

WELTE-MIGNON

TEST ROLL

100

DESCRIPTION
OF THE VARIOUS FONCTIONS OF
THE WELTE MIGNON
TEST ROLL
100

1 Tempo regulating.

The test roll is to be played with the tempo lever on "Normal" Same should move within half a minute from the first bass note in the scale to the high note cut and marked in the scale. Should this not be the case then turn the tempo lever till the roll moves in the right speed, unscrew cautiously the screw with which the tempo lever is fastened upon the axe. Place the lever on "Normal" and screw it on again carefully without turning the axe.

This manner to regulate the tempo only refers to Cabinet Players, Welte - Mignon and Grands.

In *Upright Pianos* the tempo is regulated in the following way: Take off the upper front frame of the piano first, place the tempo lever on "Normal" and try the speed of the roll as above mentioned. The roll runs to slow screw out the big throttle screw underneath the board on which the tempo lever is fastened, by doing so, you open the channel for the suction; if it is too fast, screw in the throttle screw thus closing the channel for the suction.

2. Adjusting of the pianissimo touch.

The regulating bellows "R" is connected with the regulating valve "K" by a small chain "B" By means of a leather bottom "M" at the end of the chain, this connection can be shortened or lengthened. When slightly shortened (the leather bottom "M" to be screwed up) the stroke of the chord will be somewhat louder when lengthened (screwed down) it will be softened.

The chord of the bass should be a trifle softer than the chord of the treble.

Every note of the chord must touch the string quite softly but hearable.

3. Regulating the slow movement <Crescendo f and crescendo p movement> of the expression bellows.

Crescendo forte: The pin "S" of the expression bellows "N" must touch the hook "H" of the mezzoforte bellows at just the moment the tone in the test roll strikes. If the movement is too slow unscrew a trifle the screw marked "Crescendo F" if too fast, screw it in a trifle.

Crescendo piano: The expression bellows "N" must just be quite opened, when the next tone in the test roll strikes.

If the bellows opens too slow unscrew a trifle the screw marked „Crescendo P" if it is too quick, screw in the same a trifle.

Take notice that by altering the screw "Crescendo P" the forward movement of the Crescendo forte is also altered and must again be adjusted and compensated.

4 Regulating the fast movement

(Forzando f and forzando p movement)

Forzando forte: The expression bellows "N" must move exactly as high up as the position of the mezzoforte hook "H" and must return every time to its original position by forzando piano.

If the expression bellows "N" does not reach the mezzoforte position, unscrew the screw "Forzando F" a little, if it goes up too high, screw in the same screw

Forzando piano: The fast backward movement (forzando p) of the expression bellows "N" is tested by the next 3 movements.

1st movement: The expression bellows collapse entirely and is released by the forzando piano. The bellows must open at once completely if not, unscrew the screw marked Forzando P

2nd movement: The collapsed expression bellows is released by a short perforation of forzando p, but must *not* open at once *completely*, it must leave some lines to go back slowly. If it returns too far screw in the screw "Forzando P"

Try again the first movement whether it has not altered by adjusting the second movement

3rd movement: The expression bellows "N" collapses entirely and is released by 3 single holes of forzando piano (combined with crescendo forte). The effect has to be that the moment, the 3rd hole of forzando piano has past, the expression bellows is juste quite open. *The second* hole must *not yet* open the bellows *totaly*. If the second hole already stretches the bellows completely then the bleed hole of the forzando piano diaphragm is too small, if the 3rd hole does not bring it down, the same bleed hole is too large.

Be sure that the changing of the size of the bleed hole does not affect the first and second movement.

5 Testing the release from fortissimo touch to piano touch.

The first note must strike in fortissimo, 2nd 3rd and 4th in pianissimo, the 2nd slightly louder than the 3rd and 4th. If the 2nd note is rather loud, then the suction in the regu-

lating bellows is not released quickly and does not drop down quick enough. Then open a little more the felt which closes the hole underneath the movable board of the little release bellows. This little bellows is worked by the valve "Forzando P" in the expression box.

6. Testing single hole forzandos.

⟨Combined with crescendo piano⟩

The expression bellows „N" must move during these short forzando movements from pianissimo position until its pin „S" touches with the last hit the mezzoforte hook "H" Should the expression bellows not reach the mezzoforte hook, then the bleed hole of the forzando forte valve is too large; should it pass the hook, the bleed hole is too small. Make sure that by altering the bleed hole the regulating No. 4 is not changed.

7 Testing the Mezzoforte hook.

The spring on the mezzoforte bellows "G" must be strong enough to open the bellows, even when the pin of the expression bellows "N" press against the hook "H"

On the other side, the spring must not be so strong to prevent the mezzoforte bellows to collapse properly. Be sure that the leather on the hook "H" is polished with black lead to prevent too much friction for the pin of the expression bellows.

8. Adjusting the movement of the soft pedal.

Beginning and ending of each movement is marked by the stroke of notes cut in the roll. (The soft pedal in Grands is produced by shifting the whole keyboard sideways; ascertain that there is no dirt underneath the keyboard which causes too much friction and prevents the movement.)

9 Testing the loud pedal.

The first movements cut into the roll shows to the listener whether the dampers are damping quick enough, the second movements shows whether the dampers are lifting quick enough.

In the first instance, the dampers are lifted with the note in the roll, drop shortly before the ending of the note, and are lifted again shortly after the note has past. The sound of the note must be damped promptly and no more sound heard although the dampers are lifted again. If it does not cut off quick enough, then shorten the movements of the dampers, that means do not have them lifted so far of from the strings, they will be back quicker then.

In the second instance, if the dampers are lifted too slow it misses the short notes. In this case, avoid any dead way between the pedal bellows and dampers, so to procure a proper attack.

10. Repetition of the notes.

To try the repetition, push the expression bellows half way to mezzoforte (in pianissimo it would miss the notes). If you notice that a hammer makes the tremolo *close* to the string, the bleed hole of its valve is too small. If it makes the tremolo *distant from the strings* not reaching same, the bleed hole of its valve is too large.

11 Testing of the resistance.

It is hardly necessary to say that when playing fortissimo, a larger quantity of suction is necessary than when playing pianissimo parts. Therefore the electric motor must run faster in playing fortissimo than it is necessary when playing pianissimo.

The speed of the motor can be altered by a special resistance. If there is more resistance put on, the motor will run slower if less resistance, the motor will run faster. For this purpose, our resistance is provided with two regulating buttons, one for the slow movement (green), and one for the fast movement (red). In *normal play* the *green* button is in action, in *forte play* the *red* one. Both are controlled by the music roll itself. For this purpose, a small bellows with a mercury contact on it is provided, switching in or out more or less resistance.

In *normal play*, this bellows is open, and the motor works with the *small speed*. As soon as there is a great *forte*, a special hole in the music roll (10th from the left) is *exhausting* the bellows, thus cutting out the

resistance between the green and red buttons consequently the motor runs faster

After the forte parts has past, another hole in the music roll (9th from the left) annuls this function of the 10th hole, and gives the motor its first slow speed again by switching in again more resistance.

By altering the position of these 2 buttons, it is therefore possible to regulate as well the slow speed for the normal play, as the higher speed for the forte play In moving the buttons towards the binding-screws (bearing the electric wires) the respectif speeds will be higher

These two speeds of the motor can be regulated according to the current disposable and the requirement of the instrument. The main object of this regulation is to ascertain that the motor is producing in its normal play only as much suction as necessary for playing properly and that it does not work too fast, as this would only produce unnecessary noise, thus disturbing the fine effects of the pianissimo.

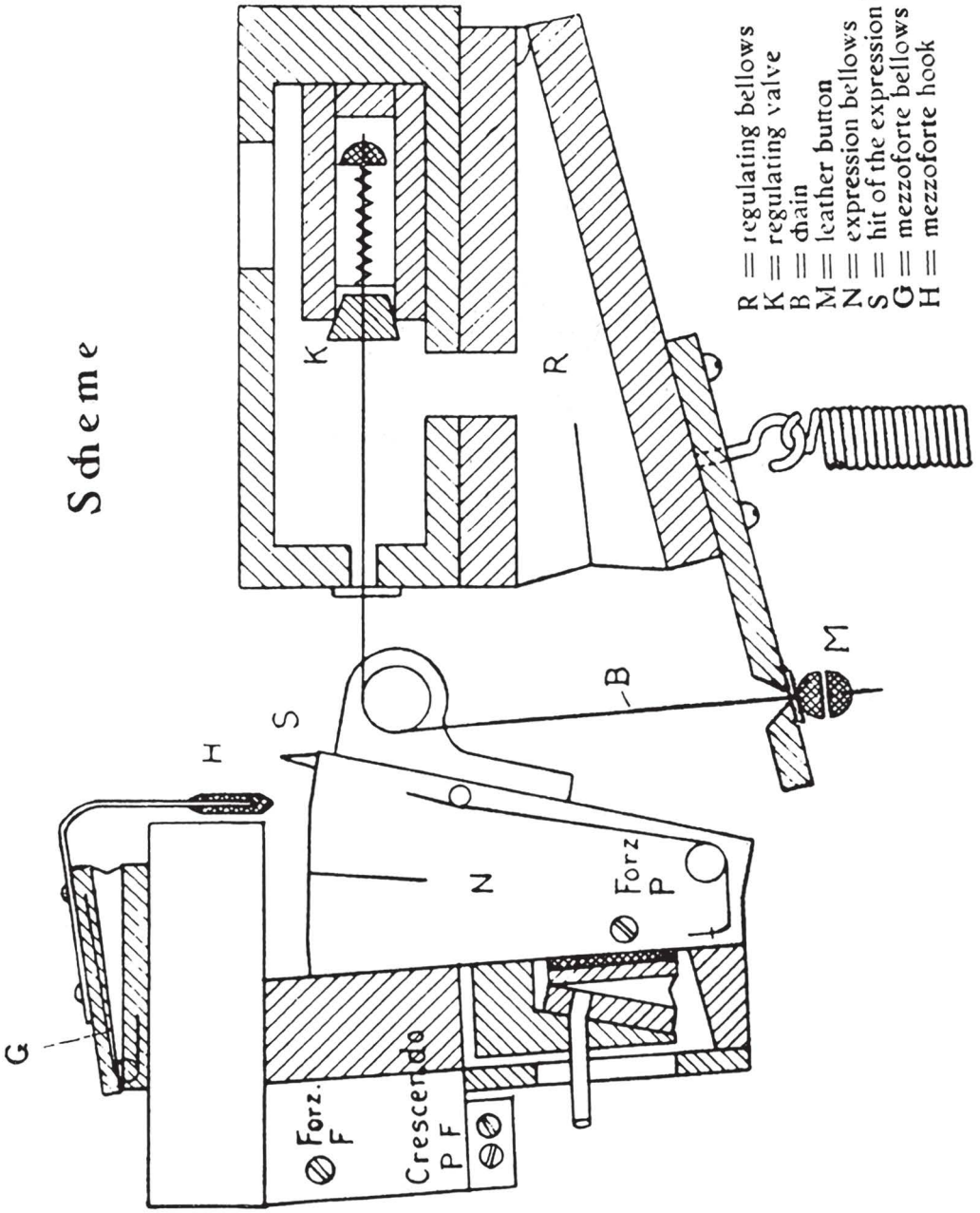
The motor has its right speed in normal play when the suction reservoir next to the pumping box is exhausted, slightly opening the valve without making too much noise,

remaining in general during the play in this position, only sometimes allowing for a few moments to fall back a little, quick recovering afterwards.

In forte play the speed of the pumping device must also be thus that the main reservoir is kept exhausted during playing. Do not make it run faster than necessary thus avoiding to work noisy



Scheme



- R == regulating bellows
- K == regulating valve
- B == chain
- M == leather button
- N == expression bellows
- S == hit of the expression bellows
- G == mezzoforte bellows
- H == mezzoforte hook

