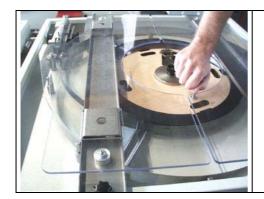
## **Maintenance**



## Changing the coil

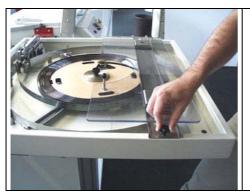


### Insert new coil

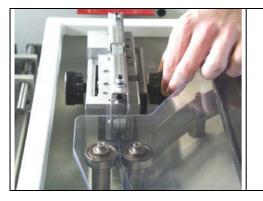
When the rule turns to its end remove the rest towards the cassette and not through the bending arbor.



Spin rule back until it is loose in the cassette. Open one of the safety lids and tighten the rest of the rule with cable ties to the center disc.



Load new steel coil and close one lid for safety and protection. Then tighten the inside coil end to the mounting of the centre disc before cutting off any ties which hold the coil together



Feed rule through the decoiler and set the rollers so that the decoiling forms the straight rule when pushing it by hand right through the bending arbour for test.



## Position for set up

Feed rule closely before the sensor. In case the rule is too far pushed in the sensor lights up and a reference drive cannot be done. In this case pull the rule back till the sensor light is off.



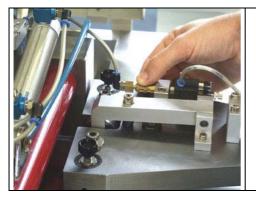
## Loosen bending arbor

In case of changing from 2pt to 3pt or vice versa or for maintenance reasons the bending arbor is loosend with the supplied pin by turning the front screw clockwise.



### Change bending arbor

When the screw is loose the arbor can be pulled out for change or maintenance.



### Disconnect air

For disassembling the bending plate, disconnect the air supply first at the quick couppling.



## **Guiding pins**

Take out the guide pins before loosening the fixing bolts.



### Loosen bolts

Undo the fixing bolts.



### Remove bending plate

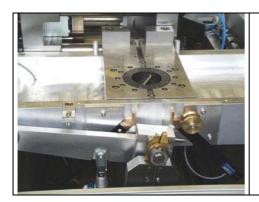
Now you can lift up the bending plate. Do this carefully and move the plate slowly vertically upwards. If the plate tilts bring it back to straight position and move it up again.



### Remove bending sleeve

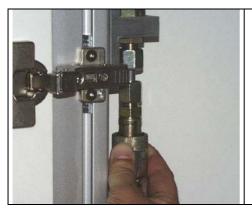
Now you can pull the bending sleeve with the supplied puller for exchange or maintenance purposes.

Grease every week moving sleeve at brass bush



#### Remove trim cutter

To remove the trim cutter for tool change or maintenance you have to remove the bending arbor, bending plate and bending sleeve as described before. Remove the stainless steel cover plate to reach the trim cutter.



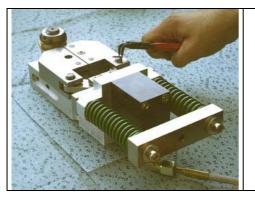
## **Disconnect hydraulic supply**

Disconnect the hydraulic supply inside the machine base underneath the trim cutter.



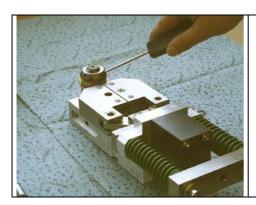
## **Undo trim assembly**

Undo the fixing bolt on the right side. Now you can take out the complete assembly for further disassembling of the male and female tool.



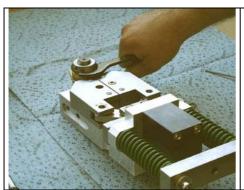
### Remove guiding pins

Undo the spring clip with the supplied pair of pliers from the top side and slightly tap the guiding pins out of the housing.



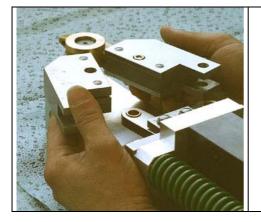
### Loosen counter srews

Loosen the 3 counter fitting screws approximately 1 turn.



### Remove nut

Undo the nut completely using the special supplied key.



### Remove male and female holder

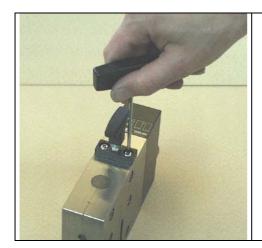
Move the male and female tool from the fixing bolt by slightly moving it up.



### Male and femal lever

Now you can unbolt the left and the right holder from the male and the female tool and then tap the guiding pins from the top till the tool is free and can be removed from the holder.

## Tool Maintenance and male and female exchange ( clean every week )



### **Undo handle**

Take the tool out of the machine and unbolt the handle.



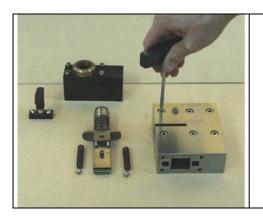
### **Undo top**

Unbolt the top of the tool.



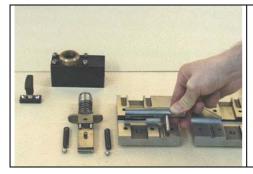
### Remove male holder

Now you can slide out the complete tool holder of the male tool.



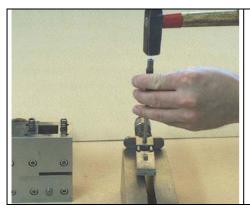
## Open the housing

Disassemble the tool housing which consists of two halves.



### Remove female tool

For inspection, maintenance or exchange you can inspect the tool and clean it before re-assembling it again.

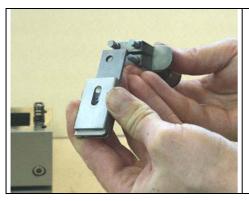


### Remove male tool

With the supplied countersink you undowel the male tool from the male tool holder.

#### **WARNING**

Make sure that the tool is evenly supported to avoid damage.



For inspection or maintenance reasons you don't have to disassemble the male tool from the tool holder, only for exchange. Clean the tool and put it carefully back together again. Don't forget to grease the moving parts with a very thin grease.

#### **WARNING**

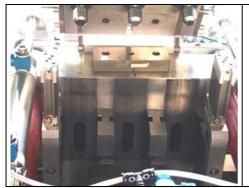
When you remount the male tool holder check the direction carefully. It will damage the female and male tool if it is assembled by 180° wrongly turned.

#### **Maschine Maintenance**



## Greasing

Grease lead srew at the carriage every 400hrs.



## **Cleaning tool location**

Take out all 3 tools and clean the holes at the vacuum connection.



### Clean vacuum cleaner

Clean vacuum once a week by just unclipping the top and emptying the bottom container.



### **Pessure Gauge**

Drain watewr once a week. Change filter every 6 month.



## Manual lead srew moving

If the lead srew should have actuated the reference switch the limit switch can be released with an allan key by turning left or right.



### Check tooth belt

Remove cover at motor side and check tooth belt once a year.



### **Filter at CNC**

Clean filter at exhaust fan once a month.



### Main switch

Switch on the system for operation. Switch off the system when working on maintenance or service.