

## Balancing the Motor:

**To check the balance of the motor, check the encoder first:  
Go to the TEST PROCEDURE and go to the group:**

### **Test Encoder / Index**

The LCD- display reads the number of pulses of the encoder. Turn the hand wheel  
And the number counts up or down, dependent on the direction. The index signal  
resets the counter at 2000 (up) or 1 (down). If the encoder counts up and the  
number changes at 2000 to 1, every thing is fine.

**To go to the next group, press the “ARROW-ROUND” button again**

The next group is:

### **Test Motor (Balance)**

This test allows testing the “balance” of the motor. If this adjustment is not  
correct, the motor turns hot while operating.

**To perform the test the motor has to be disconnected from the machine.**

Push the NU/ND- button, the motor starts running with a low speed (100 rpm) for  
about three revolutions. The display reads: “**WAITING FOR INDEX**”

After the motor stops, the following message will be displayed:

“**CALCULATE OFFSET**”. When the offset is calculated, the result will be  
displayed: “**ADJUSTMENT: + xx** “ or “**ADJUSTMENT – xx**”

“**+xx**” or “**- xx**” represents a number. This number should not be higher then 15.

If the reading is not correct, please repeat the test (Press NU/ND again).

**How to correct the balance:**

**Mark the position of the encoder hub on the motor shaft.**

**Loosen the hub and move the hub (a small amount!) on the shaft:**

**If the result was “+xx” move cw, if “-xx” move ccw.**

**Tighten the screw and try the balance again.**

**Repeat the procedure as often as you need to be in the tolerance.**

**Please note**

**To execute this procedure, be very careful by loosening the  
hub. Do not move the hub back and forth, it may damage  
the encoder disc !!**

**The encoder disc is made out of glass and it breaks very  
easy!!**