The packing elements (plastic bags, expanded polystyrene, nails, cardboard, etc.) must not be left within reach of children, as they are potential sources of danger.
- Before connecting the equipment check that the data on the machine correspond to those of the electrical supply network.
- It is advisable to unwind the supply cable for the whole length to avoid twisting or damages. Do not place the cable near water, liquids or heat sources. The cable must not be damaged.
- Should the cable be damaged, contact qualified personnel to replace it by means of a special tool.
- It is not recommended to use adaptors, multiple sockets and/or extensions. When their use is indispensable, only products with certificate of quality (e.g. IMQ, VDE, +S, etc.) may be used. Check that the voltage capacity limit indicated on the adaptors exceeds the absorption capacity (A=ampère) of the equipment.
- In doubt, request an accurate control of the plant by qualified personnel. The electric plant must be provided with the following safety devices:
  - efficient earth connection
  - section of conductors suitable for absorption capacity
  - efficient earth leakage protection circuit breaker.
- Do not install the machine in the vicinity of heat sources (oven, cooking stove, fireplace, etc.) and in conditions in which the temperature may go below + 5° C.
- Keep the packed machine in a dry place, not exposed to atmospheric agents and in conditions in which the temperature may not go below 5°C. Do not stack more than three items of the same kind. Do not place heavy items on the packaging.
- In an emergency (fire, anomalous noisiness, overheating, etc.) disconnect the plug, turn off the gas and water taps.
- Do not leave the machine exposed to atmospheric agents (rain, sun, etc.) and do not install it in damp rooms such as bathrooms
- Only spare parts authorized by the manufacturer must be used, in order to avoid compromising the safety of the machine.



***Erroneous installation can cause damage to people, animals and things for which the manufacturer cannot be considered responsible.***

## 2. DESCRIPTION

### 2.1. Assembly information

The machine is composed of a single structure for coffee grinding and dosage.

The machine has a cast-aluminium base on which a steel structure is mounted. The bean container with self-contained grinder is placed in the upper part of the machine, whereas in the front part the ground coffee container with doser is positioned.

### 2.2. Functioning

The beans are collected in a hopper container fitted with cover. After turning on the motor, the grinding device under the container is activated. The ground coffee is collected in the front container from where the coffee doses may be taken by activating a hand lever.

The possible adjustments are the following:

- grinding fineness
- delivered ground coffee dose.

### 2.3. Model configuration

#### **MD40**

Small size model with manual turn on/off modality.

#### **MD50/ST**

Medium size model with manual turn on/off modality.

#### **MD50/AT**

Automatic functioning medium size model with possible manual turn on/off modality.

#### **MD80**

Automatic functioning large size model with possible manual turn on/off modality.

Index Fig. 3

- 1 Main switch
- 2 Hand grinding button (MD50/AT-MD80)
- 3 Bean hopper container
- 4 Grinders protection
- 5 Hopper container closure lever
- 6 Ferrule to adjust the grinding fineness
- 7 Button to release the adjustment ferrule
- 8 Ground coffee container
- 9 Adjustment knob for ground coffee doses
- 10 Delivery lever for ground coffee doses
- 11 Fork to support the filter ring
- 12 Coffe powder collecting tray
- 13 Ground coffee press

#### 2.4. Protections

All moving parts are inside the machine.  
In the bean container 3 Fig. 3 a protection 4 fixed with screws Fig. 3 is positioned to protect your hands during filling and cleaning of the bean container.

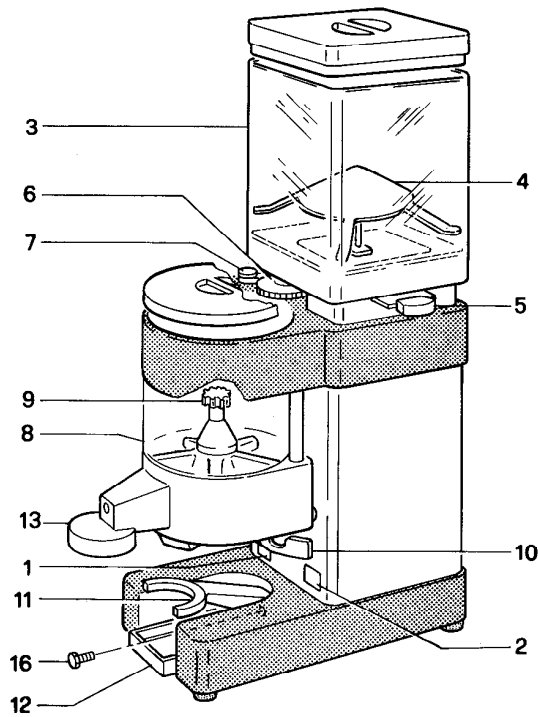


Fig.3

#### 2.5. Aerial noise

The results of the noise tests performed in accordance with the regulations in force are as follows:

At the operator's place with idling machine:

Leq (A) = <70 dB (A)

At the operator's place with operating machine:

Leq (A) = 75 dB (A)

#### 2.6. Vibrations

The machines are supplied with rubber vibration suppressing feet. In normal working conditions the machine does not produce vibrations harmful to the operator and the environment.

### 3. TECHNICAL DATA Fig. 4

Models	MD40	MD50/ST MD50/AT	MD80
Machine dimensions mm	L.140 P.335 H.440	L.155 P.360 H.405	L.200 P.390 H.610
Package dimensions mm	L.535 P.210 H.345	L.585 P.220 H.405	L.630 P.290 H.470
Package volume	0,039	0,052	0,086
Net weight kg	9	13	18
Gross weight kg	10	14	20
No. of items	1	1	1
Grinders diameter mm	50	63,5	75
Production kg/h	2,5÷3,5	7÷9	12÷14
Bean container capacity g	500	1000	1400
Ground coffee container capacity g	170	300	400
Doses adjustment g	5÷8	5÷10	5÷10

### 4. USE

The machines have been disegned and manufactured to grind coffee beans for professional use. This machine may be used only for the purposes for which it was designed. Any other use is to be considered unsuitable and therefore dangerous.



*In case of domestic use, the installer or the seller are responsible for the user's training.*

***The manufacturer cannot be held responsible for any damage caused by unsuitable, erroneous and irrational use of the machine.***

The user must always follow the indications contained in this manual. In the case of a failure or if the machine is not working properly, switch it off and do not attempt any direct repairs. Refer exclusively to qualified personnel.

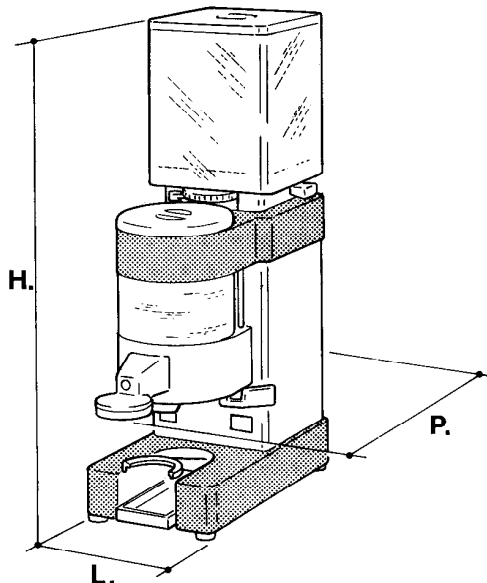


Fig.4

#### The user cannot:

- put his hands under the ground coffee container;
- touch the machine with wet or damp hands or feet;
- transport the machine or carry out maintenance operations with the plug connected;
- pull the supply cable in order to disconnect the machine from the supply network;
- use the machine if the supply cable is damaged;
- dip the machine in water or other liquid;
- wash the machine with water or vapour jet;
- use the machine when there are children in its proximity;
- allow the machine to be used by children or unfit persons;
- leave the side doors open;
- place containers with liquids on the machine.



*It is forbidden to install or use the machine in case it should be wet or damp. It is always necessary to request an accurate control by qualified personnel in order to find out any possible damages to the elctric components.*

#### 4.1. Counterinstructions

This machine may be used only for the purposes for which it was designed. It should not be used to grind any products other than coffee or non food products.



***The manufacturer cannot be held responsible for any damage caused by unsuitable, erroneous and irrational use of the machine.***

## 5. TRANSPORT

The machine must always be transported in a correct position following the instructions on the cardboard box.



*Do not turn over the machine or lay it down on a side.*

The cardboard contains three single components of the machine and the manual to be conserved for further consultation.

- Check on delivery that the machine and the accessories supplied correspond to those described on the delivery note.

- Open the upper side of the box, remove the accessories and take out the machine.

- Check if the machine, the accessories, the electric cable and the plug are in perfect conditions. Should one of these parts be damaged, contact immediately the shipper or our customer servicing office.



*The packing elements (plastic bags, expanded polystyrene, nails, cardboard, etc.) must not be left within reach of children, as they are potential sources of danger. The packaging should be disposed of with consideration.*

## 6. INSTALLATION

**Operations to be effected by professionally qualified personnel.**

The machine is delivered ready to be installed according to the label data Fig.1.

Make sure that the user's electrical supply network corresponds to the characteristics of the machine.



*The power supply plant must be provided with earth leakage protection circuit breaker or automatic main switch connected to an adequate earth. If no safety device is available, it is necessary to prepare an omnipole switch in compliance with the safety regulations in force, having an opening distance of the contacts equal or superior to 3 mm.*

***It is compulsory to use grounding connections with the machine.***

***The manufacturer declines any responsibility if this accident prevention regulation is not observed.***

*Do not damage the electric cable by bending or crushing it.*

- Place the machine for coffee grinding and dosage on a horizontal surface;

- Position the hopper container 3 Fig. 5 on the four

hexagonal pins 14;

- Place the grinders protection 4 on the bottom of the container 3 with the upper holes in correspondence with the inferior holes, then insert the screws with relative washers 15 and tighten them.



*Do not overtighten the screws.*

- Insert the plug to connect the machine.

### 6.1 Motor rotation (To be effected by professionally qualified personnel).

For the machines with triphase electrical power check the correct motor rotation.

- Switch on the coffee grinder and check if the grinding is correct. If the motor is rotating in the wrong direction, the grinding will not be satisfactory.

- Turn off the machine and the main switch.

- Invert the two phase conductors, re-assemble all the parts and grind some coffee.

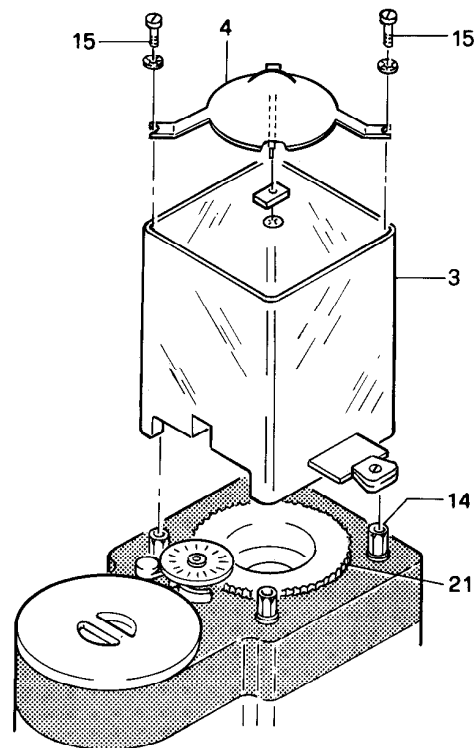


Fig.5

## 6.2. Grinders calibration (to be effected during the assembly and after the grinders change).

The coffee grinder and dosing machines are tested with an approximate adjustment; it is therefore recommended to adjust the machine before use with the empty hopper container.



*Machine adjustment should only be performed with the machine switched off and never carried out when the machine is operating.*

- Turn on the machine by pressing the main switch (see paragraph 7.1.).

### MD40

- By keeping the ferrule-stop button 7 pressed (Fig. 6), turn ferrule 6 in a clockwise direction (Fig. 6) until the grinders click; turn immediately ferrule 6 in a counterclockwise direction by 15-20 marks.

### MD50/ST - MD50/AT - MD80

- By keeping ferrule-stop button 7 pressed (Fig. 6), turn ferrule 6 in a counterclockwise direction until the grinders click; turn immediately ferrule 6 in a clockwise direction by 30-40 marks.

- Release ferrule-stop button 7 and check that ferrule 6 is locked.

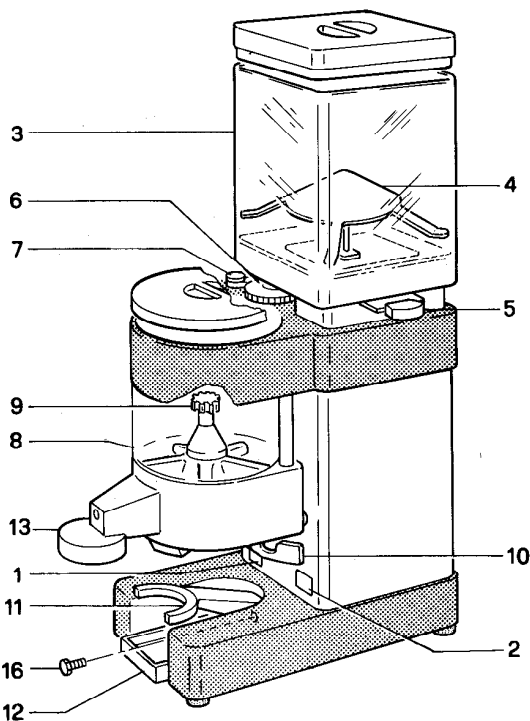


Fig.6

## 7. STARTING THE COFFEE GRINDER

### 7.1. Controls Fig. 6

#### MD40 - MD50/ST

- 1 Main switch with two positions: *when it is pressed, the light is on, the machine is connected and the coffee grinding starts.*

#### MD50/AT - MD80

- 1 Main switch with two positions: *when it is on position (I), the light is on and the machine is connected.*
- 2 Light button: *when it is pressed the light is on and the manual coffee grinding starts.*

### 7.2 Grinding adjustment Fig. 6

The coffee grinder is tested by the manufacturer with an approximate grinding adjustment. It is recommended to re-adjust the machine to get the favourite grinding according to the type of coffee used.



*Machine adjustment should only be performed with the machine switched off and never carried out when the machine is operating.*

- Put some coffee beans into the hopper container and close the cover;
- Make sure that the hopper is open (lever 5 outwards);
- Grind some coffee;
- Place the filter ring on fork 11 and use lever 10 in order to deliver the ground coffee dose;
- If the filter ring is lower or higher than the ground coffee outlet pipe, change the position of fork 11 by turning out screw 16. Tighten screw 16 after completing the adjusting operation.
- Prepare a coffee; the delivery time for the best grinding is between 25 and 30 seconds;
- Check coffee quality and taste considering that a coarse grinding produces light coffees without cream, whereas a too fine grinding produces strong, dark coffees without cream.

#### MD40

- In case coffee does not meet your requirements, adjust the grinding by means of button 7 and by turning ferrule 6 in a clockwise direction for a finer grinding and in a counterclockwise direction for a coarser grinding.

#### MD50/ST - MD50/AT - MD80

- In case coffee does not meet your requirements, adjust the grinding by means of button 7 and by turning ferrule 6 in a counterclockwise direction for a finer grinding and in a clockwise direction for a coarser grinding;

- Repeat this operation until you get the quality of coffee wished.

*By using the same kind of coffee the machine does not need new adjustments; if you change the kind of coffee re-adjust the grinding.*

### 7.3 Adjustment of the ground coffee dose Fig. 7



**To be effected with the machine switched off and plug disconnected.**

Doses can be adjusted as follows:

- Remove the cover of ground coffee container 17;
- Push downwards dosing star 18 and at the same time turn knob 9 in a clockwise direction in order to reduce the dose or in a counterclockwise direction to increase it.

*A coffee dose generally weighs between 6 and 7 grammes.*

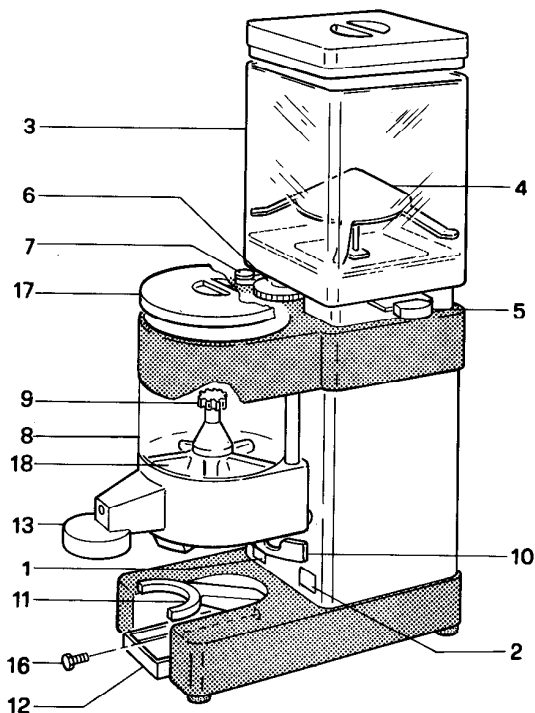


Fig.7

## 8. OPERATION Fig. 7

After adjusting the grinding and ground coffee doses, fill the hopper container with coffee beans and start grinding.

### MD40 - MD50/ST

- Grind coffee by pressing button 1.

### MD50/AT - MD80

- Press main switch 1 and the button 2: grinding is automatic.

- Use button 2 for manual grinding.

*It is recommended to grind just the coffee quantity you immediately need because ground coffee left in the container loses freshness and flavour. Never grind already ground coffee.*

- Place the filter ring in fork 11, pull towards the operator and release lever 10 one or more times according to the doses required (a dose for each movement of the lever).

- Level the coffee in the filter, place the filter ring under coffee-press 13 and lift it to press coffee;

- Make sure that there is no ground coffee on the edge of the filter ring.

## 9. MAINTENANCE



*Maintenance operations are to be effected when the machine is off and the plug is disconnected.*

*Do not clean the machine by using metal or abrasive devices, such as steel wool, metal brushes, needles, etc., or detergents.*

*For cleaning operations a damp cloth or a sponge may be used.*

### 9.1. Routine maintenance

- Clean the outside structure, the coffee-press and the tray for ground coffee.
- Clean the dosing area under the ground coffee container.

### 9.2 Periodical maintenance

- Empty the coffee bean and the ground coffee containers and clean them in order to remove any coffee greasy residue.



*All waste products used for working or maintenance operations that can be considered polluting or not biodegradable should be disposed of with consideration to the environment.*

## 10. STOPPING THE MACHINE

### 10.1. Temporary stop

- Close the hopper container and grind the beans remained in the container;
- Switch off all the buttons and disconnect the plug;
- Empty the hopper container from ground or bean coffee;
- Perform the cleaning and maintenance operations;
- Wind the supply cable and fix it to the machine with adhesive tape;
- Cover the machine and keep it in a dry place. Do not leave the machine exposed to atmospheric agents and do not allow it to be used by children or unfit persons.

### 10.2 Definitive stop

After effecting the operations of temporary stop, follow these instructions:

- Cut the supply cable;
- Pack the machine using cardboard, polystyrene or other packing materials and deliver it to a rubbish collector or second-hand goods dealer.

## 11. PROBLEMS

### 11.1. Check operations to be effected by the user (with disconnected supply plug).



*For any type of problem or inconvenience not specifically indicated disconnect the plug and contact the customer servicing.*

- A) The machine does not start:
- check if the plug is connected;
  - in case of power failure wait for the power to return and check if the earth leakage protection circuit breaker or the main switch is on;
  - check the conditions of the plug and the supply cable; if damaged contact qualified personnel to replace them.
- B) It does not grind coffee:
- check that there is some bean coffee in the container;
  - check that the hopper closure lever is open.
- C) Too long grinding:
- check the grinding adjustment;
  - contact qualified personnel to replace the grinders.
- D) Doses are not regular:
- clean properly the ground coffee container and the side under it (coffee nozzle);
  - check that the movement of the dosing lever is correct and free.

## 12. SERVICING INFORMATION

### 12.1 Grinders change

Even if grinders are made of hardened steel they can wear out.

The wear depends on the quantity of ground coffee, the coffee hardness and roasting level and the coffee beans quality.

Small stones and impurities are abrasive and reduce the grinders lifetime.

When the grinding time is too long or the grinding is not regular, the grinders may be replaced as follows:

- Pull hopper closure lever 5 Fig.8;
- Switch on the machine to grind the coffee remained in the container;
- After grinding switch off the machine and disconnect the plug;
- Empty hopper container 3 Fig.8-9;
- Remove screws 15 Fig.9, grinders protection 4 Fig.9 and hopper container 3 Fig.8-9;
- Remove clamping ring 19 Fig.10 and ferrule 20 (except for MD40 model);
- Turn upper grinders support 21 Fig.10 in a counter-clockwise direction until the whole part is out;
- Unscrew screws 22 Fig.10 and disassemble the grinders from the grinders support;
- Clean the grinders support surfaces, the grinders support thread and the seat.
- Place the new grinders on their supports and fix them tightly;
- Re-assemble all the components following the inverted procedure;
- Calibrate the new grinders.

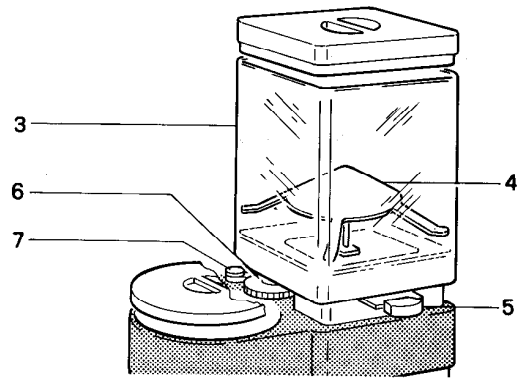


Fig.8

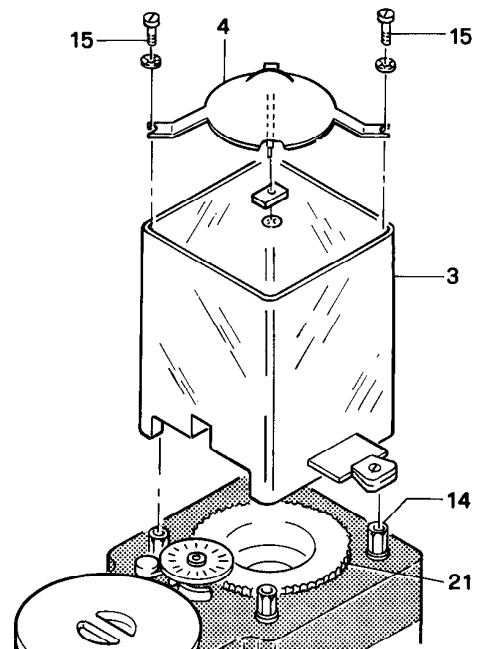


Fig.9

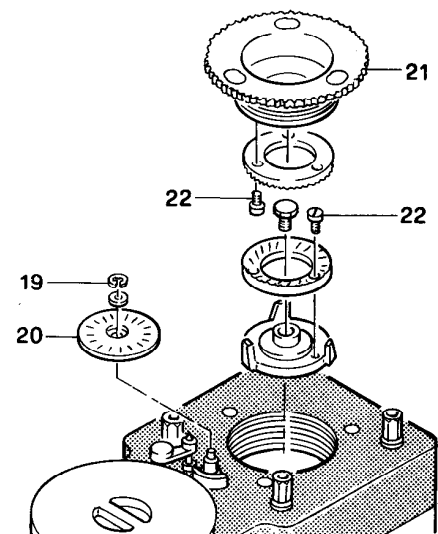


Fig.10