

Tandir Knife

Operating Manual



TANDIR®

Tandir Knife

Table of contents

Table of contents

Preface.....	1
Conformity.....	3
1 General.....	5
1.1 Address, spare parts ordering and customer service.....	5
1.2 Changes in content.....	5
1.3 Copyright.....	5
2 Technical data.....	6
2.1 Technical data of charger.....	6
2.2 Technical data of table-top power supply unit.....	6
2.3 Emission sound pressure level.....	6
3 Legal regulations.....	7
3.1 Use in conformity with intended purpose.....	7
3.2 Warranty and liability.....	7
3.3 Return and repair requirements.....	8
4 Safety notes.....	9
5 Knives and knife heads.....	10
5.1 Knife head sizes.....	10
5.2 Circular knife types.....	11
5.3 Accessories.....	12
6 Construction.....	13
7 Putting into operation.....	14
7.1 Putting into operation of unit powered by battery pack.....	14
7.1.1 General information on charger (Ansmann).....	14
7.1.2 Charging and inserting the battery pack.....	15
7.2 Putting into operation of unit powered via cable adapter.....	16
7.3 Setting the cutting depth.....	17
7.4 Slicing with the circular knife.....	18
7.5 Removing the battery pack.....	18
8 Removing and cleaning the tandir knife.....	19
5.1 Removing the guard (aluminium cap).....	19
5.2 Removing and fitting the circular knife.....	20
5.3 Removing the scraper.....	22
8.1 Cleaning the unit.....	23
5.4 Mounting the guard (aluminium cap).....	24
9 Maintenance of tandir knife.....	26

Tandir Knife

Table of contents

9.1 Grinding the tandir knife by hand with the special grinding stone available from Ümit	26
9.2 Sharpening the tandir knife with a grinding machine (OPTIONAL).....	28
9.3 Removing and charging the battery pack.....	28
9.3.1 Removing the battery pack.....	28
9.3.2 Discharging the battery pack.....	29
10 Troubleshooting.....	30
11 Repairs.....	31

Tandir Knife

Preface

Preface

Dear Customer,

Thank you for opting for a tandir knife from our company!

Please read these instructions carefully and thoroughly. Pay particular attention to the safety hints given in the text and in the section „Safety notes“.

This will:

- ensure safety when using the knife,
- produce good results
- allow the knife to be operated free from troubles.

Should you have any questions for which no answer is contained in these instructions, you can give us a call. We will be pleased to help you.

We are continually endeavouring to further improve our products, so that there may be minor deviations between the knife you have purchased and the description given in this manual.

If you have any questions or problems, we will be gladly prepared to provide assistance. You can reach us daily from 9:00 a.m. to 06:00 p.m. at

Your suggestions for improvements are always welcome.

Tandir Knife

Preface

If you have any queries and when ordering spare parts, please indicate:

- knife type, and
- knife number.

We wish you much success.

2011 Ümit GmbH

Rischbleek 2

D-38126 Braunschweig

All rights reserved. Neither this manual nor any extract from it may be reproduced in any form without the prior permission of Ümit.

Conformity

Conformity



Abb. 1 CE sign



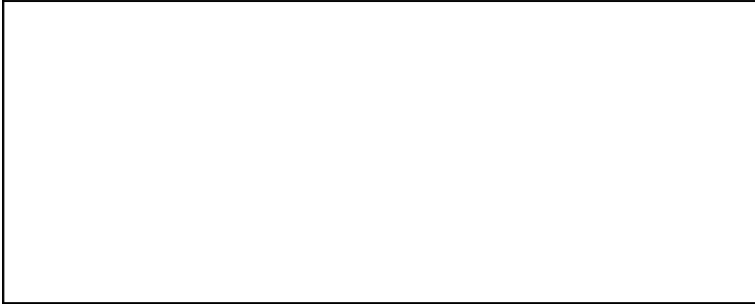
Your tandir knife bears the CE sign and conforms to the following directives and norms:

Directives	
EU directives	98/37/EC (Machinery), Annex IIA 89/336/EEC (EMC), amended by 92/31/EEC and 93/68/EEC 73/23/EEC (Low voltage), amended by 93/68/EEC
Harmonised norms	
EN 292-1: 1991	Safety of machinery – Basic concept, general principles for design Part 1: Basic terminology, methodology
EN 292-2: 1991 +A1: 1995	Safety of machinery – Basic concept, general principles for design Part 2: Technical principles and specifications
EN 12267: 1996	Food processing machinery – Circular saw machines – safety and hygiene requirements
EN55014-1: 2003	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus Part 1: Emission
EN55014-2: 2002	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus; Immunity – Product family standard (including Corrigendum: 1997)
EN61000-3-2: 2001	Electromagnetic compatibility (EMC)- Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN61000-3-3: 2002	Electromagnetic compatibility (EMC)- Limits – Limitation of voltage changes; voltage fluctuation and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

Tandir Knife

Conformity

Harmonised norms	
EN 60335-1: 2002	Household and similar electrical appliances - Safety Part 1: General requirements (IEC 60335-1:2001, modified); German version EN 60335-1:2002
EN 60335-2-14: 2003	Household and similar electrical appliances - Safety Part 2-14: Particular requirements for kitchen machines (IEC 60335-2-14:2002, modified); German version EN 60335-2-14:2003
EN 60204-1: 1997	Safety of machinery – Electrical equipment of machines Part 1: General requirements

General**1 General****1.1 Address, spare parts ordering and customer service****1.2 Changes in content**

We reserve the right to make changes to the content. ÜMIT does not accept any liability for any errors which might exist in this documentation. Any liability for consequential damage arising in connection with the supply or use of this documentation will be excluded to the extent permitted by law.

1.3 Copyright

ÜMIT retains the copyright in these operating instructions. This manual is intended for the owner and its personnel.

Neither this manual nor extracts of it may be

- reproduced,
- disseminated, or
- disclosed to unauthorised third parties.

Any violation may render the offender liable to proceedings.

Technical data**2 Technical data****2.1 Technical data of charger**

Input voltage:	230VAC~ ± 10% / 50Hz
Output voltage:	ca. 30VDC in open circuit; 14.4VDC in charging/discharging mode
Charging current:	850mA ± 10%
Discharging current:	300mA ± 10%
Float charging:	270mA + 10% pulsed
Weight incl. charging tray:	ca. 950g

2.2 Technical data of table-top power supply unit

Input voltage:	230VAC / 50/60Hz
Output voltage:	15VDC, 6A
Fuse:	T 6.3A
Weight:	ca. 2650g

2.3 Emission sound pressure level

at workplace:	acc. to EN ISO 11201
---------------	----------------------

Legal regulations**3 Legal regulations****3.1 Use in conformity with intended purpose**

Your tandir knife may be used exclusively for cutting layered or minced meat, the cutting movement taking place vertically from top downward.

Use in conformity with the intended purpose also includes regular cleaning and maintenance.

3.2 Warranty and liability

In case of any claims under the warranty, you can directly turn to us. The tandir knife including its accessories (cable adapter, charger, double grinding machine) is warranted to be free from defects in material and workmanship for a period of 12 months from the date of the invoice. Any warranty services will require proof of purchase to be produced.

Any defects covered by the warranty will be rectified in accordance with these guarantee terms. This warranty will become void if proper functioning of the unit is endangered by non-observance of these operating instructions, use not in conformity with the intended purpose or tampering. The user will become liable himself in all such cases.

This warranty will also become void if any persons other than those authorised by us have made settings or changes. Our warranty service will be available in case of valid warranty claims. We reserve the right to determine at our own discretion the place at which the service will be performed or provided.

The foregoing warranty is exclusive and in lieu of all other warranties, whether written, oral or implied and shall be purchaser's sole remedy and our sole liability in respect of the product. We disclaim any indirect warranty claims arising from the use of the product.

In no case is liability accepted by us for any collateral or consequential damage resulting from or in connection with the use or application of the product.

Legal regulations**3.3 Return and repair requirements**

All warranty claims must be made and received by us within the applicable warranty period.

Our prior permission must be obtained before a product is returned for having it repaired and/or settings be made. Any material returned for checking and/or warranty repairs should have insurance cover for the means of transportation indicated by us.

We will in all cases have sole responsibility for determining the cause and nature of a fault and for making a final decision in this regard.

Consignments / parcels sent postage not prepaid will not be accepted!

Safety notes

4 Safety notes

When using the unit, please observe the following safety notes to prevent damage to the unit and personal injury!

**Danger of cutting!**

...by sharp, uncovered circular knife. Take particular care when:

- **unpacking** the circular knife (**wear protective gloves!**),
- **removing** and **cleaning** the circular knife (**always disconnect the battery pack or cable adapter first**), and
- **working** with the knife (**switch on only just before performing a cut**).



The unit must **never be operated without knife cap!**



Keep the unit **away from children!**



Maintenance and cleaning operations may be carried out only with the **knife being switched off** and **battery pack or cable adapter disconnected**. Please observe always the **safety notes** given in section 5.1 and the **Troubleshooting directions** given in section 10.



Do not immerse the **unit in water** (**switch and battery compartment must never become wet**).



Before removing the knife cap, always **disconnect the battery pack or cable adapter!**



When using the optional **grinding machine**, always observe the instructions given in section 9.2!



Clean the unit thoroughly **once daily as a minimum** in accordance with the instructions given in section 8.4. Failure to do so will expose your customers to the **risk of infection!**

Knives and knife heads

5 Knives and knife heads

5.1 Knife head sizes



Abb. 2 Knife head sizes of tandir knife

The tandir knife consists of a casing and a head (Fig. 2).

The head of the unit is available in three different sizes. The tandir knife is shipped from the factory with one head from among the three sizes fixedly installed. The diameter of the circular knives is:

- 100 mm,
- 120 mm, or
- 140 mm.



For each knife head size, there is a corresponding circular knife and cap.



The knife head may be removed and exchanged solely by the manufacturer, because special tools and special expertise are required for this purpose.

Knives and knife heads

5.2 Circular knife types



Abb. 3 Sawing knife



Abb. 4 Round knife

Different types of circular knives can be used in the tandir knife:

- **Sawing knives** (Fig.3): are used for slicing layered meat, and
- **Round knives** (Fig. 4): for slicing minced meat.

Knives and knife heads

5.3 Accessories



Abb. 5 Tandir knife with battery pack



Abb. 6 Tandir knife with transformer and cable adapter (mains operation)



The tandir knife can be operated with a **battery pack** (Fig. 5) or at mains voltage via a **transformer and a cable adapter** (Fig. 6).



When using the unit with a transformer and cable adapter, take care:

- to ensure that the connecting cable will not be accidentally cut,
- to keep the connecting cable away from hot surfaces to prevent it from becoming damaged,
- to ensure that the transformer will neither be contaminated with fat nor exposed to heat or humidity.

Construction

6 Construction

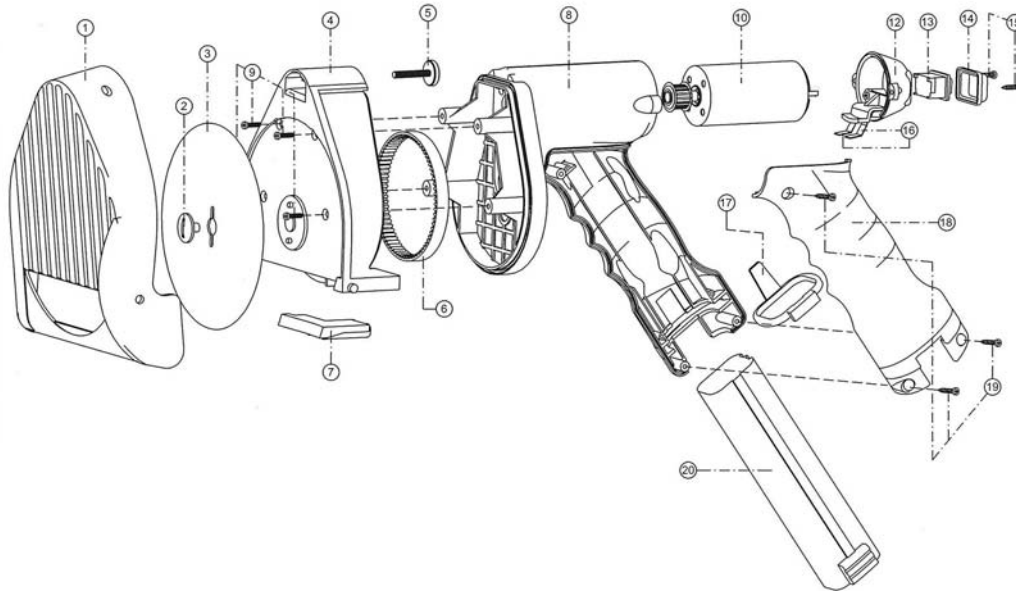


Abb. 8 Components

Item	Description
1	Guard (aluminium cap)
2	Knife screw
3	Circular knife (available in 3 different sizes)
4	Knife head (available in 3 different sizes)
5	Knurled screw
6	Toothed belt
7	Scraper
8	Casing
9	Socket head cap screw (4 off)
10	Motor

Item	Description
12	Switch enclosure
13	Switch
14	Switch protection cap
15	Screws (2 off)
16	Contacts
17	Interlock mechanism
18	Handle half
19	Screws (3 off)
20	Battery pack or cable adapter

Putting into operation**7 Putting into operation****7.1 Putting into operation of unit powered by battery pack****7.1.1 General information on charger (Ansmann)**

Protect the unit from moisture!

Do not use the set when the casing or mains plug are found to be damaged.

The set must not be opened.

The set may be repaired solely by the charger manufacturer (Ansmann).



The charger is exclusively intended for charging 12-cell nickel/metal hybrid battery packs with a capacity in the range of 1000mAh.



New battery packs which have been left unused for a prolonged period of time cannot be charged initially to their full capacity.



The battery pack should normally be left in the charger if the unit will not be used for a longer time (e.g. at night or over the weekend).

Make sure at any rate that the charger is supplied with voltage from the mains, because the battery pack may otherwise become destroyed (e.g., do not switch off line fuses in the building).

Moreover, never leave the unit in the switched on condition with the batteries being exhausted. This will also cause the battery pack to be destroyed.



The charger is provided with the following features:

- microcontroller-monitored charging,
- electronic polarity reversal protection,
- automatic switching to pulsed float charging, and an
- additional discharging function (by pressing a button) with subsequent automatic charging.



Dispose of used batteries in an environmentally compatible manner, e.g. by collecting them in a special container for having them recycled.

Putting into operation

7.1.2 Charging and inserting the battery pack



Abb. 9 Charger with battery pack



Abb. 10 Inserting the battery pack

1. Before you can start to use your circular knife, you have to adequately charge the battery pack with the help of the supplied charger. To this end, plug the plug into a socket outlet and place the battery pack into the charger (7.1.2). Charging will automatically start as soon as a battery pack has been connected and the set plugged in.



Charging takes about one hour.

2. The meaning of the colours of the LED indicator on the charger is as follows:
 - After the battery pack is inserted, the LED will be **illuminated red**.
 - As long as the LED **illuminates red**, the charging operation is still taking place.
 - As soon as the LED is **illuminated green**, the battery pack is fully charged.
3. If the battery is left in the charger after charging, float charging takes place, that is, the battery will be automatically kept fully charged until needed.
4. Push the charged battery pack (or cable adapter) into the handle of the tandir knife (Fig. 9, arrow).



The battery pack can be inserted only in one direction and will engage audibly!



Using *one* battery pack, you can slice about 10-20 kg meat (minced meat or layered meat).

Putting into operation**7.2 Putting into operation of unit powered via cable adapter**

When selecting a socket, make absolutely sure that:

- the connecting cable is carried so that it will not be accidentally cut through,
- the connecting cable will not come in contact with hot surfaces where it could become damaged,
- the transformer will neither be excessively contaminated with fat nor exposed to heat or humidity.



Abb. 11 Transformer with cable adapter

1. Plug the plug into a socket outlet (voltage indicated on transformer must be in agreement with supply voltage), and push the cable adapter into the unit (see Fig. 11).



The battery pack can be inserted only in one direction and will engage audibly!



Abb. 12 Inserting the cable adapter

 Putting into operation

7.3 Setting the cutting depth



Abb. 15 Knurled screw for setting the cutting depth

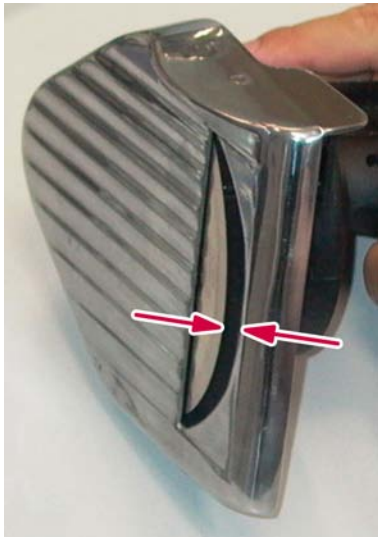


Abb. 16 Cutting depth

1. Turn the infinitely adjustable knurled screw (7.3, arrow) to set the cutting depth of the circular knife.

- Turning the screw **counter-clockwise**: greater cutting depth.
- Turning the screw **clockwise**: smaller cutting depth.



Do not turn the screw counter-clockwise too much. There is the danger that the screw will become completely undone so that the cap will become unfastened!



Changing the cutting depth will change the distance between the circular knife and the casing (Fig. 13, arrows).

The cutting depth can be variably adjusted between 0 and 10mm.

- Cutting depth too small: meat will „crumble“.
- Cutting depth too great: excessive meat consumption.

Putting into operation

7.4 Slicing with the circular knife



Abb. 19 On/Off switch

To start the unit, switch the On/Off switch to position „I“ (Fig. 14, arrow).



For slicing, always place the knife in contact with the meat (minced meat or layered meat) at the top, and carry the knife downward.



Switch the knife on only after it has been placed in contact with the meat, and switch it off immediately once it is no longer required!



Only carry out the **cutting movement** with the knife **in the vertical direction** from top downwards. The second hand must neither hold the unit nor the meat to be sliced.

7.5 Removing the battery pack



Abb. 20 Removing the battery pack

To remove the battery pack or cable adapter, press (and hold) the red locking button on the handle while pulling out the battery (Fig. 15).

Removing and cleaning the tandir knife**8 Removing and cleaning the tandir knife****5.1 Removing the guard (aluminium cap)**

Danger of injury!
Never remove the guard while the knife is still running and connected to a power supply!
Always pull out the battery pack or cable adapter first!



Abb. 21 Knurled screw for unfastening the guard

1. Hold the unit close to a soft surface (e.g. a table on which a paper pad has been placed).
2. Turn the infinitely adjustable knurled screw counter-clockwise until the guard comes off (5.1, arrow).
3. As soon as the knurled screw has been screwed out (Fig. 17, arrow), you can remove the guard (Fig. 18) or let it drop onto the pad.

**Caution!**

Danger of hand injury. The circular knife is very sharp!



Abb. 22 Unfastening the guard



Abb. 25 Removed guard

Removing and cleaning the tandir knife**5.2 Removing and fitting the circular knife**

Abb. 26 Knife screw with inserted coin

1. Make sure that the battery pack (cable adapter) has been removed from the unit.
2. Use a coin or screwdriver for unscrewing the screw in the centre of the circular knife (Fig. 19).
3. Remove the screw.
4. Hold the circular knife with a gripping device (Fig. 21).



Do not hold the knife with your hand, danger of incisions!



Abb. 27 Knife screw removed



Abb. 28 Circular knife fixed with gripping device

Removing and cleaning the tandir knife

5. Now the circular knife can be removed.



Abb. 29 Knife head without circular knife



Abb. 30 Circular knife in installed condition



For fitting the circular knife, proceed in the reverse order.

When fitting the circular knife, make sure that the labelled side of the knife points upward (Fig. 23).

Fasten the screw in the centre of the knife only hand-tight, because the screw will become automatically fully tightened during operation.

Removing and cleaning the tandir knife**5.3 Removing the scraper**

The scraper prevents the circular knife from becoming blocked by meat residues.



Abb. 31 Removing the scraper

1. The scraper is located below the circular knife and is forced by springs against the knife.
2. After removing the circular knife, pull the scraper off in the direction of the arrow (see Fig. 24).
3. For installing the scraper, proceed in the reverse order if dismantling.

Removing and cleaning the tandir knife

8.1 Cleaning the unit



The tandir knife must be **thoroughly cleaned daily** at the end of work! If hygiene requirements are neglected, your customers will be exposed to **the danger of infection!**



Before starting cleaning, remove:

- the guard (see section 5.1),
- the circular knife (see section 5.2), and
- the scraper (see section 8.3)!



The unit must **neither be immersed in water nor cleaned completely under running water.**

In particular, the **On/Off switch** (Fig. 14) and the **battery compartment must be protected from humidity.**



When cleaning the unit, hold the casing so that the battery compartment faces upward and no water can get into the unit.

Do not use acid-containing cleaning agents!

It will be completely sufficient to wipe off the casing of the unit with a **moist cloth.**



Thoroughly **clean the guard**, the **circular knife** and the **scraper** with **water** and a **household detergent** (washing-up liquid)! In addition, use a **brush** for thoroughly removing fat residues.

The **circular knife** and the **scraper** can also be cleaned in a **dishwasher.**

The **guard** (aluminium cap) should **not** be cleaned in a **dishwasher**, because the material may thereby become discoloured.

 Removing and cleaning the tandir knife

5.4 Mounting the guard (aluminium cap)



Danger of injury!
 Never mount the guard while the circular knife is still running and the unit is still connected to a power supply!!
 Always remove the battery pack or cable adapter first!

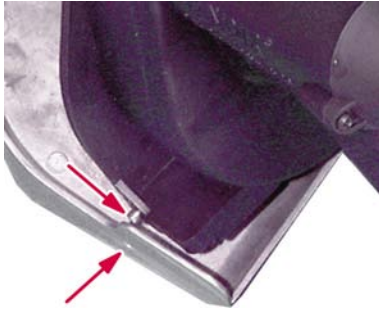


Abb. 32 Mounting the guard (A)

1. For installing the guard, first insert the nipple on the head of the unit into the hole provided in the guard (5.4 and 5.4, arrows).



Caution!
 Danger of hand injury. The circular knife is very sharp!

2. Push the nipple on the other side of the head of the unit into the oblong hole (5.4).



Abb. 33 Mounting the guard (B)



Abb. 37 Mounting the guard (C)

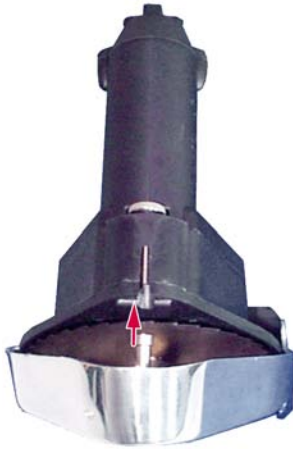
Removing and cleaning the tandir knife

Abb. 38 Closing the guard

3. Insert the knurled screw into the movable threaded sleeve on the guard (Fig. 28).



If the thread does not engage:

- squeeze the guard and the knurled screw somewhat together, or
 - align the movable threaded sleeve with the knurled screw.
4. Turn the knurled screw until the guard and the head of the unit are firmly connected to each other again.

Maintenance of tandir knife
9 Maintenance of tandir knife

The **circular knife** must be ground after having been used for slicing about 50 kg meat. It must be replaced by a new one when its diameter has been reduced by more than 2 cm.

With the **sawing knife**, you can cut approximately up to 300 kg of layered meat before it needs to be ground.



To continually achieve good slicing results, the circular knife should be sharpened **daily!**

9.1 Grinding the tandir knife by hand with the special grinding stone available from Ümit

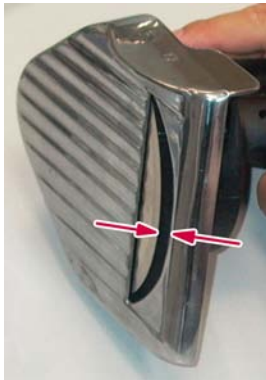
When the circular knife is sharpened with the special grinding stone, there is a **danger of injury** by the freely rotating knife!

The grinding stone must not be wedged in the gap between the guard and the circular knife. This may lead to canting or hooking. This, in turn, may result in crush injuries or incisions!

Firmly hold the unit and the grinding stone during grinding (9.1)!



Wear **protective goggles** or equivalent protective equipment during grinding. Minute chips may cause eye injuries.



1. Widen the guard clearance with the knurled screw (Fig. 12, arrow) to such an extent that you can easily insert the grinding stone (Fig. 29, arrows).



To ensure that the guard will not come off during grinding, turn the loosened knurled screw by a minimum of one complete turn in the opposite direction.

Abb. 41 Clearance between guard and circular knife

Maintenance of tandir knife

Abb. 42 Place unit on its side and hold it firmly in this position



Abb. 43 Place grinding stone in contact with underside of circular knife

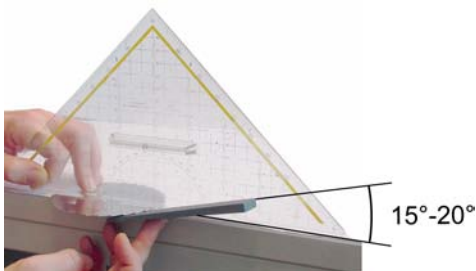


Abb. 44 Grinding angle (ca. 15-20°) during sharpening with a grinding stone

2. Lay the unit on its side, and firmly hold it in position (9.1).
3. Place the grinding stone in contact with the underside of the circular knife (9.1).



The angle between the grinding stone and the circular knife should be about 15°-20° (9.1).

4. Switch on the unit, and slightly press the grinding stone against the underside of the circular knife.



Grind the knife for about one minute.

Grinding will be more effective if you immerse the grinding stone in water after every 5 seconds!

Maintenance of tandir knife



Abb. 49 Deburring the circular knife



A burr will form on the upper side of the circular knife as a result of grinding.

- Therefore, after completing sharpening, slightly press the grinding stone against the upper side (large plane surface) of the circular knife, keeping it **flat** or only slightly inclined relative to the surface. Then switch the unit on and remove the burr (Fig. 33).



It will take about 10 seconds maximum to remove the burr.

9.2 Sharpening the tandir knife with a grinding machine (OPTIONAL)



A **double grinding machine** is available as an **optional accessory** for your tandir knife!

For more information on grinding with the grinding machine, see the enclosed operating instructions!

9.3 Removing and charging the battery pack

9.3.1 Removing the battery pack



Abb. 50 Removing the battery pack

- To remove the battery, press and hold the red locking button on the side of the end of the handle (Fig. 34), and pull out the battery pack.

Maintenance of tandir knife**9.3.2 Discharging the battery pack**

To achieve a longer service life of the battery, it is advisable to completely discharge it and then charge it again from time to time (so as to avoid the „memory effect“).



Abb. 51 Charger with battery pack

1. To this end, plug the battery pack into the charger (Fig. 35) and wait until the LED illuminates red.
2. Then press the button „Discharge“.
3. The LED will illuminate in two colours (red and green), i.e., discharging starts, and thereafter charging will take place automatically.



For further information on the charger, refer to section 7.1.

Troubleshooting

10 Troubleshooting



In the table below, you find possible faults of the circular knife, their cause and remedies for eliminating the fault.

Fault	Cause	Remedy
Circular knife is blocked	Scraper has not been mounted	Check that scraper is in place, and install it, if this is not the case
Unit does not switch on (when powered by mains via transformer)	Fuse in transformer defective	Replace fuse in transformer
	Power supply failure	Use another device for checking socket outlet
Unit does not switch on (when powered by battery)	Battery pack charge is low or battery is completely exhausted	Remove and charge battery pack (see section 7.2), use a spare battery
Poor slicing quality	Circular knife dull	Grind circular knife (see sections 9.1 and 9.2)
	Circular knife incorrectly mounted	Check that labelled side of knife faces upward (see section 8.2)
Circular knife rotates too slowly	Battery pack charge is insufficient or completely exhausted	Remove and charge battery pack (see section 7.1.2), use spare battery

Repairs**11 Repairs**

Repairs on and in the enclosure of the unit as well as exchanging the knife head may be performed only by the manufacture of the unit.

Any repairs carried out by the user himself will void the warranty. The manufacturer accepts no liability for improperly performed repairs and any damage resulting therefrom