# CombiGrinder

Grinder for cattle, horse and pet clipper blades

# Instruction manual





Version/Index: CombiGrinder/A 09-16

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# **1 Safety regulations**

1.1 Symbols



WARNING

Warning! Danger of injury or death.



ATTENTION!

Indicates a potentially dangerous situation. Take preventative action.



**NOTE** Tips and information's.



**Eye and hearing protection** Eye and hearing protection must be worn.

# 1.2 Persons



The non-observance of the instructions and safety regulations mentioned in this manual can cause operating malfunctions or serious injury to persons. The safe operation of the machine only places minimal requirements on the operating staff. It is, however, essential that these are observed and complied with.

- The operator shall be able to understand and demonstrate the operating controls and the possible risks associated with this equipment.
- The operator must have read and understood this manual. Further instructions by a skilled instructor are needed to learn more details about danger while operating this grinding device.
- Unauthorised persons are not permitted to use the grinder.
- Unauthorised persons are not permitted nearby the grinder when it is operated or maintained.

Operation of the equipment is only permitted by authorised personnel. Persons whose reactivity is affected by drugs, alcohol or pharmaceuticals are not permitted to operate the equipment.

# 1.3 Power supply connections



The voltage specified on the rating plate and stated in this manual have to match with your local power supply. The grinder may only be connected to an AC power supply. In the event that the grinder is operated from a generator, the supplied voltage must not exceed the specified voltage as stated on the rating plate. Never plug the grinder to a damaged socket. Observe the relevant regulations applicable in your country. Completely unroll the power cable before plugging in. Maintenance and cleaning of the grinder should only be carried out when the grinder is unplugged.

# 1.4 Protective gear



Eye protection ear protection fingered gloves anti-slip shoes must be worn at any time while operating this grinding device.

# 1.5 Further measures for avoiding accidents

- The operating instructions must be kept safely and accessible at all times.
- Never use the grinder on an unsafe or unstable stand, pedestal or bench.
- The protective cover must remain in place at all times unless performing maintenance, in which case the grinder must be unplugged from the power source.
- Wear suitable work clothes. Never use the grinder with loose fitted clothing, open long hair, or anything else that could reach the moving disc.
- Always ensure adequate working room around the grinder.
- Never leave the grinder unsupervised when in operation or connected to the power.
- Avoid kinks and tight coils in the cable when storing, this can damage the cable.
- Store the grinder in a dry inside area when not in use.
- Never use the grinder or any part of a grinder, i.e. discs when it is worn or damaged

Any damage or failure to the grinder which may constitute a risk to the health and safety of any person shall be immediately reported by the operator to the owner/manager who shall take appropriate measure.

Examples of the type of damage, which would constitute such a risk include:

- Damaged insulation of the electrical wiring.
- Failure or wear of any control or component, i.e. switch, discs or disc guard
- Damaged or loose fasteners, nuts, bolts, screws, etc.

# 1.6 Children



#### WARNING!

Never let the equipment unsupervised and use it very carefully when children or persons who cannot judge the dangers are nearby

# 2 Generalities

#### 2.1 Intended use

The Heiniger CombiGrinder is designed for grinding blades for cattle, horse and pet. Any other use is expressly prohibited. This guide is for the safe and efficient handling with the machine. Read these instructions carefully before beginning any works. Basic condition for safe working is the adherence to all indicated safety references and procedural instructions in this guide. As mandatory limitation of use, the data given in 3.1 Specifications is valid. If you hand on the equipment to other persons, provide them with this manual.

#### 2.2 Guarantee conditions

Your CombiGrinder has been manufactured by Heiniger, the leading manufacturer of shearing and clipping equipment. Heiniger stands for quality for more than 70 years. With just a little care and attention, the CombiGrinder is giving you many years of excellent service. The guarantee conditions are included in the general terms and conditions of the manufacturer. Claim any damage as soon as possible. Compensation only may be claimed within the valid guarantee periods.

#### 2.3 Customer service

For technical information, our customer service and our authorised service centres are at your disposal. Comment us your experience. Our staffs are interested in new information and experience resulting from the operation which could be useful for the improvement of our products.



## 2.4 Limitation of liability

All data and information in this instruction manual were arranged in consideration of the current standards and regulations and state of the art as well as our realizations and experiences of many years.

The manufacturer assumes no liability for disadvantages due to:

- Non-observance of the instruction manual
- Operation of the equipment for not intended use
- Employment of not instructed personal
- Normal wear and consequential damages
- Technical modifications
- Use of not approved spare parts
- Maintenance work by not authorised service centres

With care this grinding device has been manufactured and forwarded by our agents. To ensure your grinder arrives in perfect conditions.

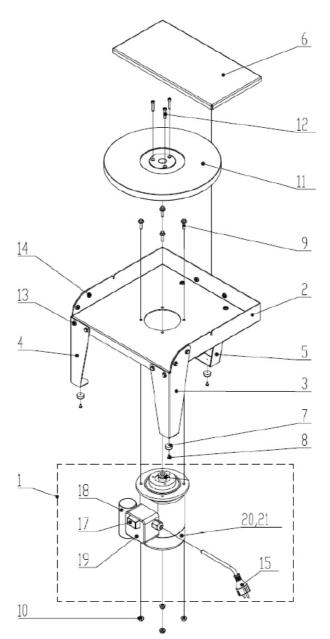
Damage occurring during transport or faulty operation will not be covered by our warranty. Further are not covered secondary damage accidents and damage of improper use.

#### **3** Technical specification and spare parts

#### 3.1 Technical specification

Description	Grinder for cattle, horse and pet clipper blades		
Model	CombiGrinder		
Voltage	230-240V~	120V~	
Frequency	50Hz	60 Hz	
Speed	1420 1/min	1700 1/min	
Power	0.37 kW		
Height 330 mm			
Dimensions	Width 430 mm /	Width 430 mm / Depth 400 mm	
	Disc Ø 352 mm		
Weight	21.6 kg		

# 3.2 Spare parts



Pos	Art - No	Description	Total	Pos	Art - No	Description	Total
1	718-028	28 Motor for CombiGrinder 230V with switch + flange		17	719-027	Switch with cover	1x
1	718-029	Motor for CombiGrinder 120V with switch + flange	1x	18	722-851	Capacitor 12µF 240V	1x
2	718-020	Frame	1x	18	718-236	Capacitor 40µF 120V	1x
3	718-021	Foot front right	1x	19	718-237	Switch housing	1x
4	718-022	Foot front left	1x	20	718-238	Fan blade	1x
5	718-023	Foot back	1x	21	718-239	Fan cover	1x
6	718-024	Protection cover	1x		722-248	Converter Schuko/GB-Plug 5A	1x
7	718-223	Rubber foot Ø22/4 x 10	3x		722-848	Converter Schuko/CH Type 12	1x
8	718-234	Screw M4 x 8	3x		722-849	Converter Schuko/AUS	1x
9	718-229	Hexagon head screw M8 x 25	4x				
10	718-230	Hexagonal nut Verbus M8	4x			Accessories	
11	718-010	Grinding disc Ø352 cattle/horse for CombiGrinder	1x		715-220	Grinding paste coarse, stick 510g	
11	718-040	Grinding disc Ø352 PET for CombiGrinder	1x		718-001	Precision ruler	
12	718-027	Socket head cap screw M6 x 30	3x		718-002	Grinding holder for domed clipper blades	
13	718-026	Hexagon head screw M6 x 12	12x		718-003	Grinding holder for flat blades	
14	718-222	Hex nut M6 Verbus	12x		718-012	Grinding paste applicator	
15	722-813	Cable ONE/EVO with Schuko plug	1x		718-130	Grinding powder Pet 1.9kg can	
15	722-814	Cable ONE/EVO with US-plug	1x		799-054	Acutecc hollow gauge (silicon carbide stone)	
			1x		722-811	Sponge rubber 20 / 20	

Version Pet

- 1 Grinding disc Ø352mm pet

- 1 Sponge rubber 20/20

- 1 Grinding powder pet 1.9 kg can

further options.

The CombiGrinder is dispatched completely; however it must be assembled and set up before being used for grinding. For full setup instructions refer to chapter 6 of this manual.

#### 5.2 Protective cover

NOTE

The CombiGrinder is fitted with a protective cover enclosing the disc to protect the user during use. It is necessary to remove the protective cover to remove the disc.

# 4 Transport and accepting delivery

Check the delivery on receipt immediately for completeness and transport damage.

The grinder is supplied in a case without the fitted disc. It is essential that the disc is protected during transport. If the grinder is not transported in the case, ensure that it cannot fall over or slide.

All units are transported at the owner's risk. Before accepting delivery, thoroughly inspect the Grinder for damage. If any has occurred you should note the nature and extent of the damage in view of any insurance claim you may wish to make.

The following areas should be checked carefully:

- Protection cover; it should be located securely in place.
- Electrical components, disc and emery.

#### 5 Assembly and function

#### 5.1 Equipment

Included:

- 1 Basic unit with motor and cable
- 1 Protective cover
- 1 Safetv glasses
- 1 Ear protection
- 1 Instruction manual including CD or USB memory stick

#### Version Cattle/Horse

- 1 Grinding disc Ø352mm cattle/horse
- 1 Grinding paste coarse
- 1 Precision ruler -
- 1 Grinding paste applicator
- 1 Grinding holder for flat blades \_

Optionally available:

- Hollow gauge (silicon carbide stone) 799-054
- Grinding holder for domed clipper blades 718-002

The actual scope of delivery can differ for specially designed models. Or if ordered with

# 5.3 Grinding disc

The special light weight aluminium alloy grinding disc is a precision tool and will ensure the best possible cutting edge for your blades. It will give you years of great service if provided with care. It is important that the disc is not damaged or neglected, this can make it unusable.



# ATTENTION!

The disc may be hazardous if used in damaged condition. If the disc becomes damaged it must be replaced. Use only genuine Heiniger discs for replacement. The grinding disc is not fixed at delivery and must be fitted correctly onto the motor. The disc must be protected at any time against crushes hits and fall down. Do not use too much power to take off the disc from the grinder.

### 5.4 Fitting the grinding disc on the motor

Unplug the grinder from power before proceeding. The disc must be free of dirt, dust or any other foreign matter.

Slide the disc onto the shaft of the motor. Fit the 3 screws (pos. 12) on the disc and tighten with the enclosed spanner.

#### 6 Operation



### NOTE

Do not start the grinder before read and understood this instruction manual completely. Ensure the disc is fitted and tightened. Ensure that the switch is in the OFF position before connecting the grinder to a power source. Do not start the grinder before having fit the disc guard and first put the safety glasses and ear protection on. Do not attempt to grind until the grinder is at full speed.



# ATTENTION!

Always ensure that the protective cover is securely fitted before setting up and using the grinder. Always wear safety glasses and hearing protection. When the grinder is running do not allow anything to come into contact with any part of the discs.

#### 6.1 Grinding method

The result is similar achieved as with a diamond grinder. The surface of the special grinding disc consists of soft aluminium and the abrasive grain used is hard. The surface consists of fine grooves, which hold the abrasive grain in place. The abrasive particles are carried by even application on the grinding disc in these grooves. During the grinding, the abrasive grain rotates in this groove until it is firmly anchored. With this an excellent grinding result is generated.

#### 6.2 Preparing the grinding disc and grinding

The exact process to prepare the grinding disc and grinding the clipper blades, is showed in the enclosed CD or USB memory stick under "CombiGrinder" for cattle and horse clipper blades and "CombiGrinderPet" for small animal blades.



NOTE

The video is an integral part of this manual.

#### 6.3 When is the blade sharp?

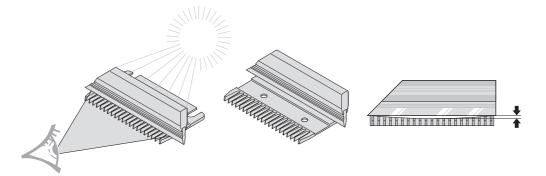
The whole surface of the blade must be ground evenly. With a strong light source look carefully over the cutting edge of each tooth. The light will reflect on blunt cutting edges but will not reflect on a sharp cutting edges.

# NOTE

You must grind your blades until the blunt edge is sharp. If in doubt, grind it again.



The hollow-grind on all cattle and horse clipper blades has to be checked by the supplied precision ruler. Put the precision ruler above the teeth. Then hold it against the light. The gap now seen is called hollow-grind. This hollow-grind has to run evenly and be at its biggest in the centre of the blade.



The best hollow-grind: For cattle and horse blades between this:  $5-15\mu m$  For PET blades between this:  $0-5\mu m$ 

The hollow-grind is achieved by the correct pressure while grinding. These rules also apply to blades of other manufacturers.



# NOTE

Clean the blades after grinding. Oil them to prevent rust.

# 7 Servicing

Use only genuine Heiniger spare parts. All parts are available through Heiniger dealers. Use only qualified personnel for electrical repairs. Always contact an authorized service centre if you are unsure how to rectify a problem. Or in the event of malfunctions that are not included in this manual. Only do maintenance work when the grinder is disconnected from the power supply.

#### Motor

Keep the housing and motor unit dust free. This is to keep the cooling system of the motor working properly. Otherwise the motor can overheat while working. Periodically check the condition of the power cord, replace if worn or damaged.

Ensure that the rubber feet are fitted well to the foot. Without these rubber feet the grinder can become dangerously unstable.

#### Switch

Replace damaged switches immediately.

#### Protection cover

The grinder is fitted with a protection cover that encloses the disc. This protection cover is an integrated part to the safe use of the grinder. It must fit the grinder correct and secure. If the cover is damaged it must be repaired or replaced before the grinder is used.

#### **Grinding disc**

Keep the surface of the disc dry and free of dirt, grease and damages.

#### 8 Trouble Shooting

For all electrical faults qualified personnel only may undertake fault finding and repairs.

Problem	Cause	Solution
Motor doesn't start	No Power	Check the plug is correctly connected to the socket. Check that power is available at the socket. Call an electrician.
Grinder vibrates	<ol> <li>Disc out of balance</li> <li>Disc buckled</li> </ol>	1. Balancing disk 2. Replace disc
	3. Motor shaft deformed	3. Replace motor

# 9 Disposal and material groups



# Warning!

Environmental damages will occur when disposing incorrectly! Electronic waste batteries lubricants and other additives are subject to the treatment of hazardous waste and only be disposed by specialised centres!



Please observe the applicable disposal regulations in your country.

Material	Contained in position (see 3.2 Illustration spare parts)
Iron/steel	1/2/3/4/5/8/9/10/12/13/14
Aluminium	6 / 11
Copper	1 / 15
Polyethylene	19 / 20 / 21
Rubber	7 / 15 / 16 / 17
Electronic	17 / 18

>	Item
ant	Serial no.
Warranty	Date of purchase
3	Stamp and signature

In case of claim, please return your machine with the instruction manual and the warranty card directly to your local distributor. Please do not cut off the warranty card from the instruction manual.

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