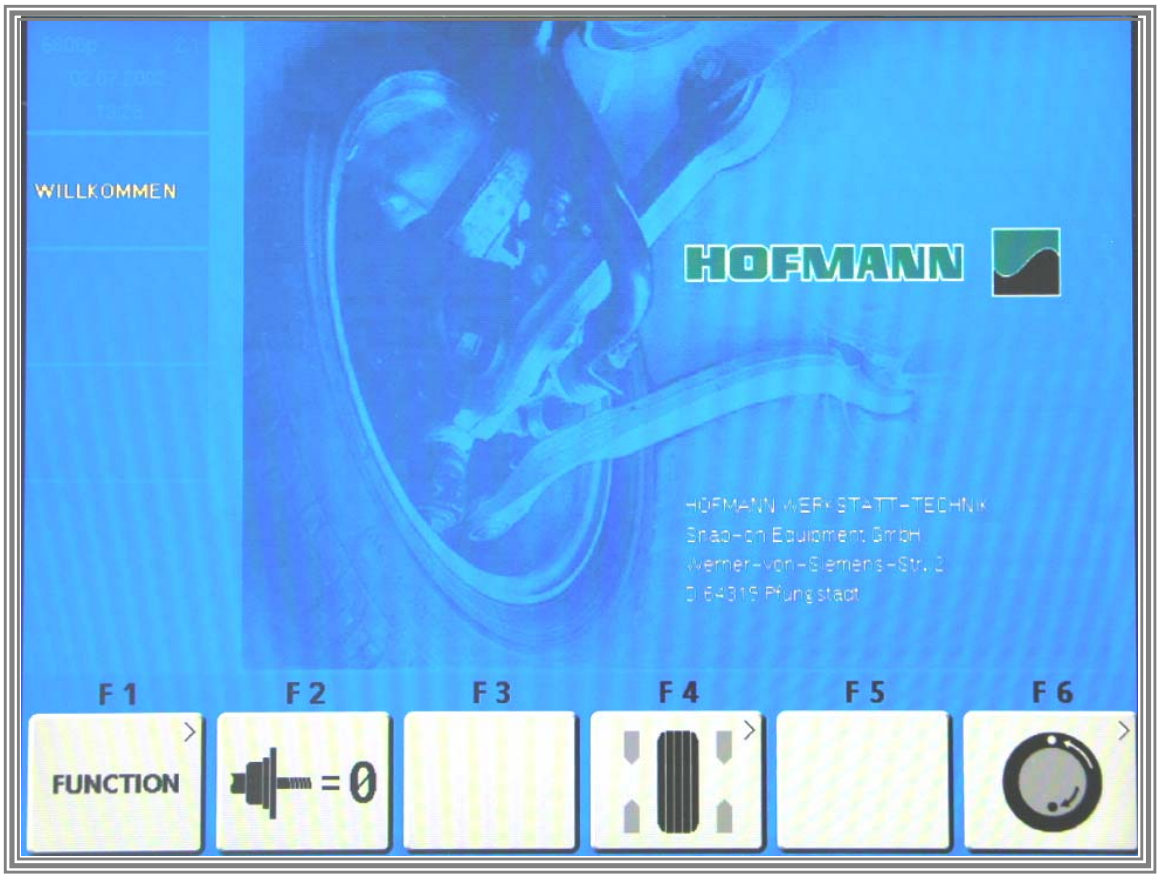
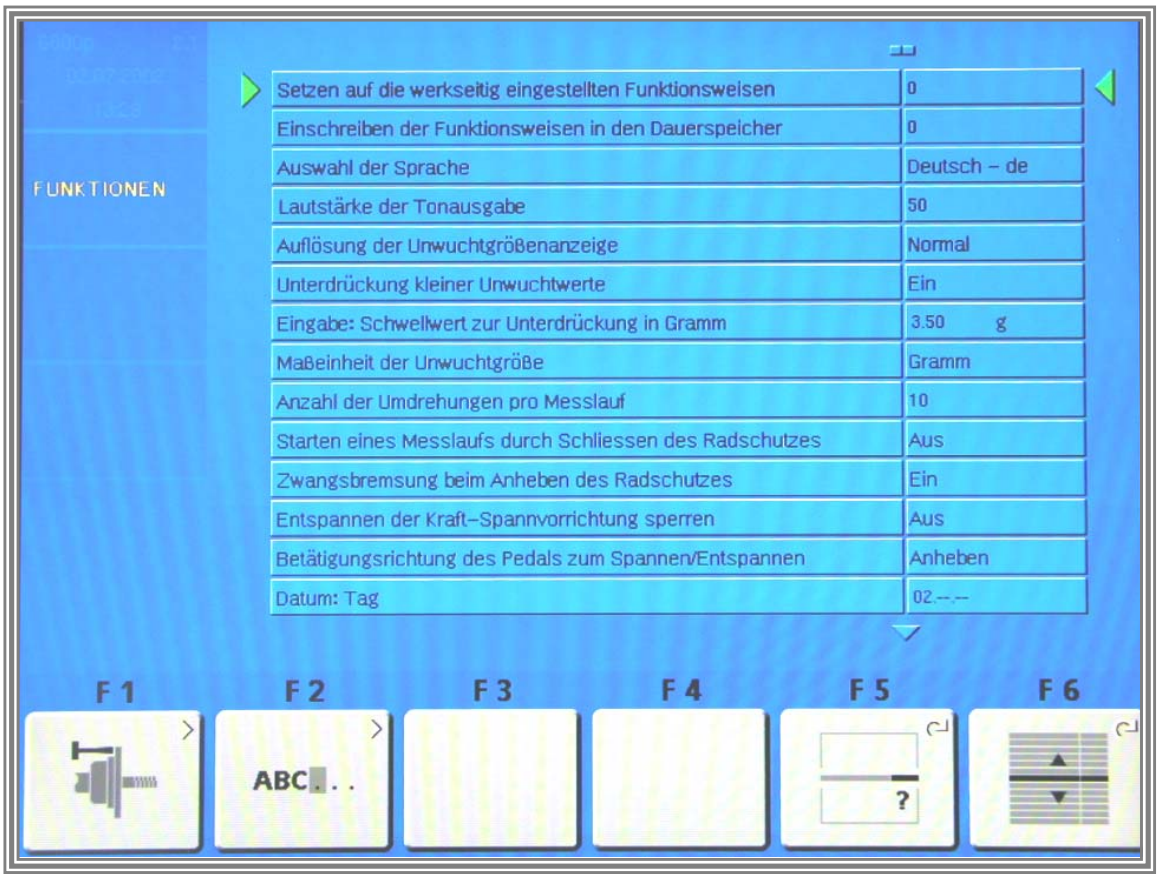
After switching on the machine, the following readings comes up.



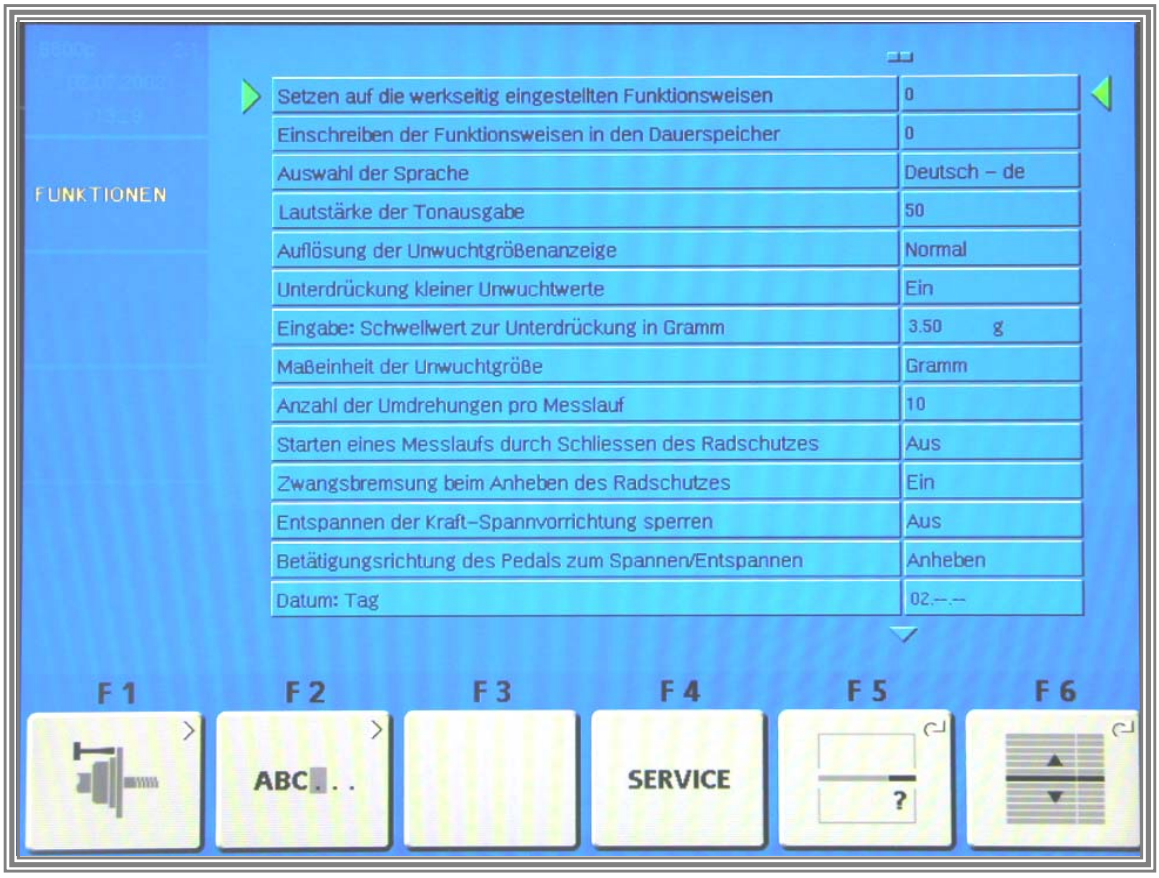
By pressing key ***F1*** you enter the configuration menu..

The following reading appears:



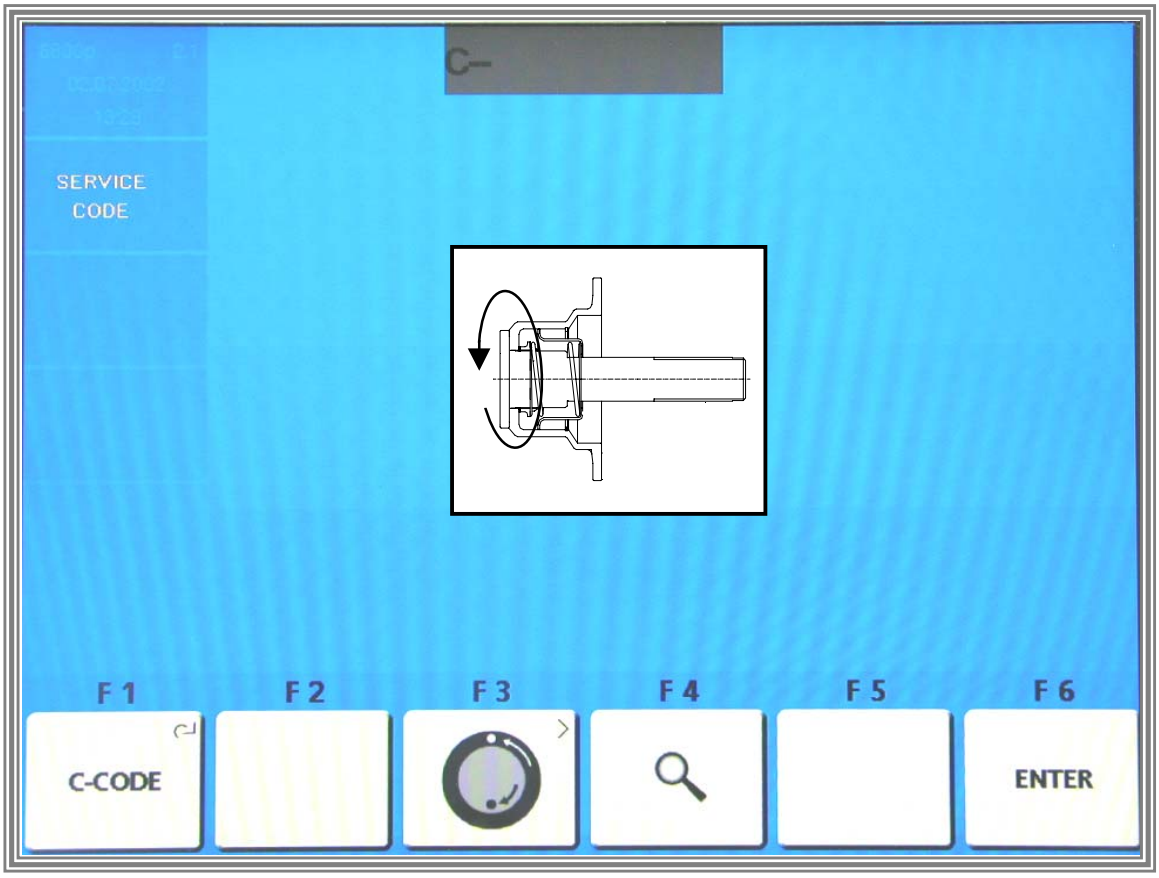
By pressing 3times key ***F 6*** the key ***F 4*** service routine will be come active.

The following reading appears:



By pressing key ***F 4*** the the service program become active.

The following reading appears:

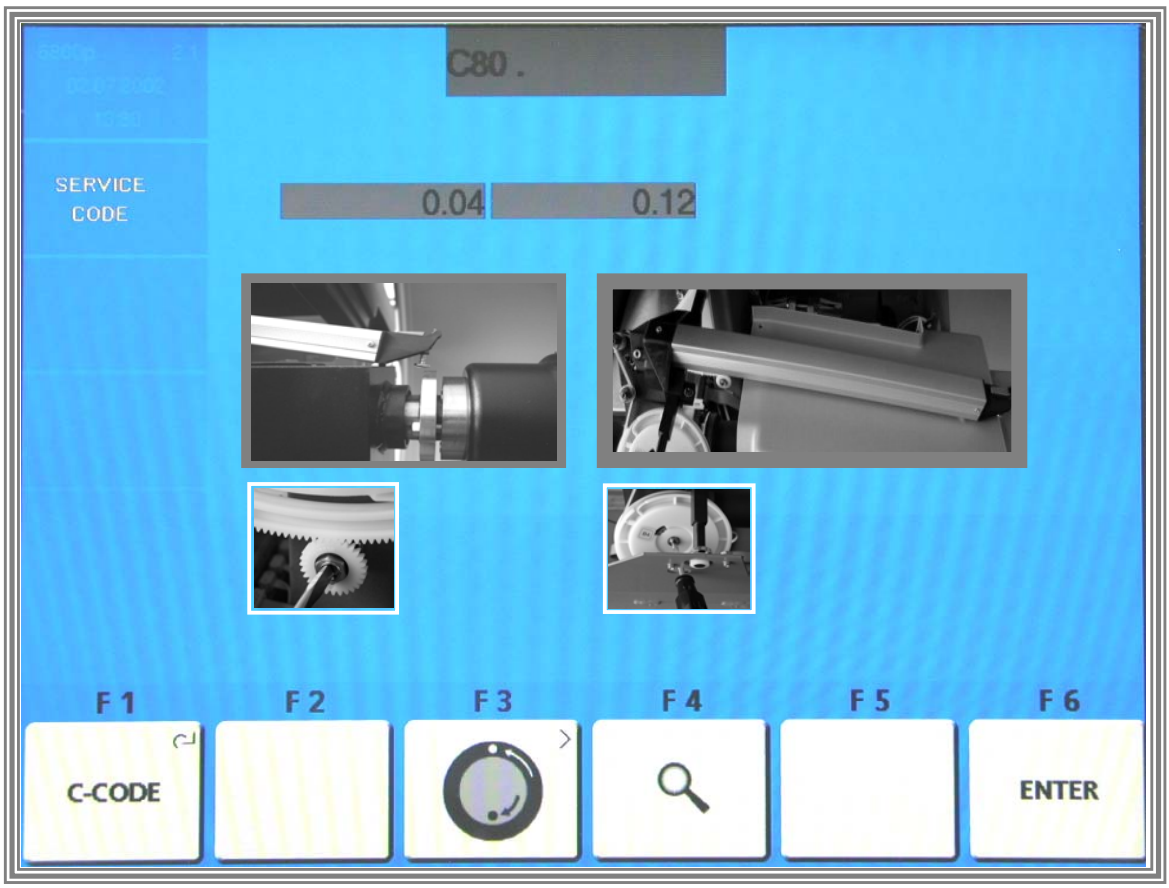


By pressing and holding key ***F1 C – Codes*** and by rotating the main shaft you can select calibration and test codes.

Code C80 Basic settings of the potentiometers

.

The following reading appears:



The display proceeds automatically to the basic settings.

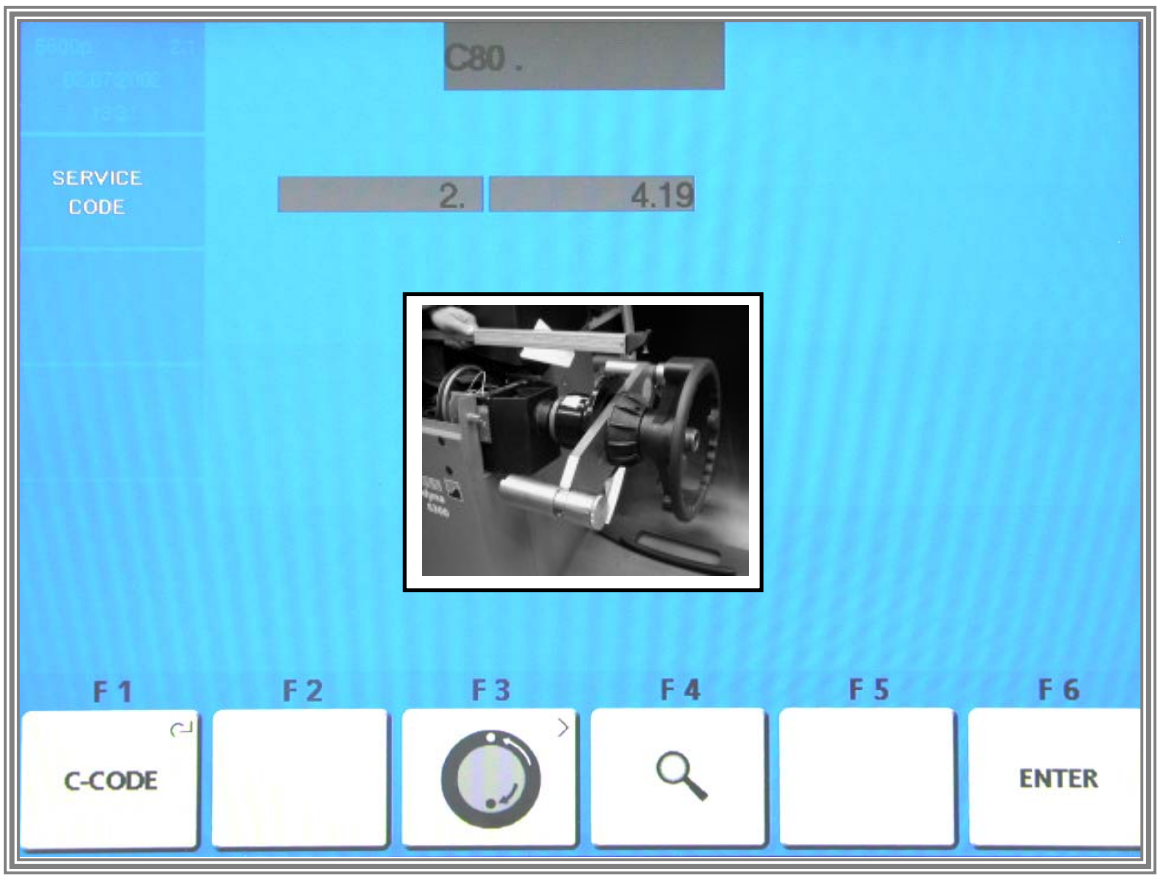
Then the basic settings of .15 to .20 Volt of the diameter and distance potentiometers are read out.

The left-hand reading refers to the basic setting of the diameter potentiometer. Engage the calibration tip of the gauge head with the calibration groove in the board of the vibratory system. If the slider voltage of the diameter potentiometer is not within a range of .15 to .20 Volt, turn the potentiometer shaft to bring the voltage to within this range.

The right-hand reading refers to the basic setting of the distance potentiometer.
If the gauge arm is in left home position and if the slider voltage of the distance potentiometer is not within a range of .15 to .20 Volt, turn the potentiometer shaft to bring the voltage to within this range.
Return the gauge arm into the left home position and press the ***F6 ENTER KEY*** to store the values.

Code C80 Basic settings of the potentiometers

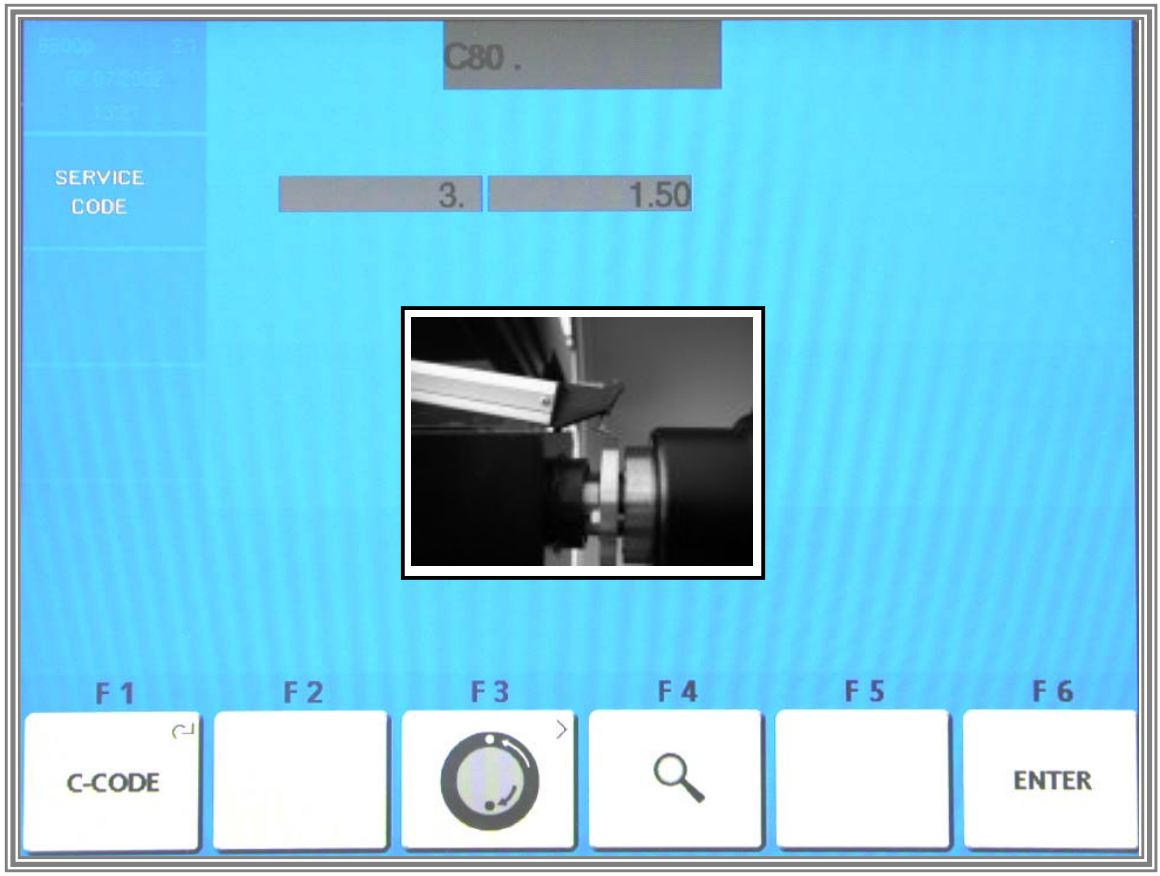
The following reading appears:



Pull out the gauge arm exactly 300 mm hold, and press the ***F6 ENTER KEY*** to store the value.

Code C80 Basic settings of the potentiometers

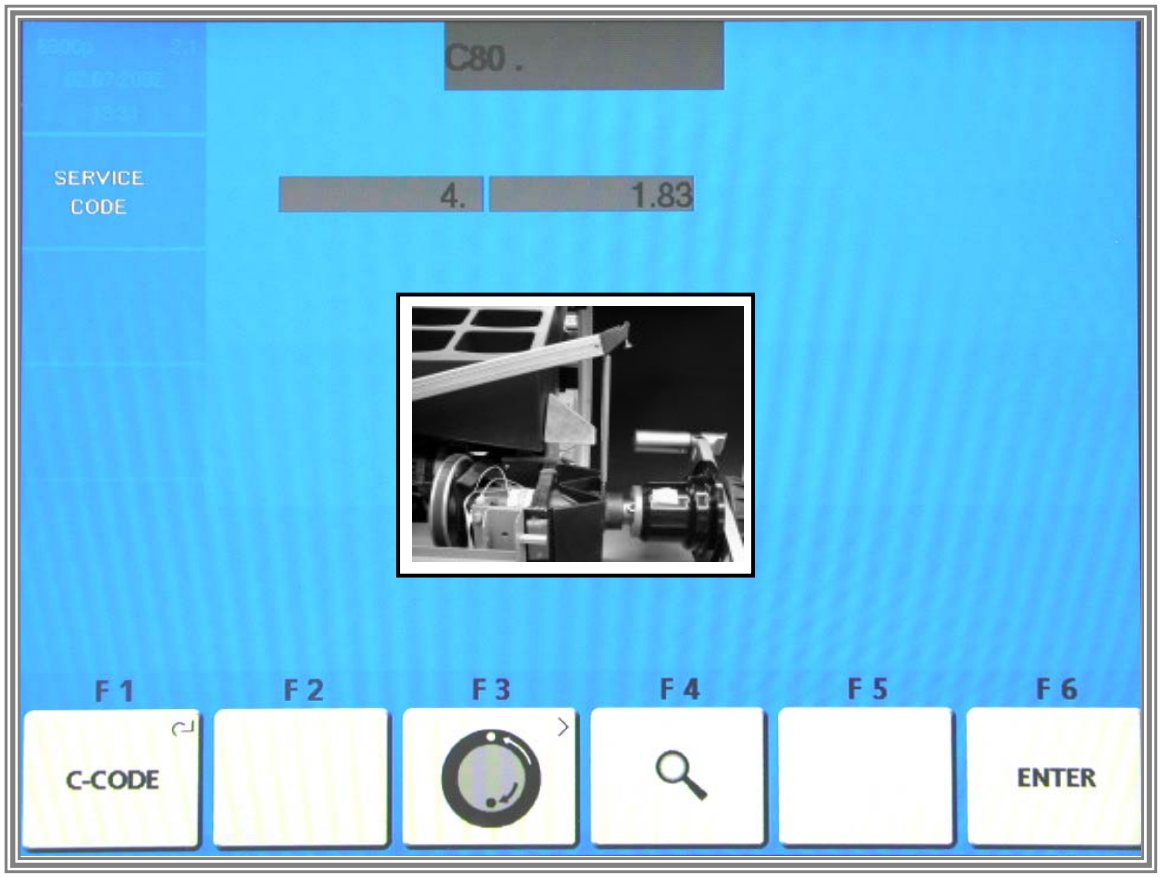
The following reading appears:



Engage the calibration tip on the bottom of the gauge head with the calibration groove in the board of the vibratory system and press the ***F6 ENTER KEY*** to store the value.

Code C80 Basic settings of the potentiometers

The following reading appears:

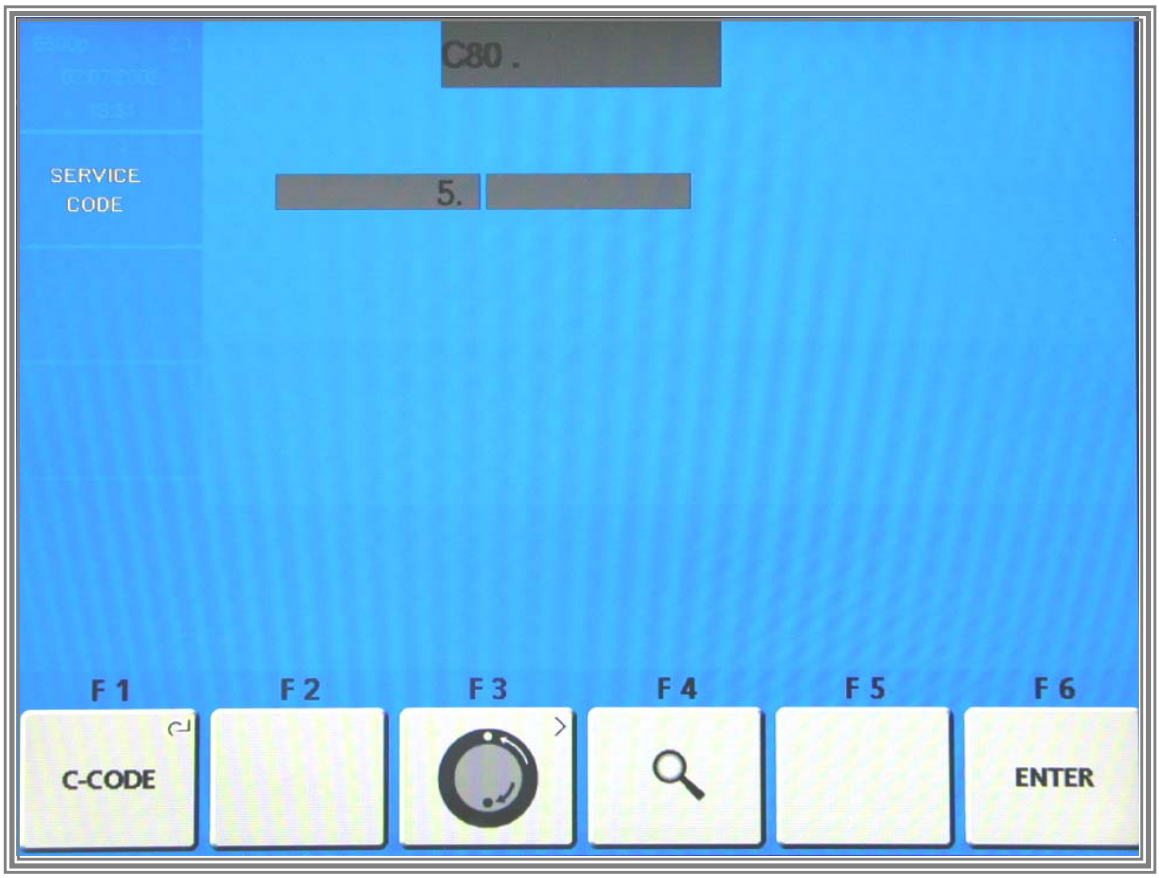


Raise the gauge arm, apply the calibration tip of the diameter calibration rod into the calibration groove of the board of the vibratory system and the calibration tip of the gauge arm into the recess at the lower end of the calibration rod. Pull out the gauge arm until the calibration rod is in vertical position.

Press the ***F6 ENTER KEY*** to store the value.

Code C80 Basic settings of the potentiometers

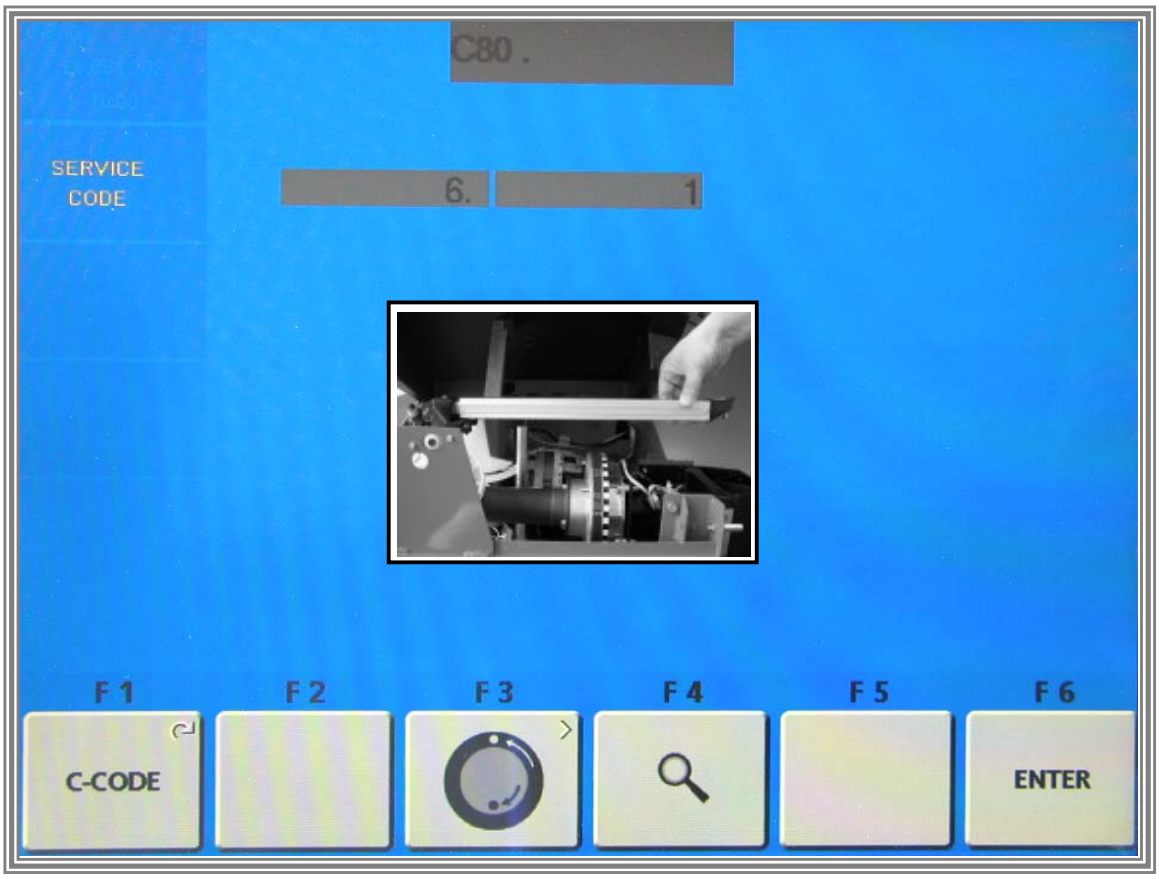
The following reading appears:



Step no. 5 has no function yet. Press ***F6 ENTER KEY*** to continue

Code C80 Basic settings of the potentiometers

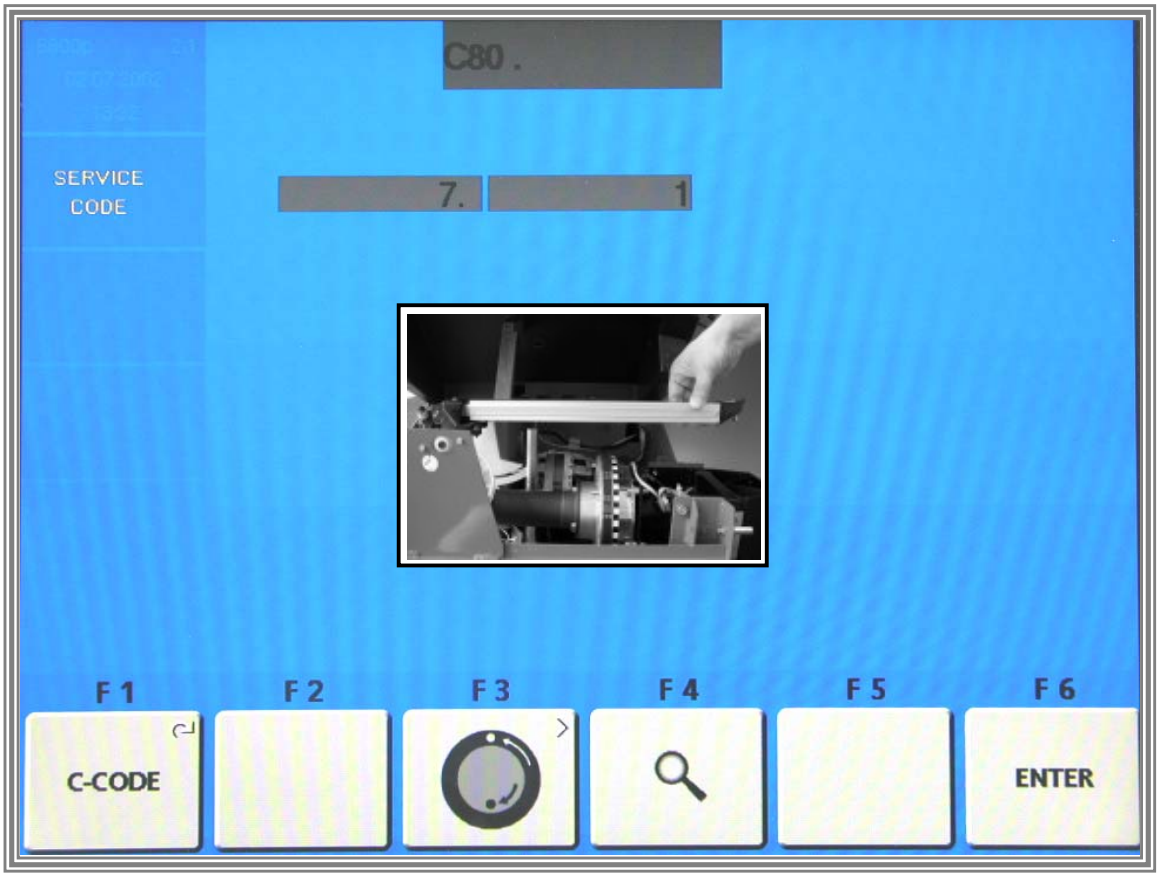
The following reading appears:



Raise the gauge arm and pull out at least 3 times **slowly** until it clamps. After each clamping hold the gauge arm for at least 1 second in the instantaneous clamping position before repeating this procedure. When the gauge arm had been pulled out and clamped 3 times, the reading proceeds automatically with step no. 7.

Code C80 Basic settings of the potentiometers

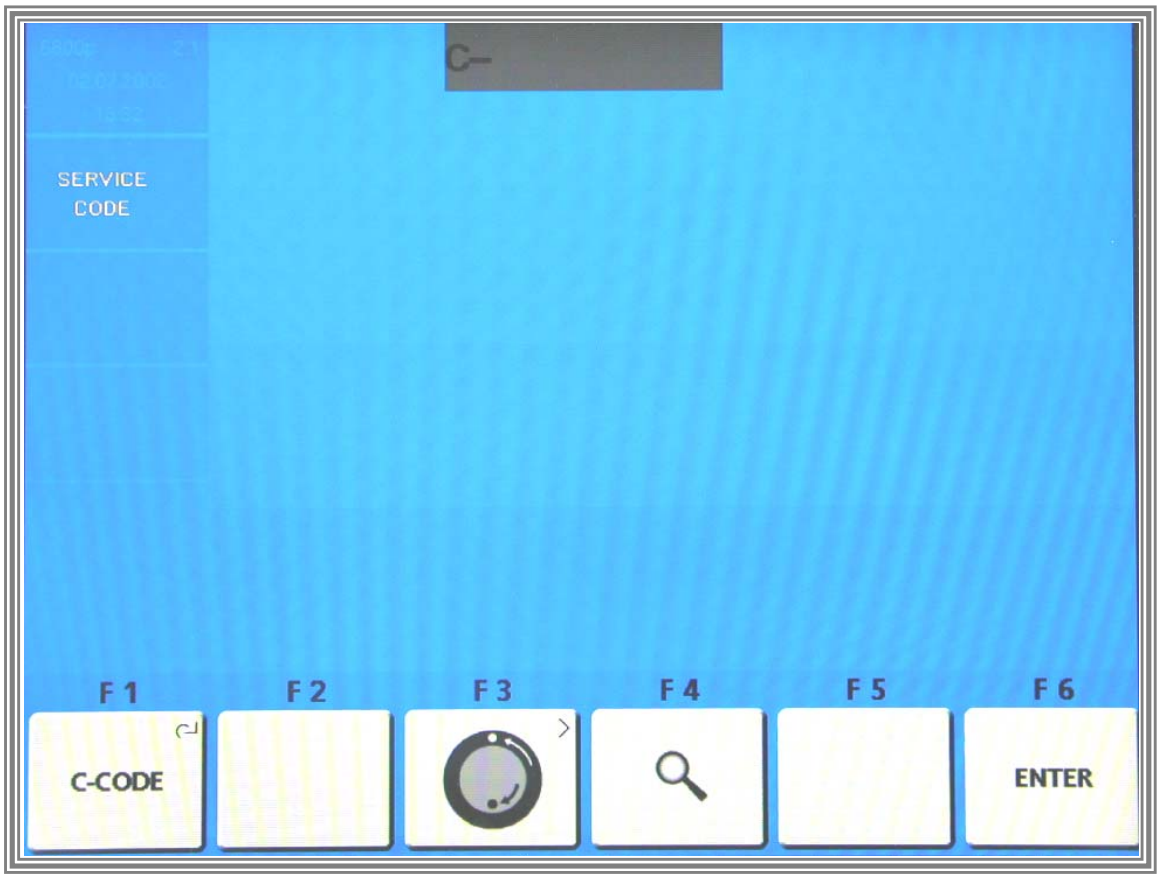
The following reading appears:



Pull out the gauge arm at least 7 times with increased **constant speed** until it clamps. After each clamping hold the gauge arm for at least 1 second in the instantaneous clamping position before repeating this procedure. When the gauge arm had been pulled out and clamped 7 times, the reading proceeds automatically with C- -.

Code C80 Basic settings of the potentiometers

The following reading appears:

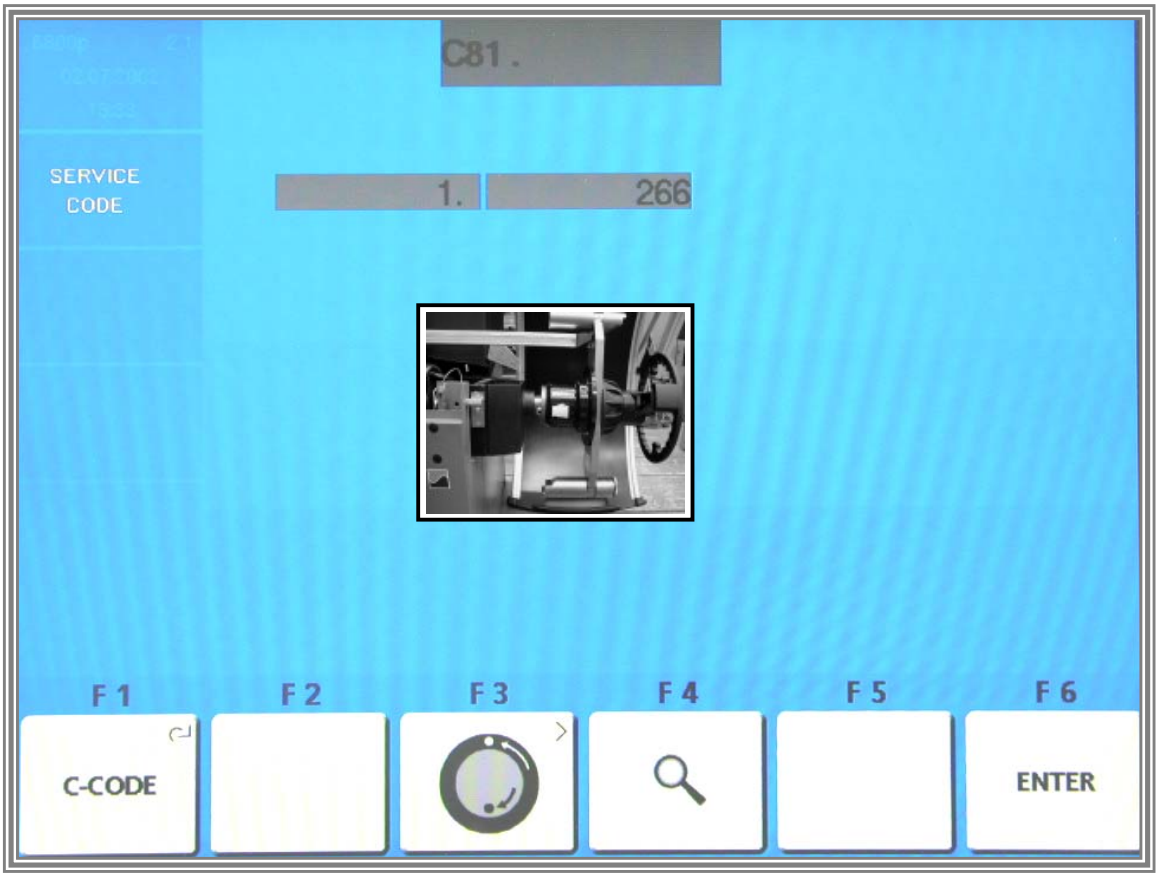


Calibration is completed and must be stored by entering C90.

Or
Service and test functions become accessible by pressing and holding the ***F1 C-CODE KEY*** and by rotating the main shaft.

Measuring adaptor flange and zero plane using code C81.

The following reading appears:

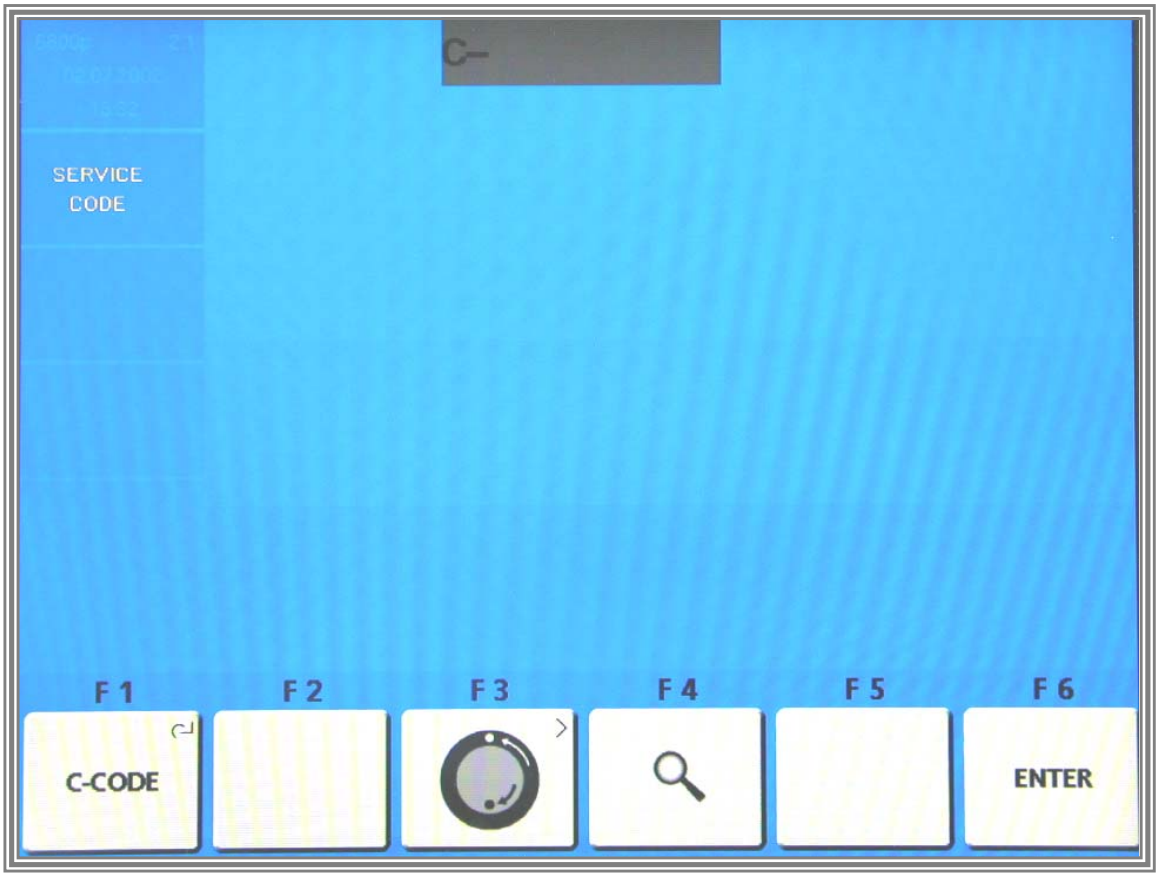


Apply the gauge arm on the contact surface of the test rotor and press the ***F6 ENTER KEY*** to store the value.

.

Measuring adaptor flange and zero plane using code C81

The following reading appears:

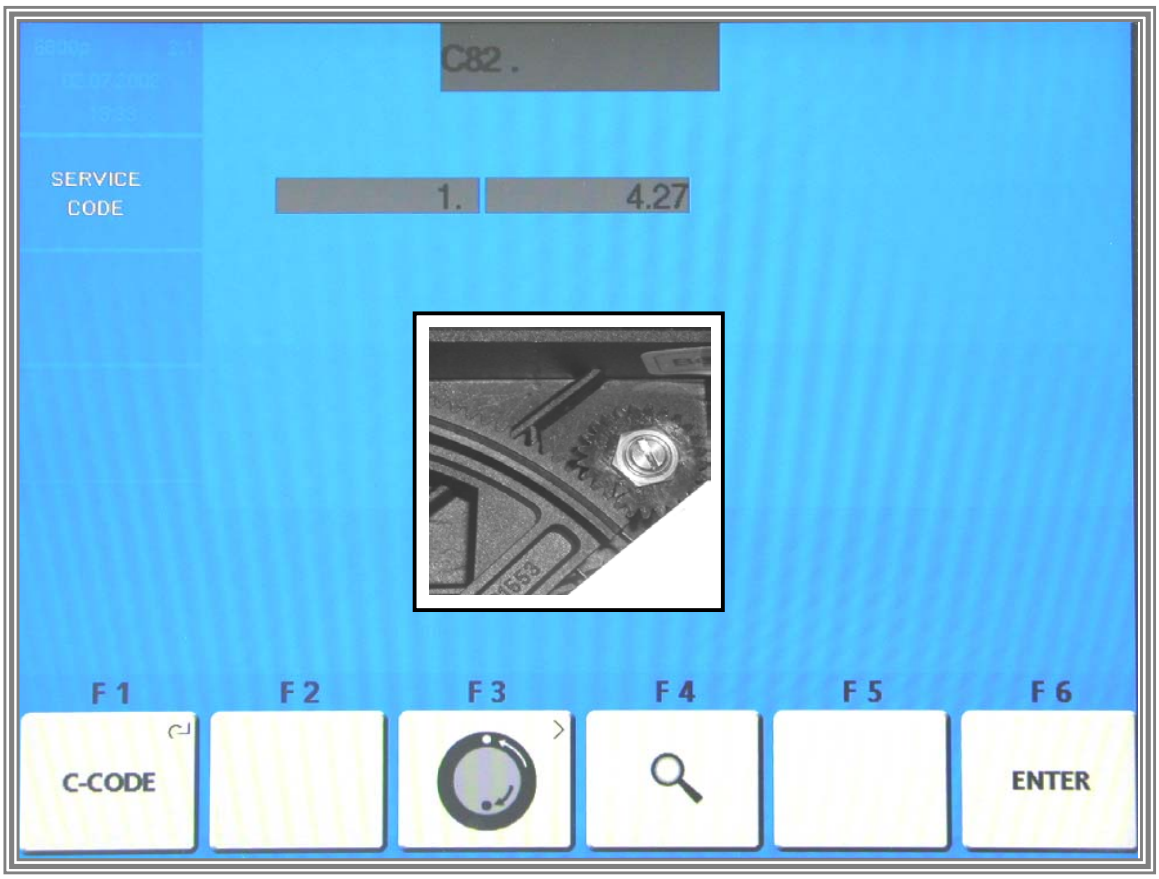


Calibration is completed and must be stored by entering C90.

Or:
Service and test functions become accessible by pressing and holding the ***F1 C-CODE KEY*** and by rotating the main shaft.

Code C82, 3 D SAPE calibration of width gauge arm

The following reading appears:

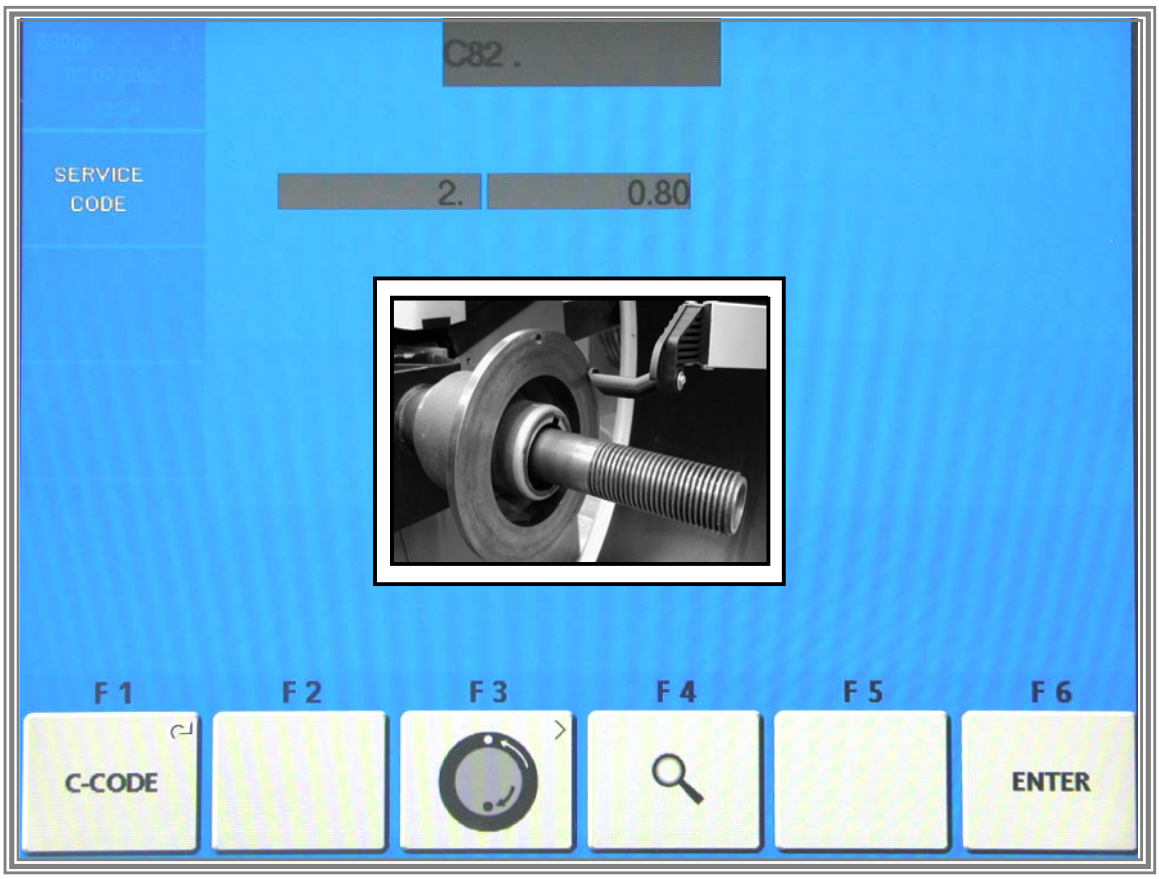


If the width gauge arm is in right home position and if the slider voltage of the width potentiometer is not within a range of 4.25 to 4.30 Volt, turn the potentiometer shaft to bring the voltage to within this range.

Press the ***F6 ENTER KEY*** to store the value.

Code C82, 3 D SAPE Calibration of width gauge arm

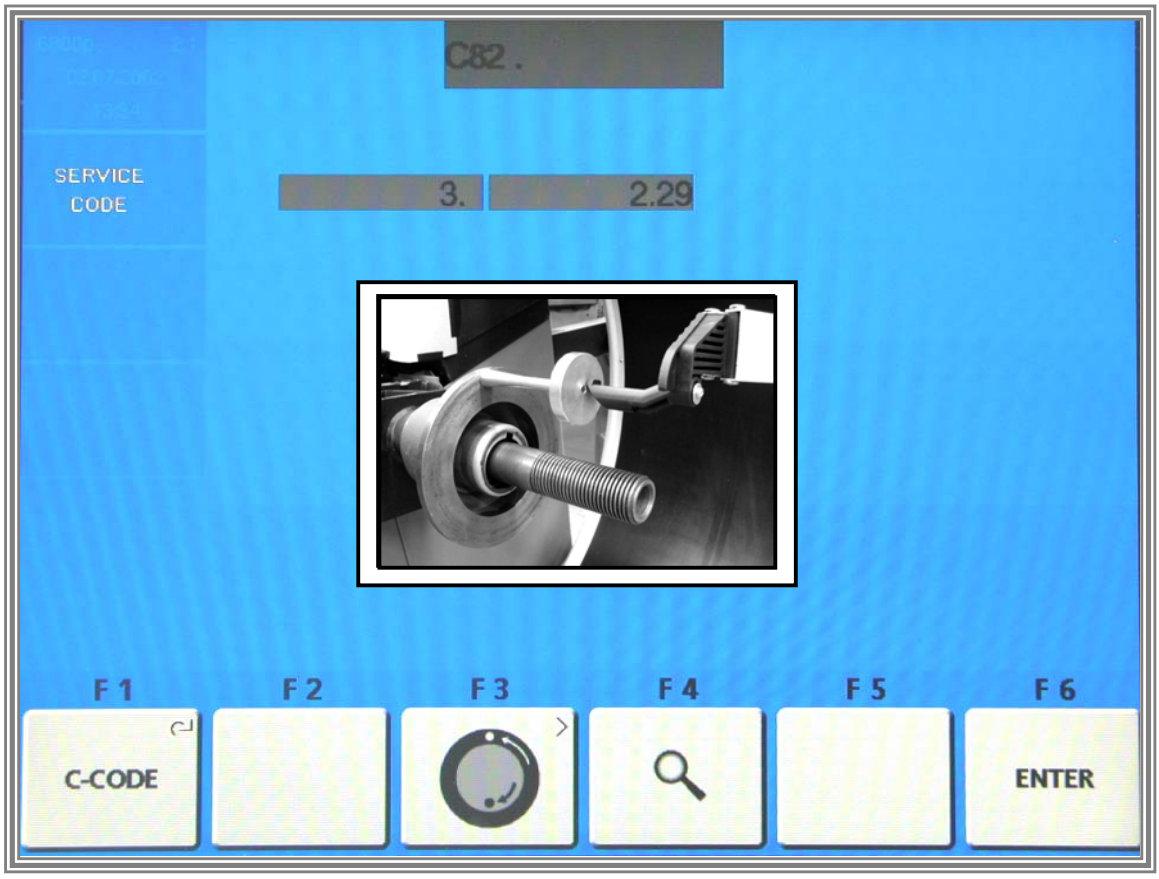
The following reading appears:



Apply the gauge head of the width gauge to the outer surface of the adaptor flange and press the ***F6 ENTER KEY*** to store the value.

Code C82, 3 D SAPE calibration of width gauge arm

The following reading appears:

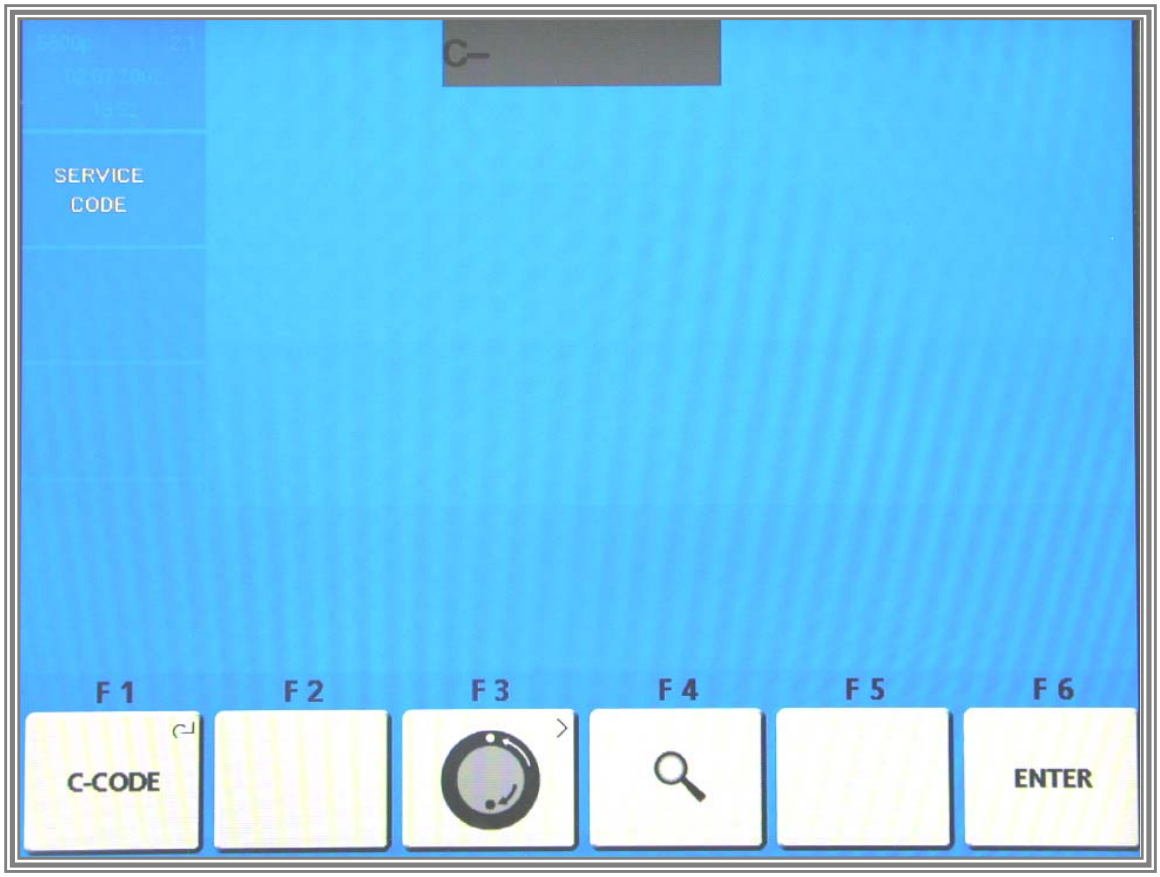


Insert the calibration weight supplied with the machine into the adaptor flange so that it protrudes to the right.

Apply the width gauge arm to the outer surface of the calibration weight and press the ***F6 ENTER KEY*** to store the value.

Code C82, 3 D SAPE calibration of width gauge arm

The following reading appears:

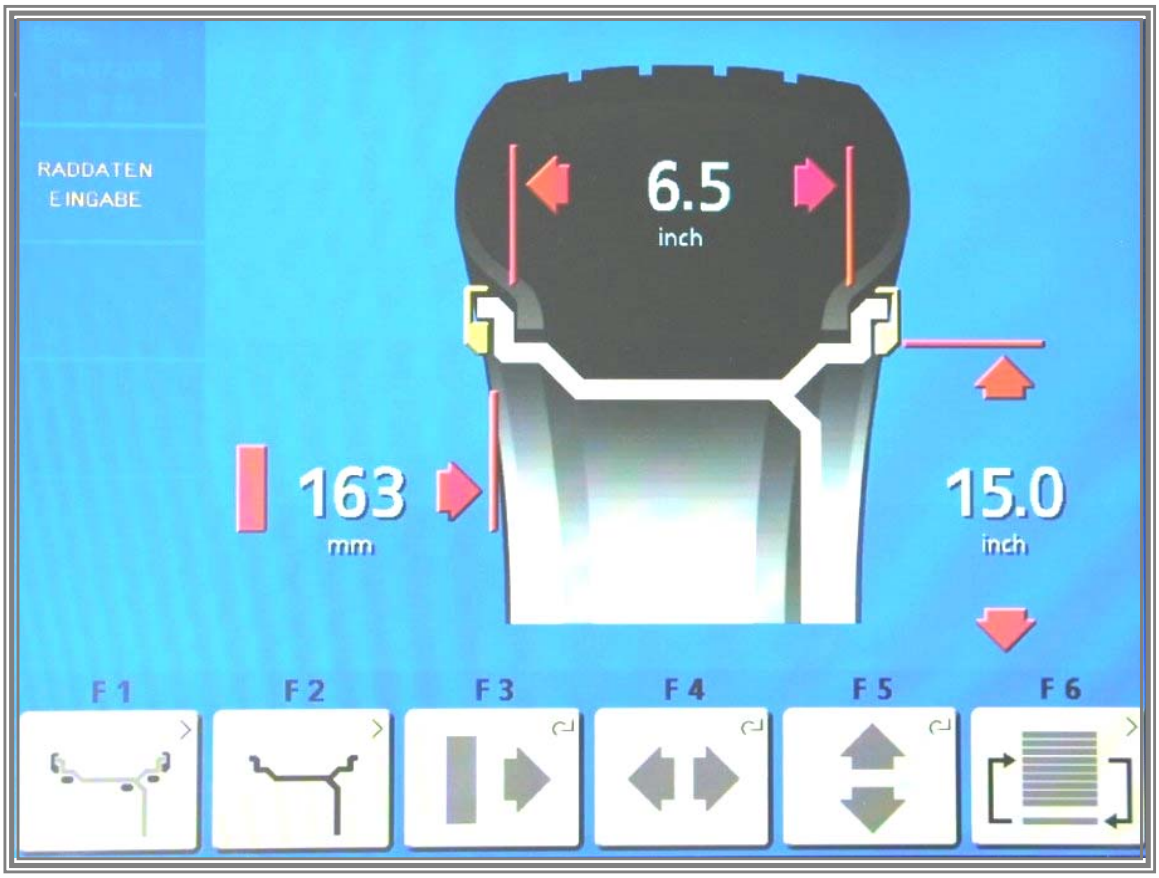


.

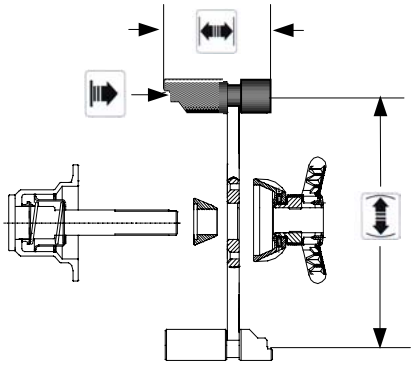
Calibration is completed and must be stored by entering C90.

Or:
Service and test functions become accessible by pressing and holding the ***F1 C-CODE KEY*** and by rotating the main shaft.

Code C83 – Calibration of unbalance measurement

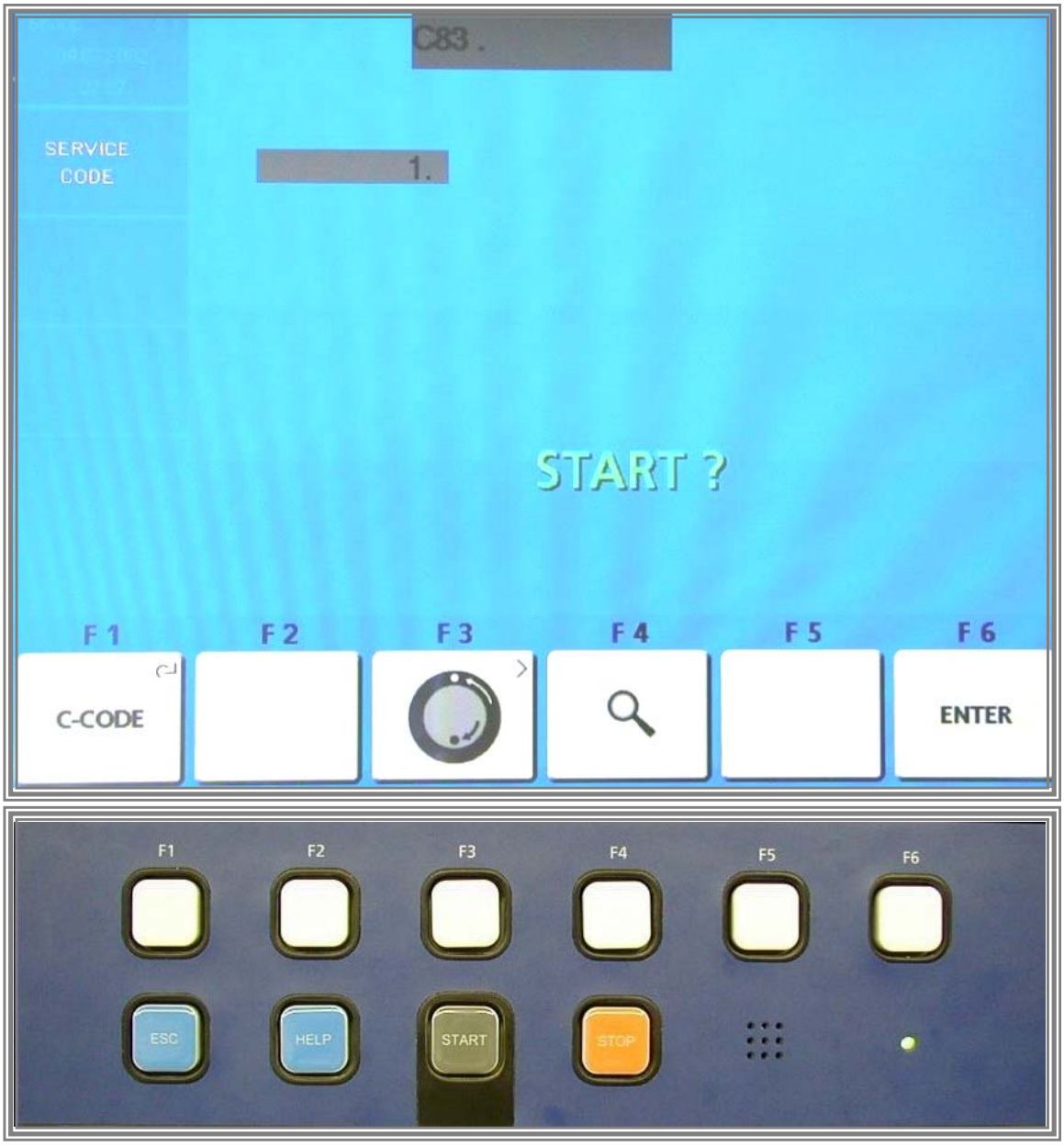


Clamp the test rotor, enter distance, 15“ diameter and 6.5“ width.



Code C83 – Calibration of unbalance measurement

The following reading appears:

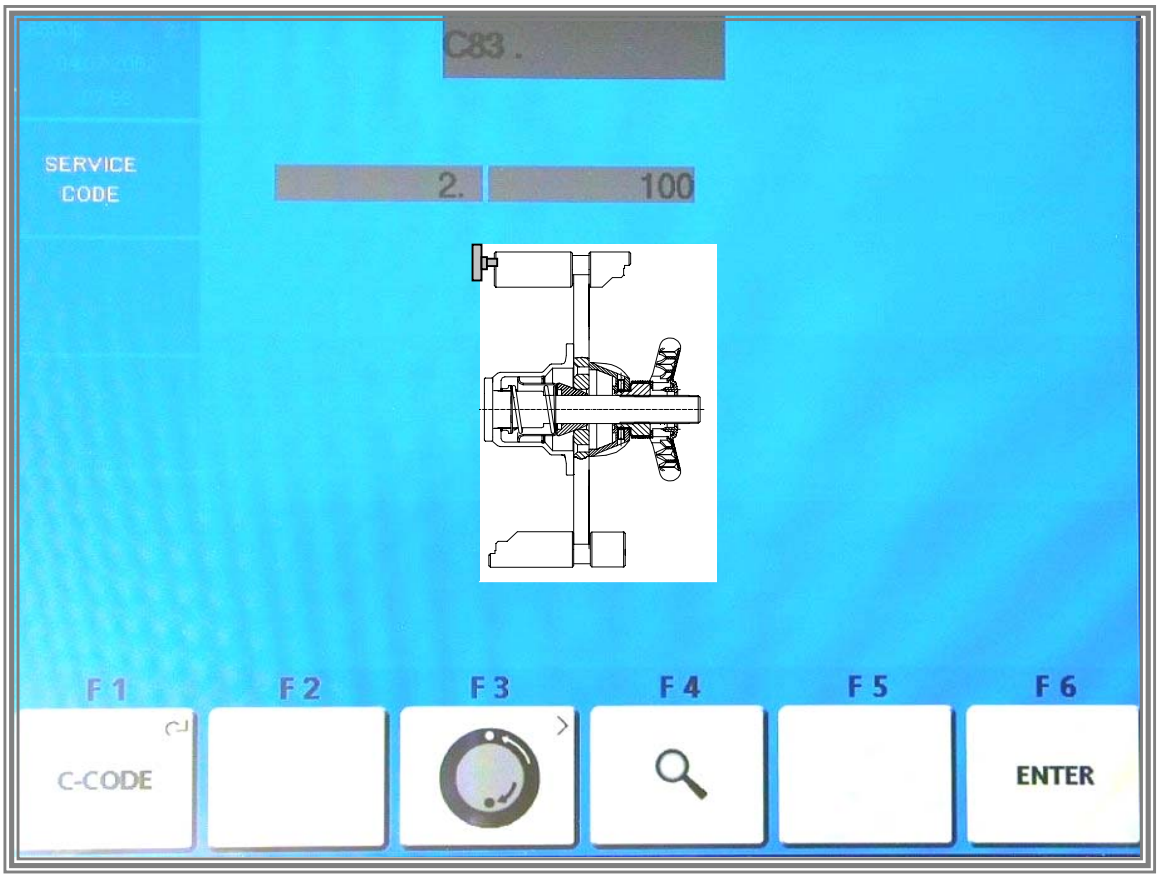


.

Press the ***START*** key to start a measuring run.

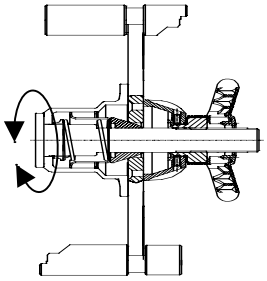
Code C83 – Calibration of unbalance measurement

The following reading appears:



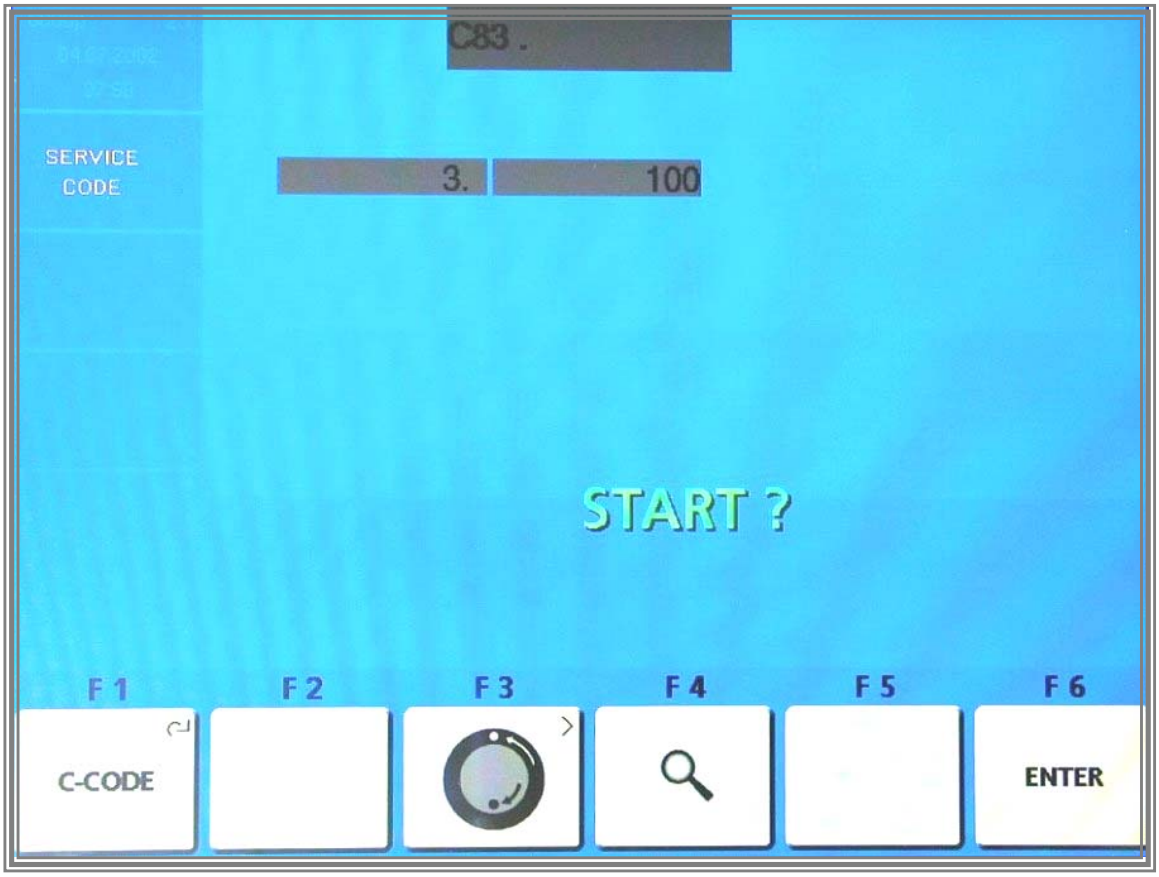
Insert a calibration weight of 100 gms in the left-hand plane of the test rotor and press the F6 ENTER KEY to acknowledge this weight. Then proceed to the next step.

If necessary, press and hold the precision key and rotate the main shaft to set the actual weight



Code C83 – Calibration of unbalance measurement

The following reading appears:

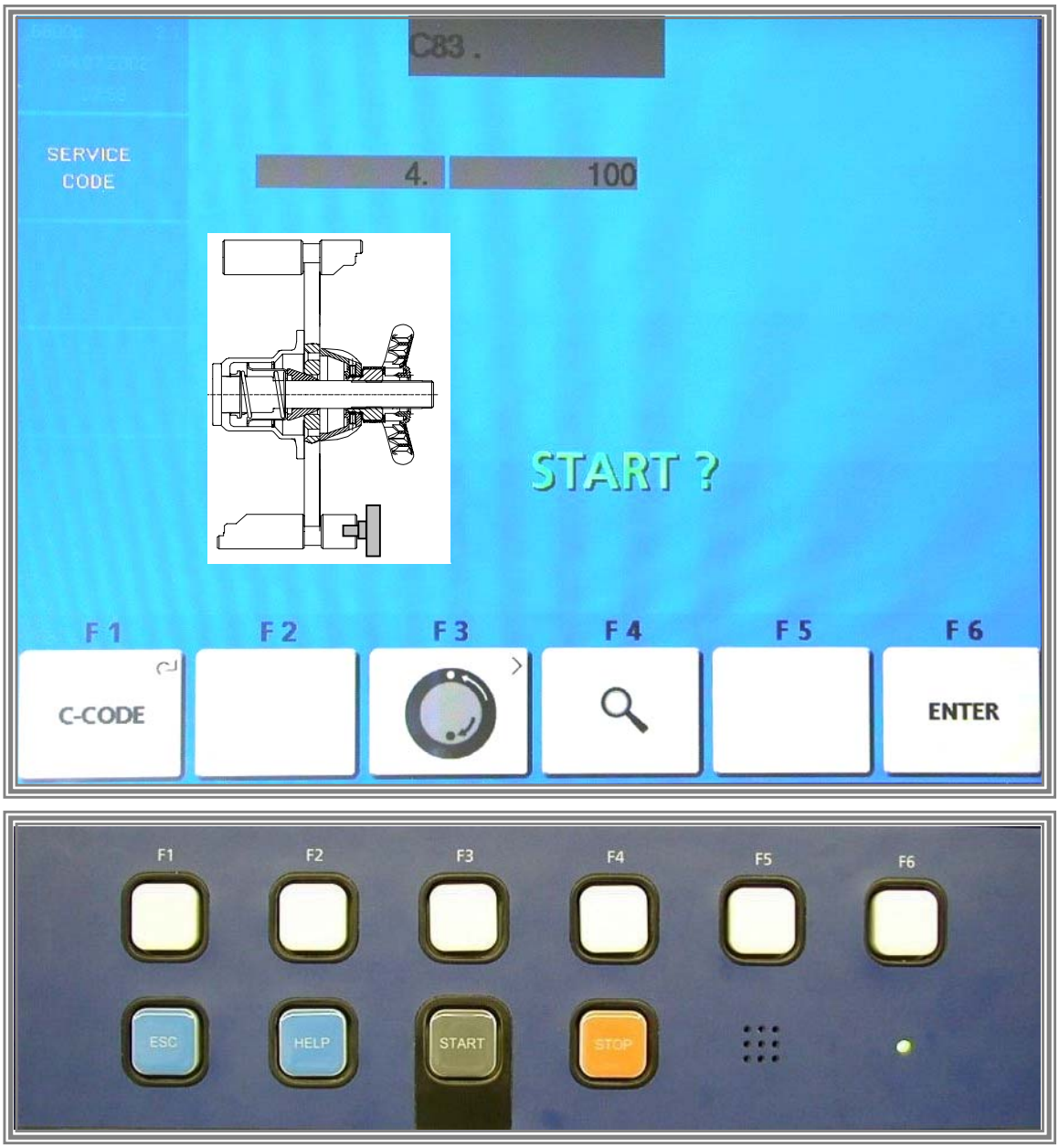




Press the ***START KEY*** to start a measuring run.

Code C83 – Calibration of unbalance measurement

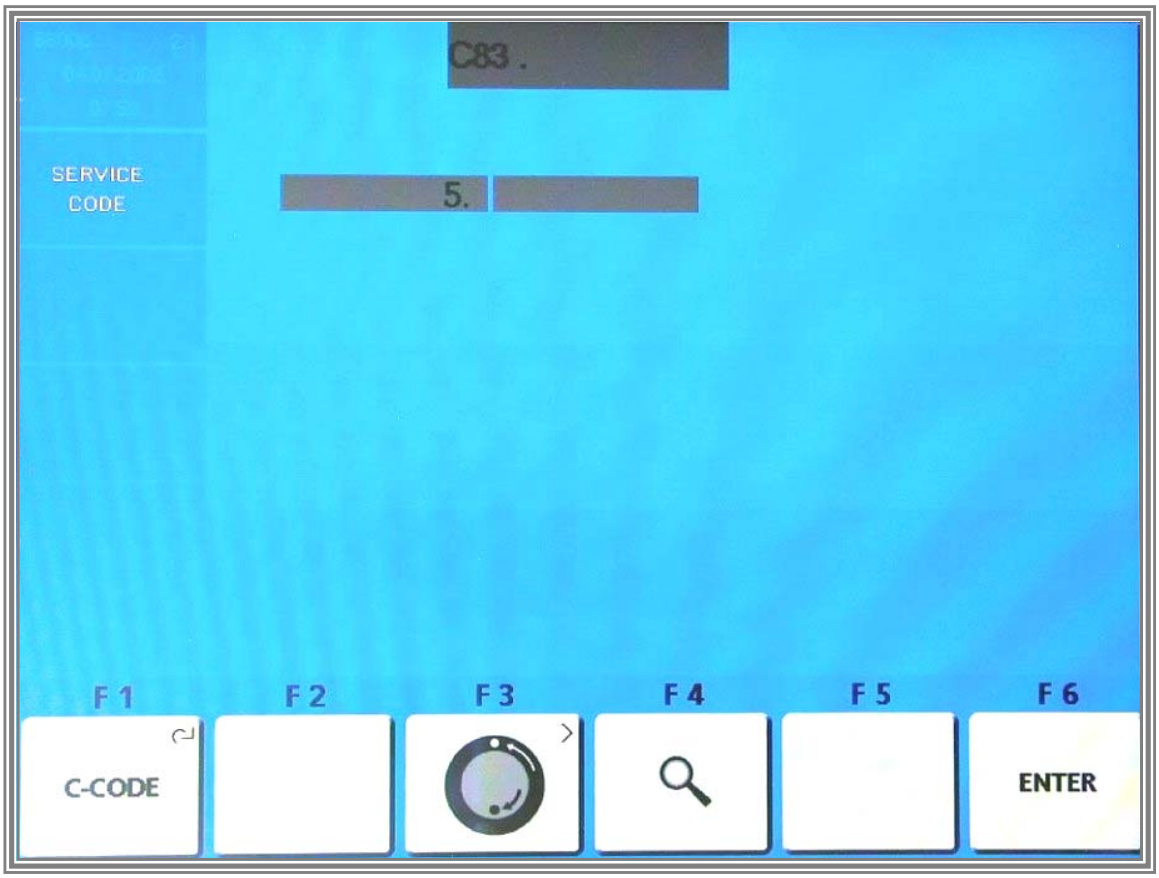
The following reading appears:



Remove the 100 gm calibration weight from the left-hand plane of the test rotor and insert it into the right-hand plane of the test rotor. Then press the ***START KEY***.

Code C83 – Calibration of unbalance measurement

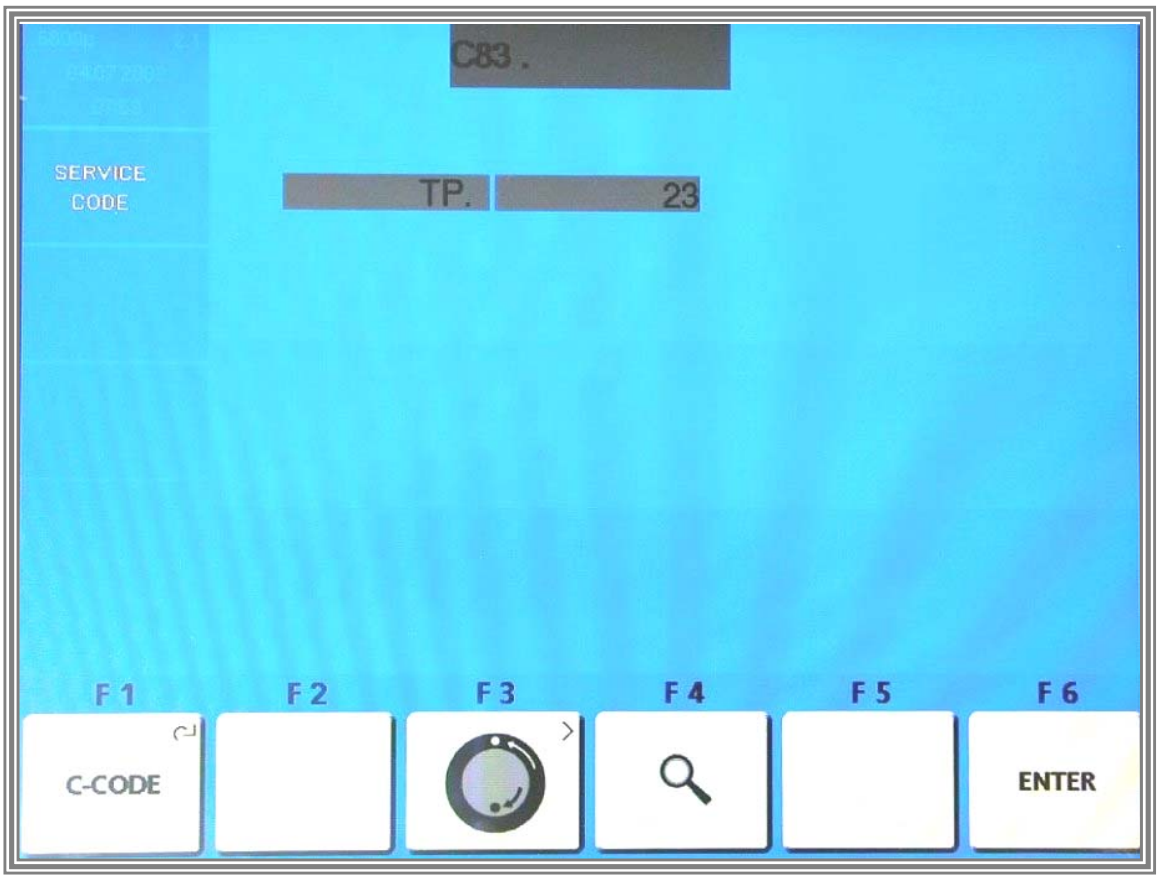
The following reading appears:



Step no. 5 has no function yet. Press ***F6 ENTER KEY*** to continue

Code C83 – Calibration of unbalance measurement

The following reading appears:



The ambient transducer temperature is read out for 1 second.

Code C83 – Calibration of unbalance measurement

After the temperature compensation the following is displayed:

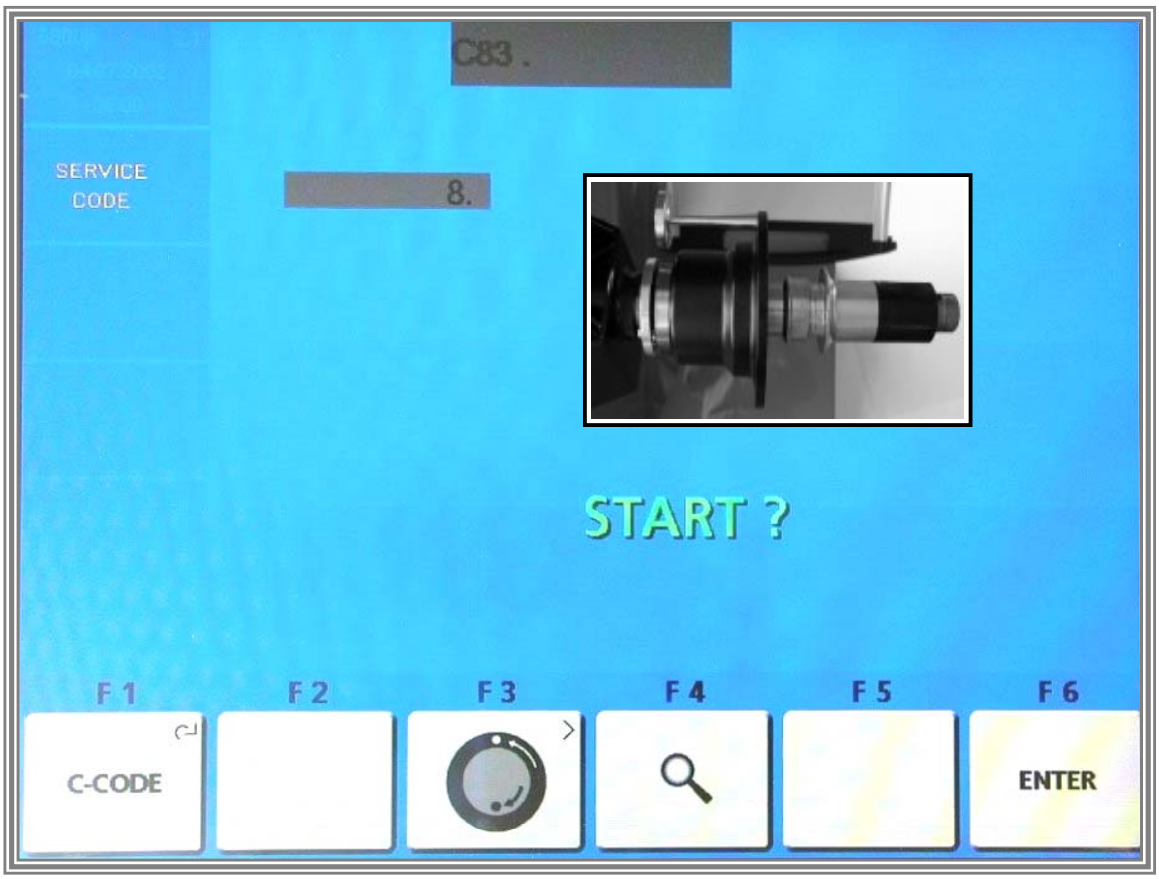


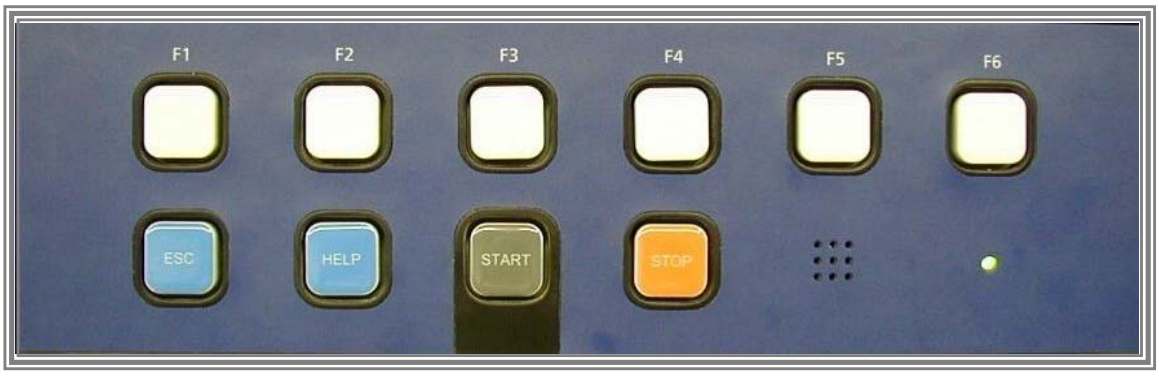
After temperature measurement the following reading appears:

Remove the 100 gm calibration weight from the test rotor. Press the ***START KEY*** in order to proceed with instantaneous electrical compensation of residual adaptor unbalance.

Code C83 – Calibration of unbalance measurement

The following reading appears:

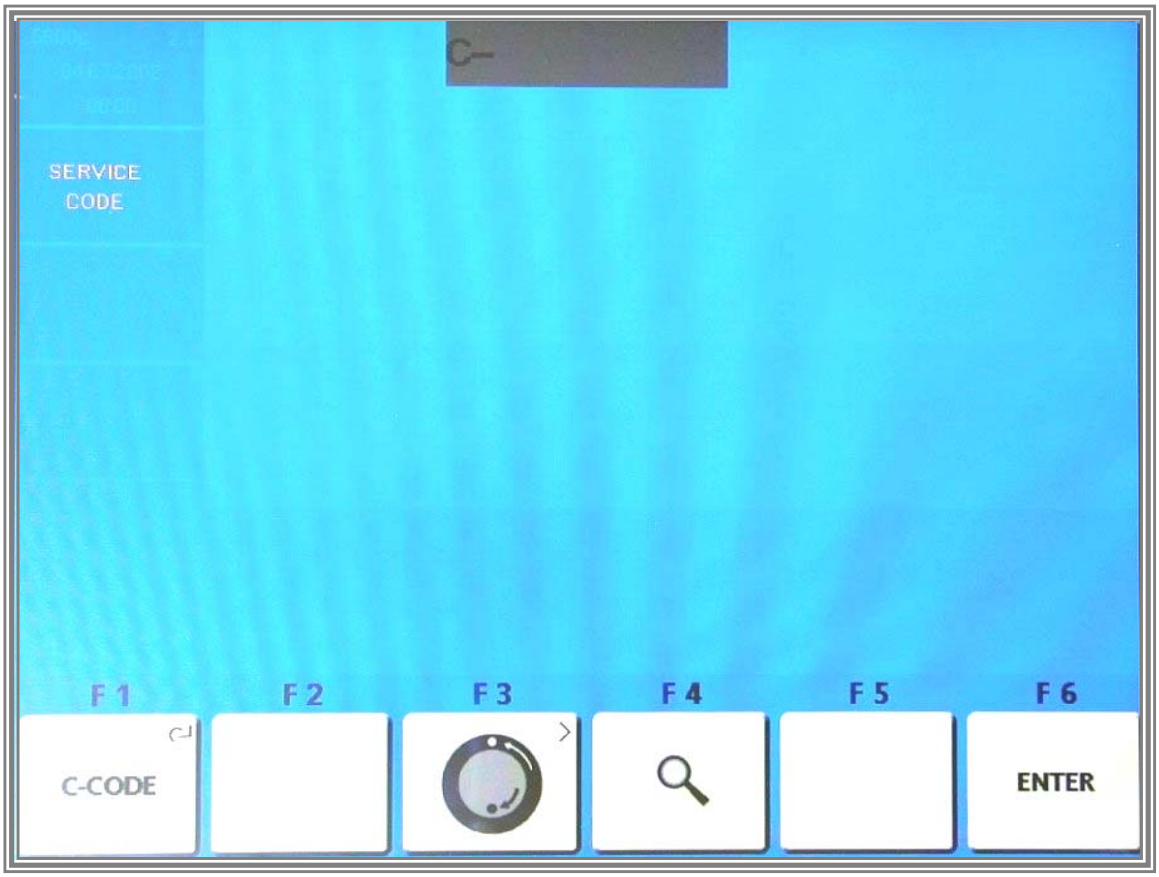




Insert the calibration weight supplied with the machine at the **left inner** side of the adaptor flange.
Press the ***START KEY.***

Code C83 – Calibration of unbalance measurement

The following reading appears:

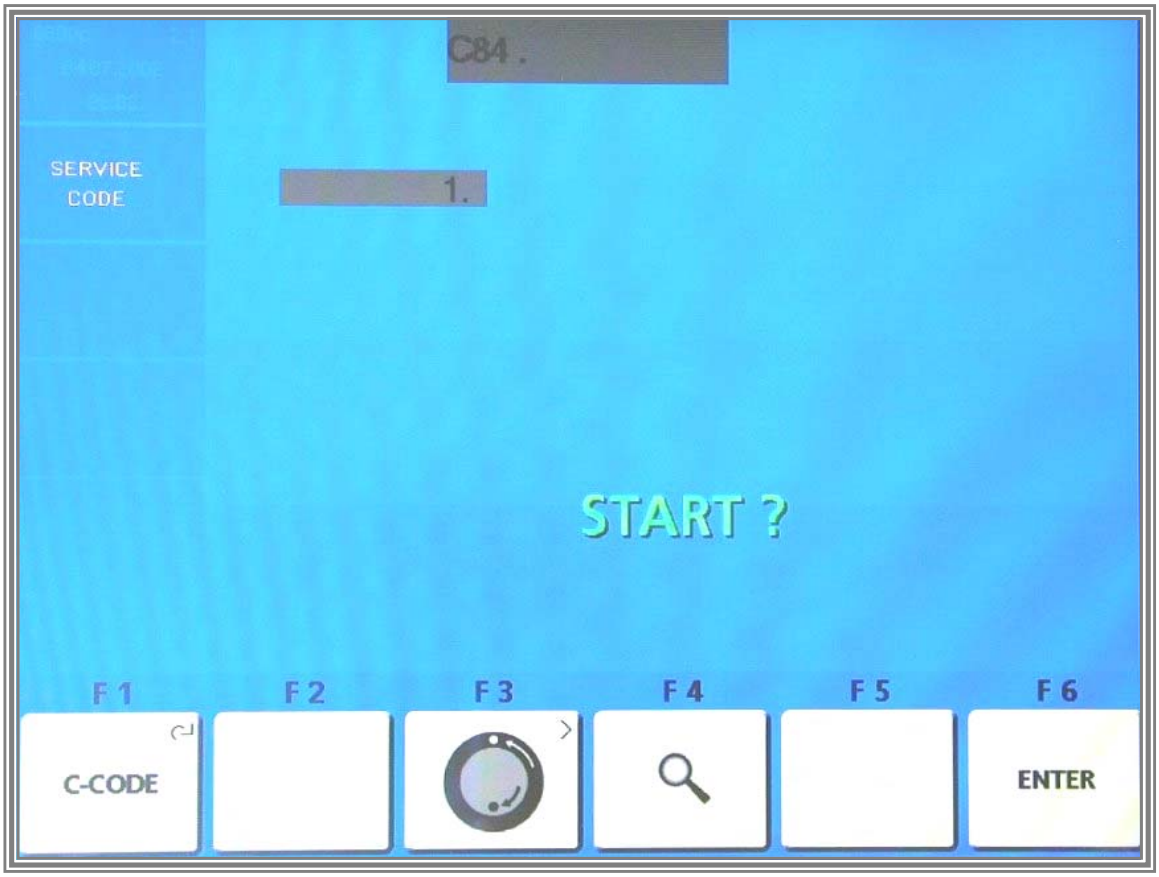


Calibration is completed and must be stored by entering C90.

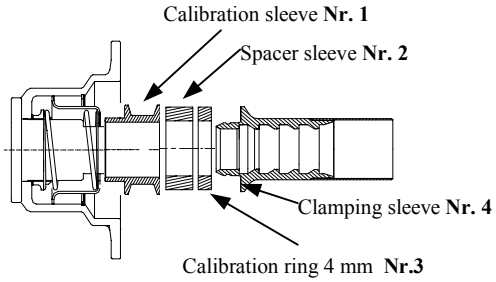
Or:
Service and test functions become accessible by pressing and holding the ***F1 C-CODE KEY*** and by rotating the main shaft.

Code- C84 Adjustment compensating for the residual unbalance of the main shaft and the drive disc of a *p*-variant

The following reading appears:



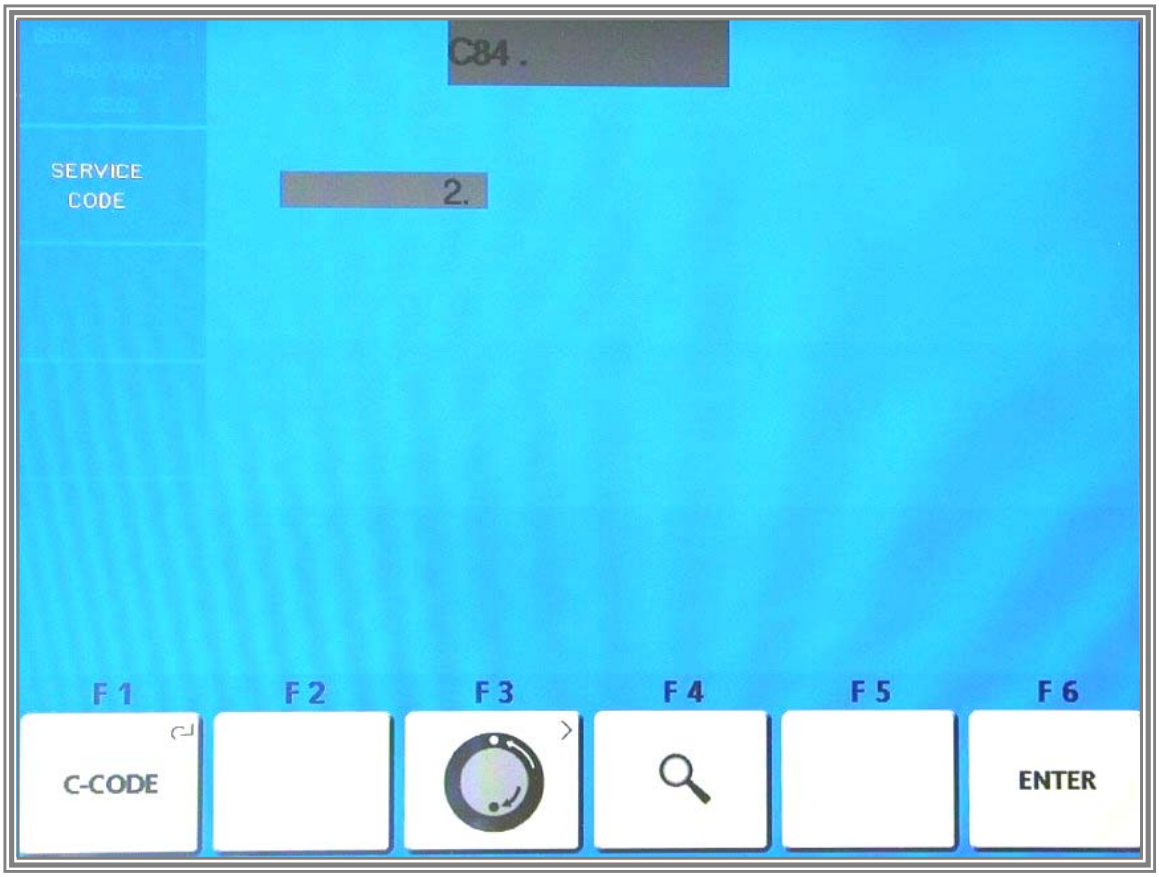
Slide the calibration sleeve **no.1** with the slim end on first then the spacer sleeve **no. 2** and the calibration ring 4mm **no. 3**. Push the clamping sleeve **no. 4** towards the calibration ring 4mm **no. 3** and actuate clamping.



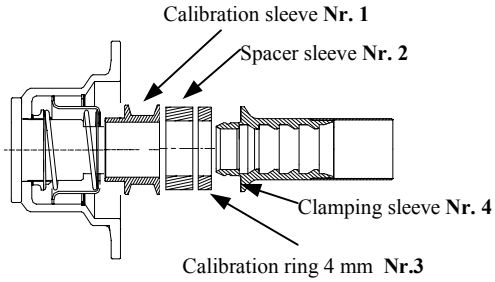
Close the wheel guard and start the extended measurement run by pressing the ***START KEY.***

Code- C84 Adjustment compensating for the residual unbalance of the main shaft and the drive disc of a *p*-variant

The following reading appears:



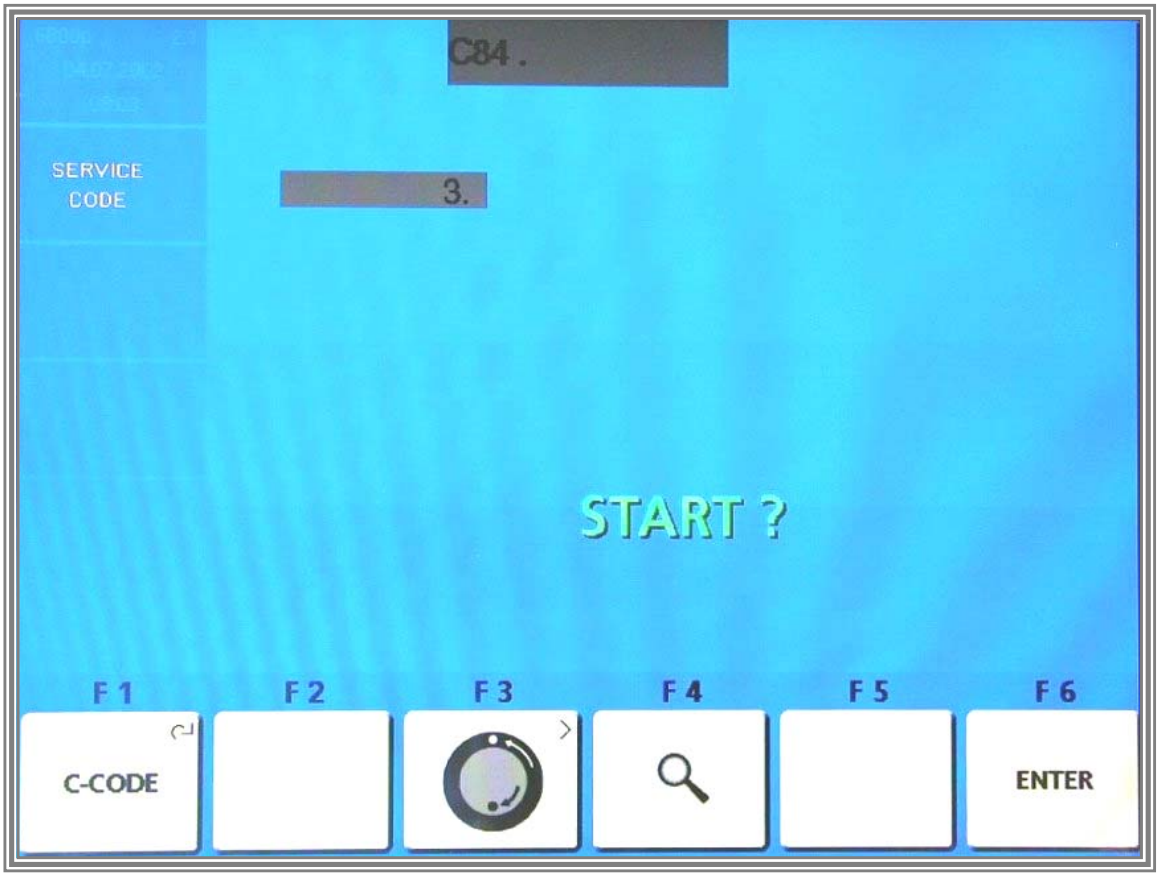
After the measuring run, release clamping and pull off the **clamping sleeve no.4** and the **calibration ring 4mm no.3** Push the **clamping sleeve no. 4** towards the **spacer sleeve no.4** and actuate clamping.



Close the wheel guard and start the second extended measurement run by pressing the ***START KEY***

Code- C84 Adjustment compensating for the residual unbalance of the main shaft and the drive disc of a *p*-variant

The following reading appears:



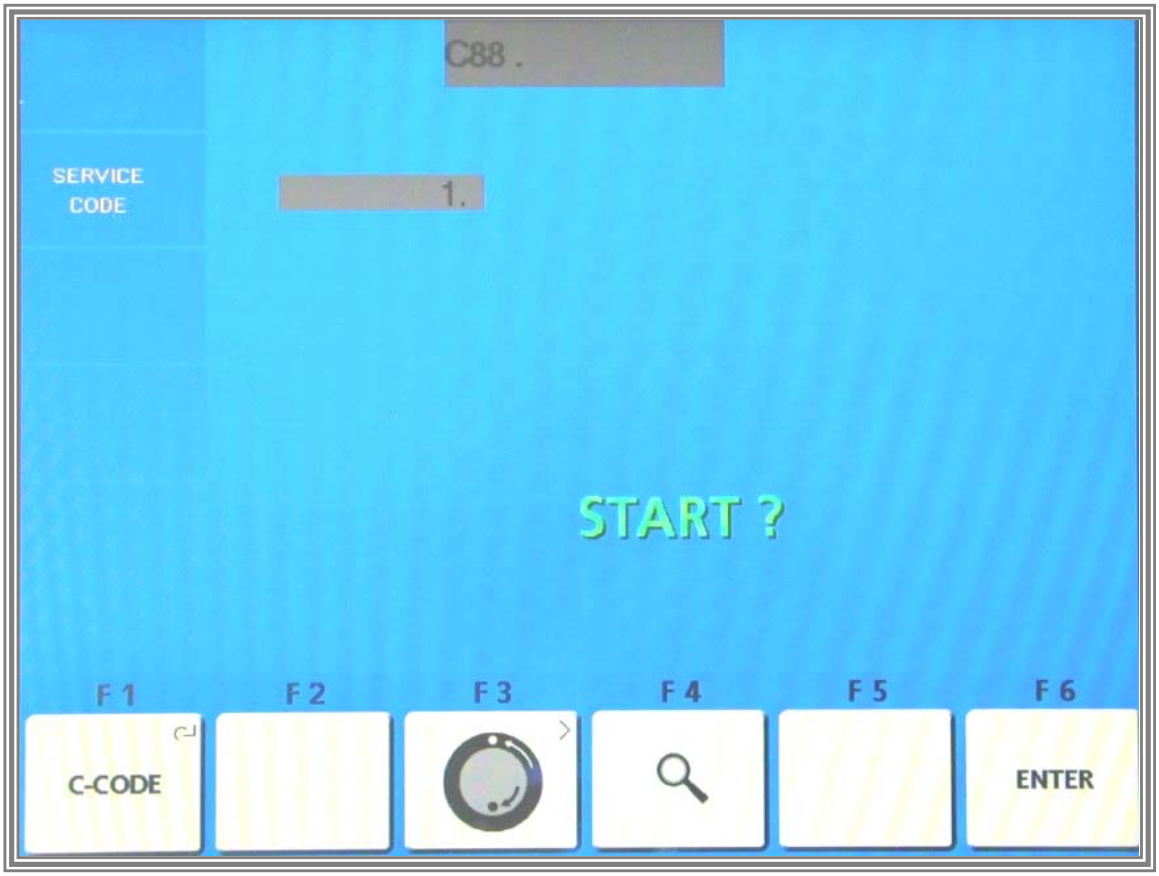
Close the wheel guard and start the second extended measurement run by pressing the ***START KEY***

The residual unbalance of the main shaft and the drive disc was determined during the two measurement runs and is stored into the volatile data memory.

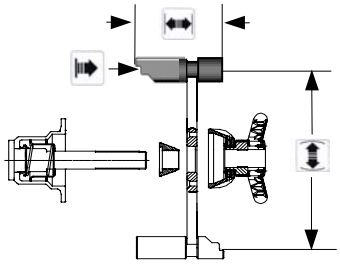
To ensure that compensation of residual unbalance remains effective after power has been switched off, the data must be stored to the permanent memories with code C90 (nonvolatile memories).

Code C88 Adjustment of the angular unbalance position.

The following reading appears:



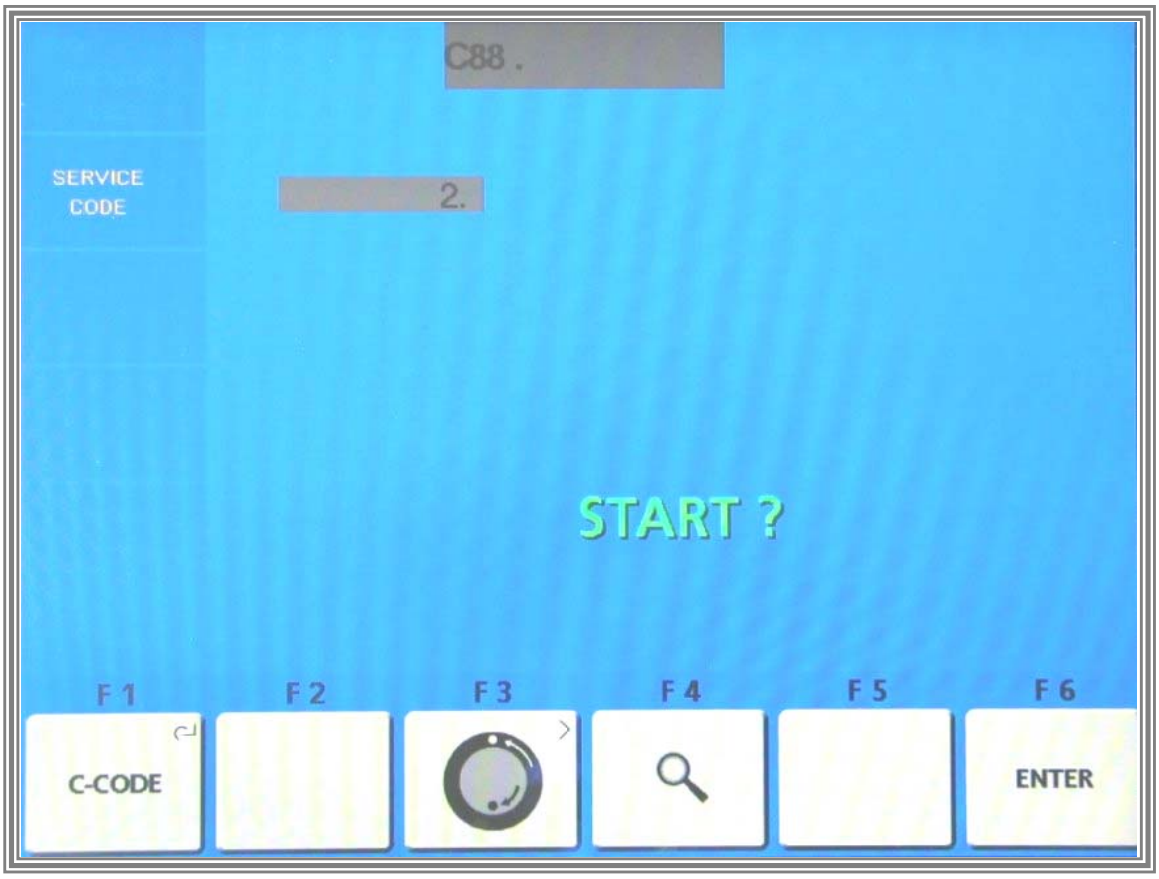
Clamp the test rotor on the main shaft, enter distance, 15“ diameter and 6.5“ width.



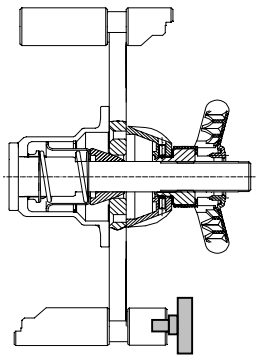
Close the wheel guard and start the first measurement run by pressing the START KEY

Code C88 Adjustment of the angular unbalance position.

The following reading appears:



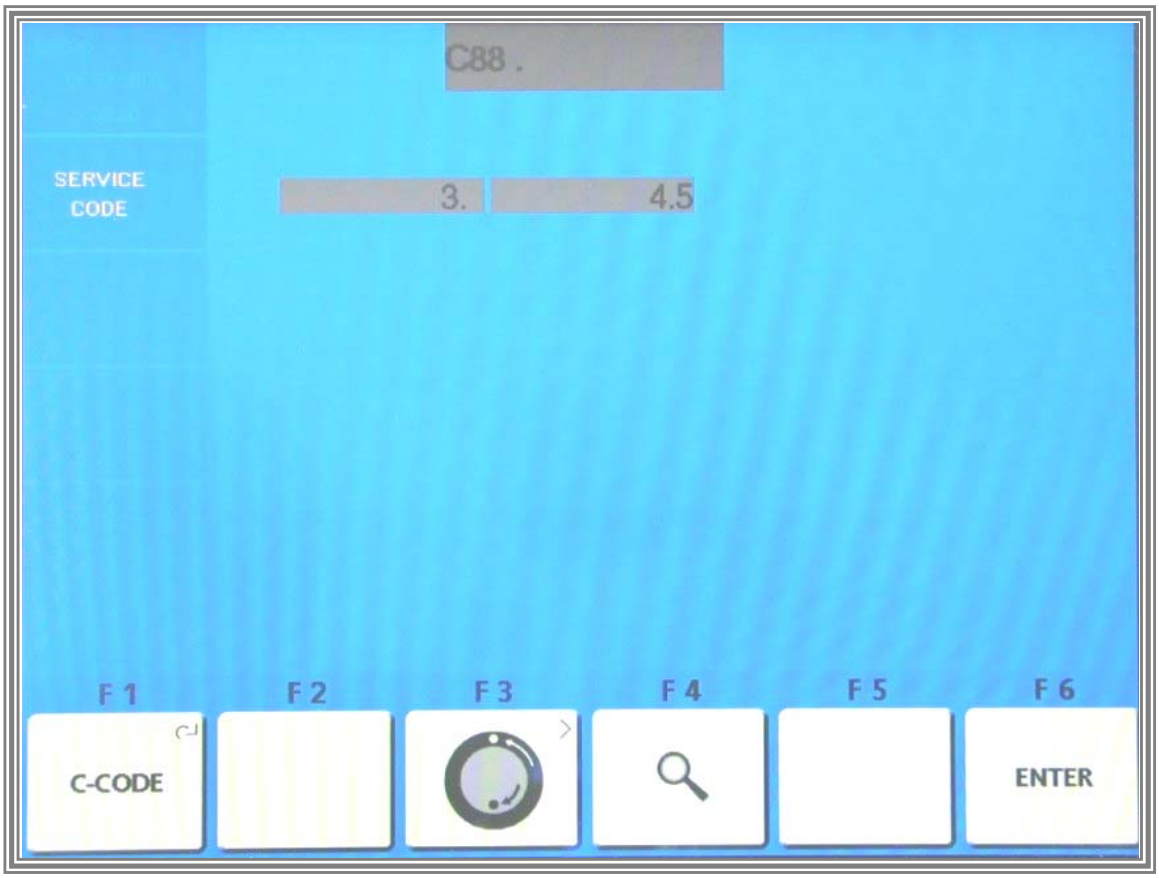
Attach a whght of 100 gm in one of the correction planes..



Carry out the second measurement run by pressing the ***START KEY***

Code C88 Adjustment of the angular unbalance position.

The following reading appears:



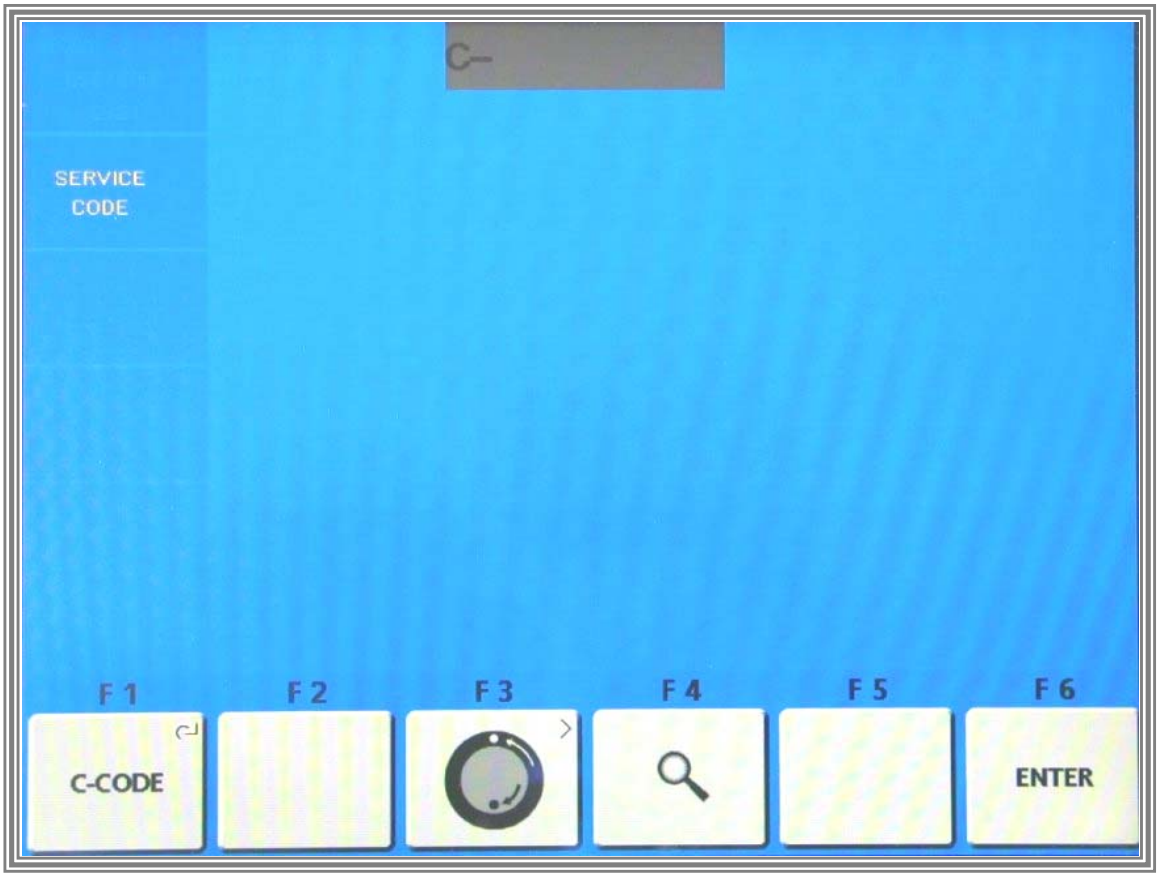
Turn the wheel until the weight is exactly vertical below the main shaft. The correction value will follow the rotation of the main shaft within the premissible range of +/- 7 incrementsof the position counter, i.e. +/- 4.9°.

Outside the range the value is set to 0.

Check the instantaneous value. Press the ***F6 ENTER KEY*** to accept the value .

Code C88 Adjustment of the angular unbalance position.

The following reading appears:

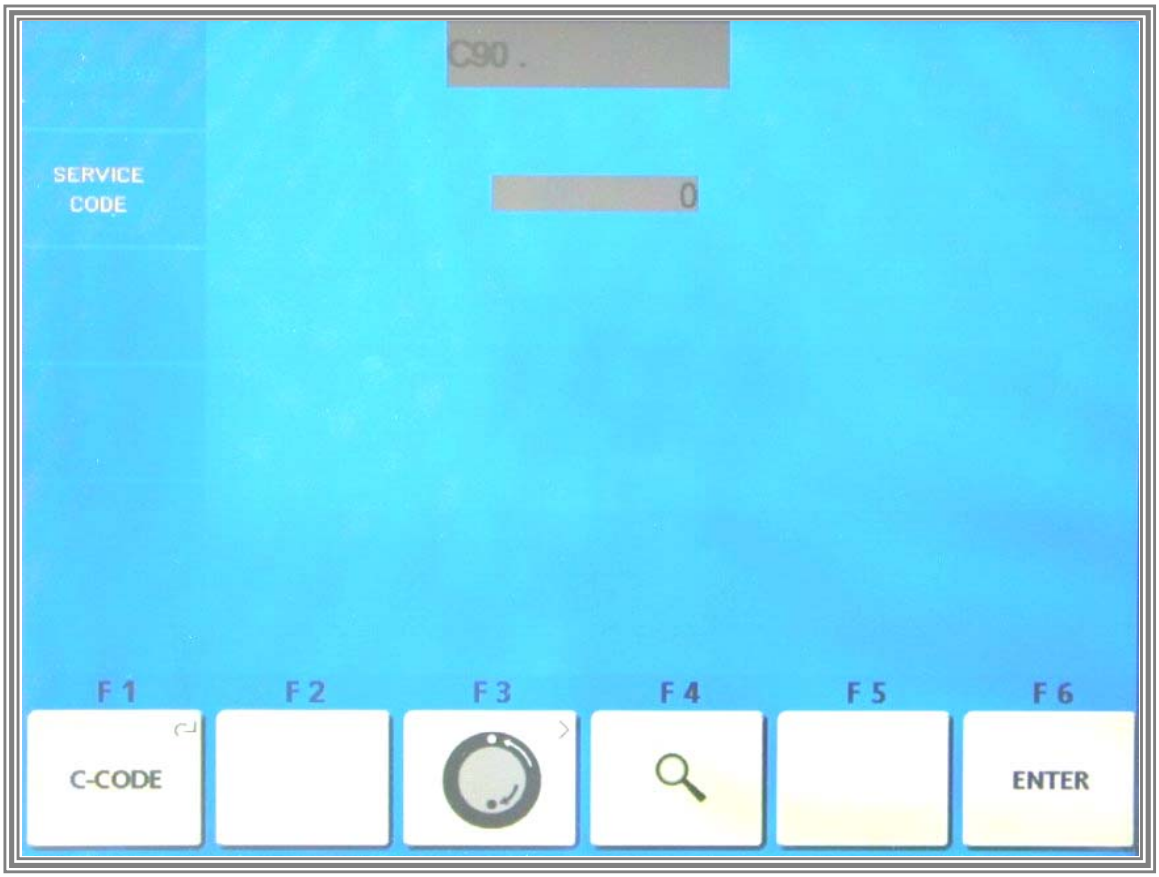


Calibration is completed and must be stored by entering C90.

Or:
Service and test functions become accessible by pressing and holding the ***F1 C-CODE KEY*** and by rotating the main shaft.

Code C90 Saving adjustment data

The following reading appears:



1.) Press key ***F1 C – Codes*** and rotate the main shaft until Code C90 appears on the screen..



Press the precision key  ***F 4*** and rotate the main shaft until **1** appears on the screen .Press ***F6 ENTER*** key to store the calibration in the permanent memory.