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SPOT WELD CUTTER SHARPENER

Model: S-115

OPERATING MANUAL

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WARNINGS

1. BEFORE AND DURING USE

**Install the machine on a level, firm base, in a dust/vibration free area.
Do not expose machine to water, chemicals, etc.
Do not use the machine where flammable gases are generated.**

**Wear protective eye gear at all times.
Use a respiratory mask to avoid inhalation of metal dust.
Avoid loose clothing and long hair near the rotating grindstone.**

2. DURING USE

**Keep your face at a safe distance from the rotating grindstone.
Cutters can shatter and flying debris can injure user.
Do not put any foreign objects on the rotating grindstone
Do not place anything between the protective housing and the grindstone.**

Be sure to switch the machine to the off position before plugging it into an outlet.

Do not use this machine for any other purpose than the sharpening of cutters.

If you notice an unusual sound or smell, switch off the machine and unplug it.

Do not use dressing on grindstone.

When grinding, push cutter tips gently against the wheel. Let the wheel do the work. Too much pressure will reduce the life of the wheel.

3. AFTER USE

Do not force the rotating grindstone to stop rotating. Let it slow down automatically.

Pull the plug out of the outlet when not using the machine.

ATTENTION

This machine works on AC110V 50/60 Hz.

The CBN grindstone in this machine cannot be sharpened. Replace it with a new one when the current one is abraded. Excessive sparking or burning of the tips indicates that the grindstone has reached the end of its life.

Do not use the machine continuously for 5 minutes or more. The motor stops automatically when it gets overheated. If this happens, switch the machine off to avoid an automatic restart once it cools down.

OPERATING INSTRUCTIONS

The Sharpening procedure consists of 3 steps:

- 1. Positioning of the cutter in the collet**
- 2. Sharpening of the horizontal areas**
- 3. Sharpening of the pilot point**

1A. Positioning for 6.5, 8, 8.2, 9 and 10mm:

To prepare the cutter for sharpening it should be properly secured in the collet.

The sharpener is delivered with 5 collets measuring 6.5, 8.0, 8.2, 9.0 and 10mm in diameter.

- 1. Select the proper collet for the size of your cutter.**
- 2. Insert collet with Allen screw directed away from the machine as far as possible into the "Positioning Port".**
- 3. Insert the cutter into the collet and push until you reach the backstop. While pushing, turn the cutter to the right until it stops.**
- 4. Hold the cutter in the extreme right position and fasten into the collet by tightening the Allen screw. It is VERY important to keep the cutter in the extreme right position. Failure to do so will result in a faulty sharpening! When securing the cutter in the collet make sure the Allen screw hits the raised part of the cutter and not the grooved part.**
- 5. Place the collet chuck around the collet and cutter. Push the chuck as far as possible and turn to the right until it hits the stop. Fasten the collet chuck into position with the Allen screw. Again, make sure that the chuck and the collet are in the extreme right position before tightening the Allen screw.**

1B. Positioning of the short cutters:

The positioning procedure for short cutters is slightly different from the long ones.

- 1. Insert the appropriately sized collet with the Allen screw facing the machine until you cannot go any further into the “Positioning Port.”**
- 2. Slide the cutter into the collet and use the Allen wrench to push it all the way forward.**
- 3. Grab the front of the cutter and turn it to the right until stopped.**
- 4. Keep the cutter in this far right position and tighten the Allen screw. Make sure that the Allen screw hits the raised part of the cutter and not the grooved part.**
- 5. The collet chuck installation is the same as in step 1A.**
- 6. The sharpening procedure is the same as in step 2.**

2A. Sharpening of the horizontal areas for 8.0, 8.2, 9.0 and 10mm:

Switch the machine on. Take the collet chuck, with the cutter firmly installed, out of the “Positioning Port” and insert it into “Cutter Sharpening Port”. The pin on the left side should fall in the cut-away of the chuck. Push the chuck in, then turn right and left until stopped by the pin. You should hear a grinding noise. Continue to turn the cutter right and left until the grinding noise comes to an end. Slightly pull the chuck out, turn it 180° and repeat the procedure.

2B. Sharpening of the horizontal areas for 6.5mm only:

Switch the machine on. Take the collet chuck with the cutter firmly installed, out of the “Positioning Port” and insert it into the “Cutter Sharpening Port”. The pin on the left side should fall in the pin hole of the chuck. Push the chuck in (light pressure) until the grinding noise comes to an end. Slightly pull the chuck out, turn 180° and insert the pin in the other pin hole. Apply light pressure until the grinding stops.

3. Sharpening of the point for all sizes:

When the grinding noise stops, pull the collet chuck out of “Cutter Sharpening Port” and insert into “Pilot Point Sharpening Port”. The 2 pins on the left side should fall in the cut-away section of the chuck. Press lightly on the chuck. When the grinding comes to an end, rotate the chuck 180° and repeat the procedure. When the grinding noise stops, switch off the machine.

The cutter is now ready to be used again.

REPLACING THE GRINDSTONE

The Replacement of the Grindstone consists of 5 steps:

1. Remove the protective housing by loosening the 3 bolts with a 3mm hexagon wrench.
2. Remove the 3 bolts holding the grindstone with a hexagon wrench of 5mm. You can use a 13mm wrench to steady the motor shaft but.. ***NEVER loosen the central nut.***
3. Remove the old grindstone and install the new one.
4. Steady the motor shaft with the 13mm wrench and fasten the 3 bolts equally.
5. Reinstall the protective housing and fasten the 3 bolts.

SPECIFICATIONS

Drill Diameter	6.5mm-10.0mm
Point Angle	180°
Pilot Angle	110°
Power Supply	110V 50/60 Hz
Watt	65W
R.P.M. of Motor	3440
Grindstone	CBN #170
Net Weight	8.0kg
Overall Dimensions	230x230x225mm
Rated Time	5 Minutes



- 1 METAL COLLETS
- 2 COLLET CHUCK
- 3 POSITIONING PORT
- 4 CUTTER SHARPENING PORT
- 5 PILOT POINT SHARPENING PORT
- 6 PROTECTIVE HOUSING