Repair Instructions for Item No. 8220

Apply only to authorized Kisag service center!

Caution: **This is an electrical device.**
(Danger of life hazard by electric shocks!)

Maintenance Inspections:

The knife is a wearing part and must be regularly checked for its cutting ability and it's fixation on the drive shaft.
Damaged blades should be replaced and can be ordered under **item no. 8220 210.**

Depending on use and service life the shaft seal must be checked it's the condition.
In case of damages the complete drive shaft must be replaced, **item no. 8220 315**

General Repairs / Trouble Shooting:

There is no extra maintenance required since it is designed that up a failure complete repair units can be replaced.

Problem A) Motor has stopped: (may be due to following facts)

1) faulty power cord	Item no: 8220 363 CH / EU	Item no: 8220 361 GB
2) worn carbon brushes	Item no: 8220 362	
3) electronics defective	Item no: 8220 200 CH / EU	Item no: 8220 201 GB
4) faulty engine	→ new appliance	

Response to 1) **To replace the power cord:**

- Remove screw caps item no. 8220 322 using a pointed tool and dismantle the four screws that appear beneath screw caps.
  Separate handle complete from the housing and disconnect cable from the engine.
  Caution: Cables must be identically reassembled.
- Remove screw caps on handle item no. 8220 321 and item no. 8220 340 using a pointed tool and dismantle the appearing screws. Remove bolts item no. 8210 329 and item no. 8210 353 and separate housing parts.
  Solder out faulty power cord from printed board and solder on new cable in same sequence.
- Loop cable around traction relief. Flat surface at cable inlet has to point downwards.
- Reassemble all components in reverse sequence and replace old screw covers with new ones.

Response to 2) **To replace handle completely:** if PCB is defective (printed circuit board)

- Remove screw caps item no. 8220 322 using a pointed tool and dismantle the four appearing screws.
  Fully separate handle from housing and take off cable from the engine.
  Caution: Cables must be identically reassembled.
- New full component-part handle, items no: 8220 200 **CH / EU or** item no: 8220 201 **GB** (depending on plug connector), reassemble in reverse sequence and replace old screw caps with new ones.

Response to 3) **To replace carbon brushes:**

- Dismantle handle completely as described under **figure 2**
- Lift up the spring of the carbon brush; replace the used carbon.
- Reassemble all components in reverse sequence and replace old screw caps with new ones.

Response to 4) **faulty engine:**

- Exchange-Offer for new machine

Shaft seals or clutch defect:

5) **To replace shaft or clutch:**

- Dismantle blade.
- (Do heat the stainless steel tube above the foot slightly (to untighten the adhesive)) and disassemble the fixing nut with the special tool. To remove the fixing nut in the foot.
- Pull out drive shaft item no. 8220 215 with clutch item no. 8220 318.
- Push the new drive shaft with the flat area of the clutch in line with the flat area of the rotor, into the distance pipe.
- Place fixing nut into base and mount it into the distance pipe. Make sure it has a tight fit and secure it with suitable adhesive.
- Install blade

Important: the injecting point (small dot on the side) of the clutch has to look to the mixing foot!

6) **To replace blade:**

- Pull knife with suitable protective gloves of the shaft, slide the new blade on the shaft and check the snap mechanism of the knife.

Inspections to be carried out: (Following every repair)

- Make sure that there is no possibility of current flowing between live parts and touchable metal parts using a voltage detector.
- Check all switching functions.
- Make sure the blade was properly mounted.
- Make sure the device complies to hygiene regulations.
- Advise the customer to check the shaft seals frequently.