

TY-P Series Multihead Weigher



Instruction Manual





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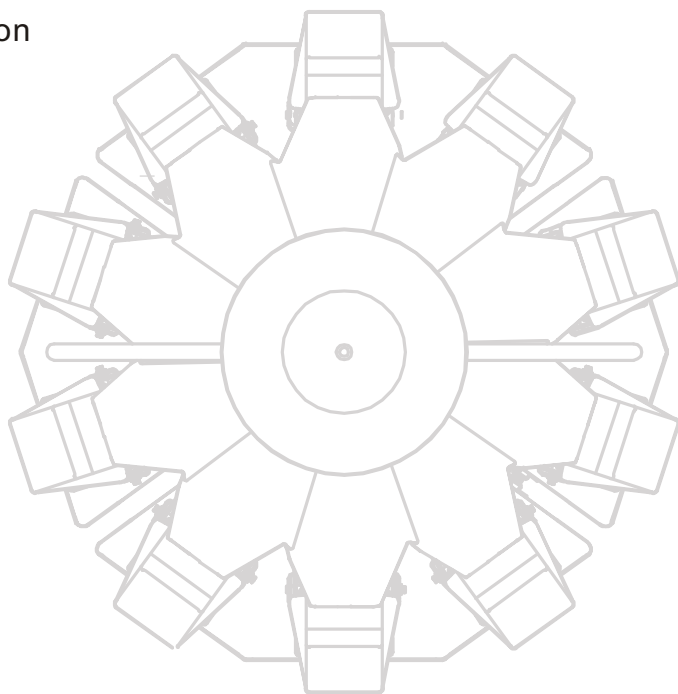
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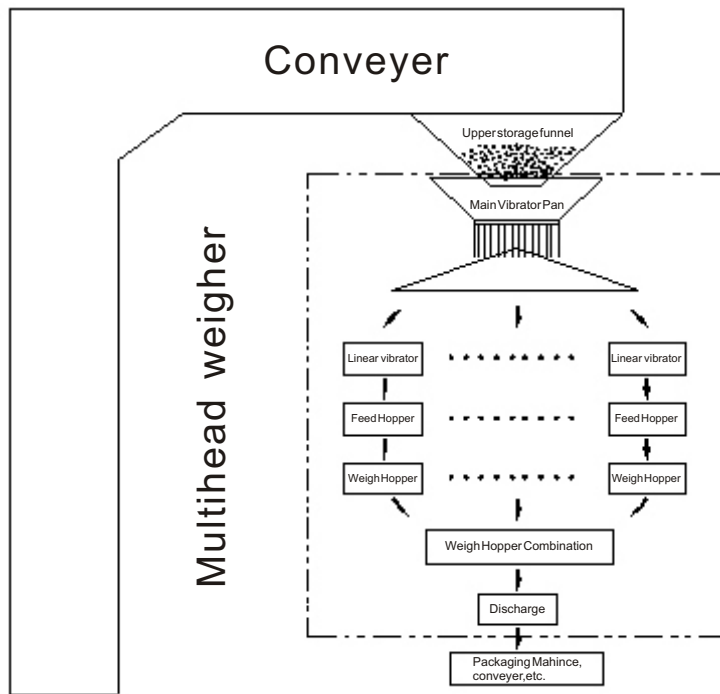


Chart4-1-1

Chapter 5. Operation

Our machine panel are friendly-use design. All functions will work within 0.5-1 second after be touched.

■ 5.1 Start up

It will automatically enter into the language choice menu after turning on the machine, shown as chart 5-1-1.

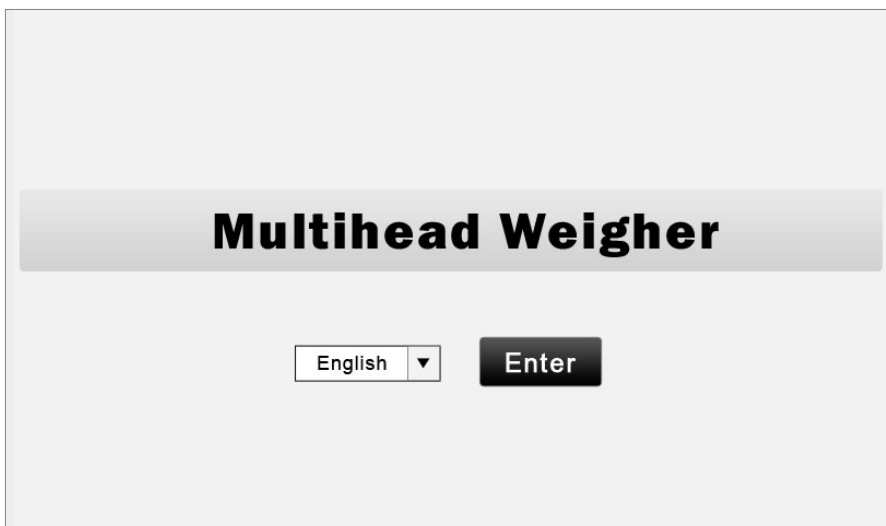


Chart 5-1-1

Press the arrow key to choose language and press the language button to enter the main menu, shown as chart 5-1-2.

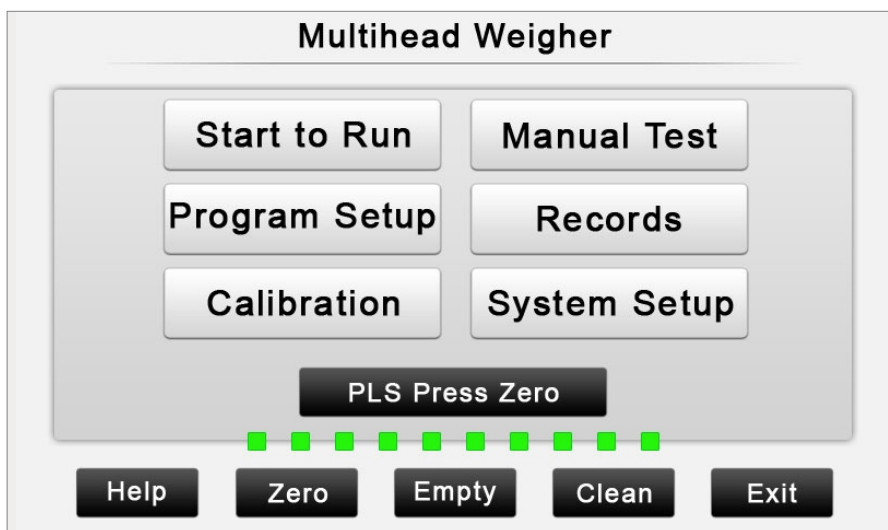


Chart 5-1-2

- (1) **Help** Press the "Help" where you can read explanation of parameters by checking its different page.
- (2) **Zero**
 - ① After turning on the machine, an attention of "PLS Press Zero" will be displayed on the main menu, which reminds that you must make manual Zero operation.
 - ② Press "Zero", all feed hoppers and weigh hoppers will open in turn to empty the rest products in the hoppers. After 3 seconds, each load cell has an auto zeroing.
 - ③ After auto zeroing, the attention of "PLS Press Zero" will auto-disappear and display the current date and time on the screen.
- (3) **Empty** Press "Empty" to empty products. Main vibrator, linear vibrators, feed hoppers and weigh hoppers will run continuously to clear up the hoppers. Press "Empty" again to exit. To ensure the weighing accuracy, after the "Empty" operation stop, it will make Auto-zero again.
- (4) **Clean** Press "Clean" , all hoppers will stay open at its maximum angle. Press "Clean" again to exit.
- (5) **Exit** Return to language choice menu.

■ 5.2 Start to Run

On the main menu, press "Start to Run" to enter the menu "Run" , shown as chart 5-2-1.

The 'Run' menu interface includes the following elements:

- Title:** Run
- Left Panel:**
 - Program NO.
 - Prod.Name
 - Target Wt
 - Over Wt
 - Under Wt
 - Av Comb Hps
 - Actual Sp
- Center:** A circular dial with 'Full' in the center, surrounded by numbers 1-10 and 'R' labels.
- Right Panel:**
 -
 - Pass
 - Run
 - Details
 - Exit
- Bottom:**
 - Preset Sp
 - Main AMP
 - Lin.AMP

Chart 5-2-1

- (1) **Preset Sp** Preset Speed: Set an expected speed for multihead weigher according to the actual packaging speed. The revised speed will be auto-saved after Exit.
- (2) **Main AMP** Adjust the main vibrator amplitude at running status. The larger the value is, the stronger the vibration is. The revised main AMP will be auto-saved after Exit. Range: 1-99.
- (3) **Lin. AMP** Adjust the linear vibrator amplitude at running status. Press the button and it will display arrow key to change the value. Each amplitude can be adjusted independently. The larger the value is, the stronger the vibration is. The revised Lin AMP will be auto-saved after Exit. Range: 1-99.
- (4) **Details** Show the weight of each weigh hopper during running, shown as chart 5-2-2. The ideal weight of each hopper should be 20%-35% of the target weight. If the weight is out of this range, you should adjust the amplitude accordingly. Besides, it also shows the pass bags, overweight bags and pass rate. Press "Exit" to return to "Run" menu.

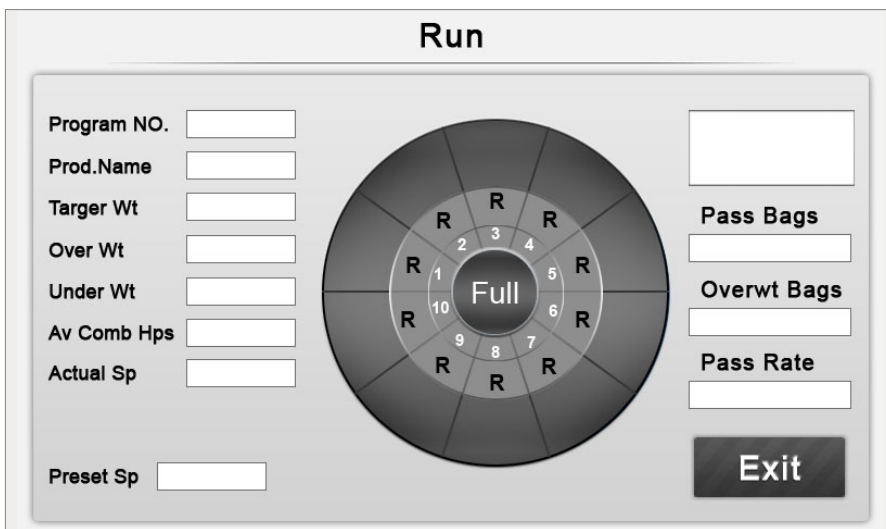


Chart 5-2-2

- (5) **Run** Run or pause the machine.
- (6) **Pass** The number means the weighed product is acceptable or not.
- (7) **Exit** Return to "Main Menu". During running, you have to press "Pause" first.

■ 5.3 Manual Test

On the main menu, press "Manual Test" to enter the "Manual Test 1" interface, shown as chart 5-3-1. "Manual Test" is mainly to check the running condition of each part.

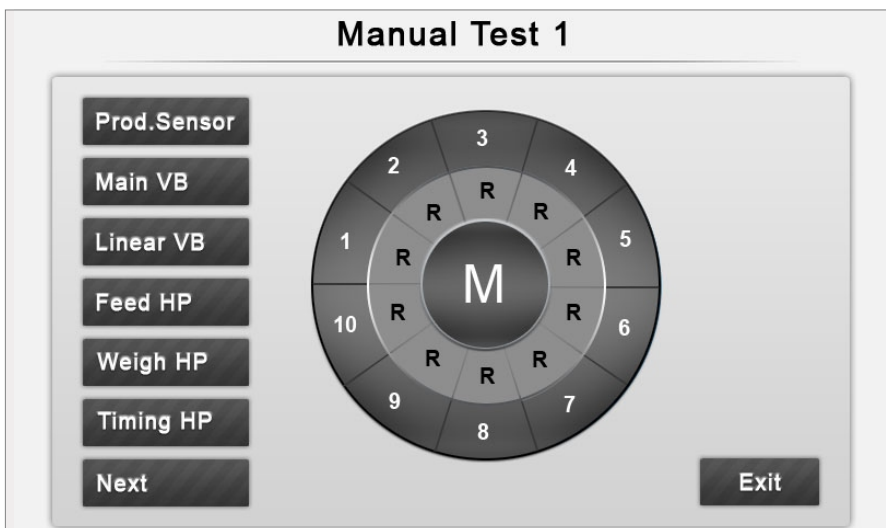


Chart 5-3-1

- (1) **Prod. Sensor** Product Level Sensor: Press this button to detect product thickness .If the product level lower than the sensor, feeding product signal will be output and the alarm light on top left corner will blink until it detects that there are enough products. Press "Prod.Sensor" again to exit.

- (2) **Main VB** Main Vibrator: Press this button and then press "M" to start testing . If keep pressing "M" button, the main vibrator will run continuously. Press "Main VB" again to exit.
- (3) **Linear VB** Linear Vibrator: Press this button and then press the number key accordingly to test the corresponding vibrator. The selected vibrator will run according to the preset program. Press "M" to select all of the vibrators. If you keep pressing the number key or "M", the vibrator will keep running. Press "Linear VB" again to exit.
- (4) **Feed HP** Feed Hopper: Press this button and then press the number key accordingly to test the corresponding feed hopper. The selected feed hopper will run according to preset program. Press "M" to select all of the feed hoppers. If you keep pressing the number key or "M", the feed hoppers will run continuously. Press "Feed HP" again to exit.
- (5) **Weigh HP** Weigh Hopper: Press this button and then press the number key accordingly to test the corresponding weigh hopper. The selected weigh hopper will run according to the preset program. Press "M" to select all of the weigh hoppers. If you keep pressing on the number key or "M", the weigh hoppers will run continuously. Press "Weigh VB" again to exit.
- (6) **Timing HP** Timing Hopper: Press this button and then press "M" to start testing. The timing hopper will run according to the preset program. If you keep pressing "M" button, timing hopper will run continuously. Press "Timing HP" again to exit.

Notes:

- This function is only available when you equip with timing hopper and activate it in system setup.

- (7) **Exit** Return to Main Menu.
- (8) **Next** Enter into next page , shown as chart 5-3-2.

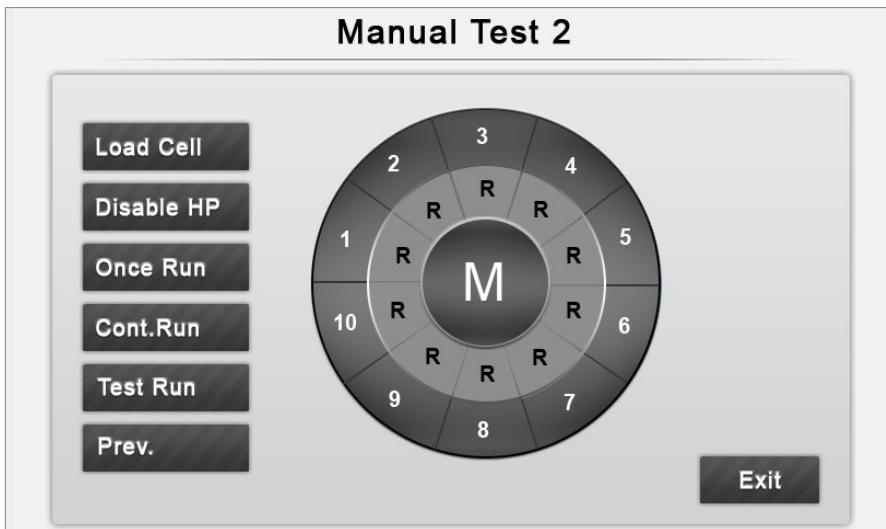


Chart 5-3-2

- (1) **Load Cell** Press this button to test the status of A/D module. If the communication is normal, the numbers are in green color. If not, they will be displayed in red color. Meanwhile, it will display the weight of each hopper. Press the corresponding number to make zeroing.
- (2) **Disable HP** Disable Hopper: Press this button and then select the number key to inhibit the corresponding hopper. Once the hopper is inhibited, "D" will appear and show in black color. Press the number key again to activate the hopper and "R" will show green color again. This function is mainly applied to repair the failure hopper. Press the "Disable HP" again to exit.
- (3) **Once Run** Press this button and then select the number key. The selected hopper will run once with the process of main vibrator→linear vibrator→feed hopper→weigh hopper→timing hopper. Press "M" to select all hoppers. If you keep pressing the "M" button, they will run continually. Press "Once Run" again to exit.
- (4) **Cont. Run** Continuous Running: Press this button and then select the number key. The selected hopper will run continuously with the process of main vibrator→linear vibrator→feed hopper→weigh hopper→timing hopper. Press "M" to select all hoppers. Press "Cont. Run" again to exit.
- (5) **Test Run** Process the combination according to preset parameter in no material condition.
- (6) **Prev.** Return to the previous page.
- (7) **Exit** Return to Main Menu.

■ 5.4 Program Setup

On the main menu, press "Program Setup" and then input password to enter into the "Login" menu , shown as chart5-4-1.

Login

Program No.

Prod.Name

Target Wt

Over Wt

Under Wt

Correct Wt

Preset Sp

7 8 9 -

4 5 6 Clr

1 2 3 Esc

. 0 Enter

Please input password:

Program Setup

↑ 01 ↓ Download Exit

Chart5-4-1

- (1) **Program No.** Press the arrow key or press the number key or input number to go to program No. you need . Then Press "Download" and then you can save any preset program without actually entering the Program Setup menu.Rang: 1-99.
- (2) **Password** Press the password window, then input password by key board. Press "Enter" to confirm and press "Program Setup" to enter into "Program Setup 1" menu, shown as chart 5-4-2. The initial password is 11111111.
- (3) **Download** After you change the parameters in the program setup, you must press "Download" to save the program, until then the revised parameters will work. Please press "Download" for at least 1 second until the guage comes up.
- (4) **Exit** Press "Exit" to return to main menu.

Program Setup 1

Program No.	<input type="text"/>	Lin AMP	Level Feed Tm	<input type="text"/>
Prod. Name	<input type="text"/>	Main AMP	<input type="text"/>	LinVB Dly
Target Wt	<input type="text"/>	VB Feed Tm	<input type="text"/>	Feed HP Dly
Over Wt	<input type="text"/>	Zero Intervals	<input type="text"/>	Weigh HP Dly
Under Wt	<input type="text"/>	Stable Tm	<input type="text"/>	Time HP Dly
Correct Wt	<input type="text"/>	Min HP WT%	<input type="text"/>	Dump Sgl Tm
Preset Sp	<input type="text"/>	IDLE	<input type="text"/>	Dump Sgl Dly

Next
↑
↓
Exit

Chart 5-4-2

Press the arrow key to refer the program backward or forward.

- (1) **Program No.** Program No.: Choose the saved program number for different product.
Range:1-99.
- (2) **Prod. Name** Products Name: Input the products' name. (8 letters Maximum).
- (3) **Target Wt** Target Weight: The target weight of the weighed products. Unit is gram.
Range:10.0-3000.0g.
- (4) **Over Wt** Over Weight: The over weight limit of the weighed products.
- (5) **Under Wt** Under Weight: The under weight limit of the weighed products.
- (6) **Correct Wt** Correct Weight: It used as a correct value when the combination weigher can not be calibrated amendatory value referring to the deviation between the actual weight and display weight. Actual weight= Displayed weight - Correct weight.
- (7) **Preset Sp** Preset Speed: Set an expected speed for multihead weigher. It can be set according to the working speed of the connected packaging machine.
- (8) **Main AMP** Main Vibrator Amplitude: It refers to the strength of the main vibrator amplitude. (Range:1-99.)
- (9) **Lin AMP** Linear Vibrator Amplitude: It refers to the strength of the linear vibrator vibration. (Range:1-99.)
- (10) **VB Feed Tm** Vibrator Feed Time: It refers to the time that the main vibrator and linear vibrators feed the products to the feed hopper.(Range: 1-99*10ms. Recommendation: 10*10ms.)
- (11) **Zero Interval** Zero Intervals: The load cell performs zeroing automatically after N times combination. This function aims to remove error to ensure weighing accuracy. In Zero status, the hopper is cleared up and will not be combined. (Range:1-999 times.)

- (12) Stable Tm** Stable Time: After feed hopper closing, there is a stable time delay before system reading digital sensor to make sure the accuracy of weighing. The bigger the value is, the slower the weighing speed is. (Range: 35-999*10ms, Recommendation: 50*10ms)
- (13) Min HP WT%** Minimum Single Hopper Weight(%): It is a percentage to be set. If single hopper weight is less than certain percentages of target weight, the hopper is not allowed to join combination and it needs feed more material. And this hopper can attend the combination when reaching the certain percentage. (Recommendation: 10% of target weight)
- (14) IDLE** No Combination Times: It refers to the times that the hopper not be combined while running. If the times that the hopper uncombined exceeds the IDLE times preset. That hopper will be combined forcibly. This function can improve the using rate of weigh hoppers. (Range: 1-9999)
- (15) Level Feed Tm** Level Products Feed Time: It refers the lasting time of elevator or conveyor feeding to the weigher, conveyor will begin to feed material after weigher output feeding signal. After the product is fed up to the upper limit, the feeding signal will last for "Level Feed Time" and then the weigher stop outputting the feeding signal out put. (Range: 1-99*1s.)
- (16) Lin VB Dly** Linear Vibrator Feed Delay: It refers the time delay that linear vibrator to feed product to feed hopper after the feed hopper open. (If it is too short, products may be blocked in feed hopper, if it is too long, it will affect weighing speed (Range: 5-999*10ms.)
- (17) Feed HP Dly** Feed Hopper Delay: It refers the time delay that feed hopper to feed products to weigh hopper after the weigh hopper open and releasing the product. (Range: 1-999*10ms)
- (18) Weigh HP Dly** Weigh Hopper Delay: It refers the time delay that the weigh hopper to dump products into the timing hopper after the timing hopper open. (Range: 1-999*10ms)
- (19) Time HP Dly** Timing Hopper Delay: It refers the time delay that the timing hopper to discharge products into the packaging machines after weigh hopper dumping the products to ensure all the materials in the timing hopper and then allow next discharge.(Range: 1-999*10ms.)
- (20) Dump Sgl Tm** Dump Signal Time : It refers the duration time that multihead weigher send dump signal to packaging machine. (Range: 1-9*100ms. Recommendation: 2.)

- (21) Dump Sgl Dly

Dumping Signal Delay: It refers the discharged signal delay. After multihead weigher dumping material to the packaging machine, there will be a delay time, then it sends discharged signal to packaging machine. (Range: 1-999*10ms. Recommendation: 10.)
- (22) Next

Enter into next page, the "Program Setup 2" menu, shown as chart 5-4-3.

Program Setup 2

FD HP Motor MD

Single Pcs WT

Track Interval

WG HP Motor MD

Target Pcs

Avg HP Wt%

Tm HP Motor MD

Over Pcs

ACPT HP Wt Err

FD HP Opn Tm

Under Pcs

Track Interval

WG HP Opn Tm

AFC

Tm HP Opn Tm

Avg Comb Hps

Multicomb TMS

Acpt Comb Err

Copy to

Prev.

Exit

Chart 5-4-3

- (23) FD HP Motor MD

Feed Hopper Motor Mode: It refers to the running model of the feed hopper motor. There are 4 patterns for choice. That is 0-3. The bigger the value is, the faster the speed is.(Recommend value: 1)
- (24) WG HP Motor MD

Weigh Hopper Motor Mode: Set the motor pattern of weigh hopper. There are 4 patterns for choice, that is 0-3. The bigger the value is, the faster the speed is. (Recommend value:1)
- (25) Tm HP Motor MD

Timing Hopper Motor Mode: Set the motor pattern of timing hopper mode, there are 4 patterns for choice, that is 0-3.(Recommend value: 1)
- (26) FD HP Opn Tm

Feed Hopper Open Time: After feed hopper open, there will be a "feed hopper open time" delay, and then the feed hopper will close to ensure all the products are discharged. (Range:1-99*10ms)
- (27) WG HP Opn Tm

Weigh Hopper Open Time: After weigh hopper open, there will be a "weigh hopper open time" pause, and then the weigh hopper will close to ensure all the products are discharged. (Range: 1-99*10ms)
- (28) Tm HP Opn Tm

Timing Hopper Open Time: After timing hopper open, there will be a "timing hopper open time" pause, and then timing hopper will close to ensure all the products are discharged. (Range:1-99*10ms)

- (29) Multicomb TMS** Multi-combination Times: When target weight is large, it will be divided into several times to discharge. The time hopper will open to dump the products into packaging equipment after collecting all the products from the multi-combination times discharging. (Range:1-99)
- (30) Single Pcs WT** Standard Piece Weight: The standard weight of single piece for uniform products which is applicable to calculate the combination weight to finish the target pieces.
- (31) Target Pcs** Target Pieces: The target pieces of the weighing products.
- (32) Over Pcs** Over Piece Limit: The allowable up limit of the weighed products.
- (33) Under Pcs** Under Piece Limit: The allowable down limit of the weighed products.
- (34) AFC** Auto-adjust amplitude model selection.

Notes:

- 0: It means to close this function. The amplitude can only be adjusted by manual;
- 1: AFCT, it adjust the amplitude according to the combined hoppers and it will give an auto adjustment to all linear vibrator amplitudes;
- 2: AFCI, it adjust the amplitude according to the single hopper weight and it will give an auto adjustment to the single linear amplitude, meanwhile, display the single amplitude.

-----AFCT -----

- (35) Avg Comb Hps** Avg Combination Hoppers: It refers the average combination hoppers which are used in a successful combination weighing.
(Recommendation: 3.0-4.0.)
- (36) Acpt Comb Err** Single Acceptable Combination Error Hoppers: It refers to the acceptable deviation of average number of combination hoppers.
(Recommendation: 0.1-1.0.)
- (37) Track Interval** Track Interval: After N times successful combinations, it will give an auto adjustment to all linear amplitudes. (Range 1-99.
Recommendation: 10.)

-----AFCI -----

- (38) Avg HP Wt%** Single Avg Hopper Weight Percent: It refers to the ideal average weight of single hopper, and it was calculated as certain percentage of single combination weight. (Recommendation: 20%-40%.)
- (39) ACPT HP Wt Err** Single Hopper Acceptable Error Weight: It refers to the single acceptable hopper weight error during running. (Recommendation: 10.0g.)
- (40) Track Interval** Track Interval: After N times successful combinations, it will give an auto adjustment to the single linear amplitude.
(Range:1-99.Recommendation:10.)

- (41) **Copy To** Copy this Program to: The current parameter will be saved with another program number.
- (42) **Prev.** Press "Prev" to return to previous page.
- (43) **Exit** Press "Exit" to return to the main menu.

■ 5.5 Records

On the main menu, press "Records" to enter the menu "Records" , shown as chart 5-5-1. 2000 pages of records could be saved.

Records

Program No.

Under Wt

Prod.Name

Pass Bags

Target Wt

Overwt Bags

Over Wt

Pass Rate

Started At

Avg Bag Error

Ended At

Total Wt

Total Records

Day Records

Display Record

Date Search

Print

Prev.

Next

Del.All

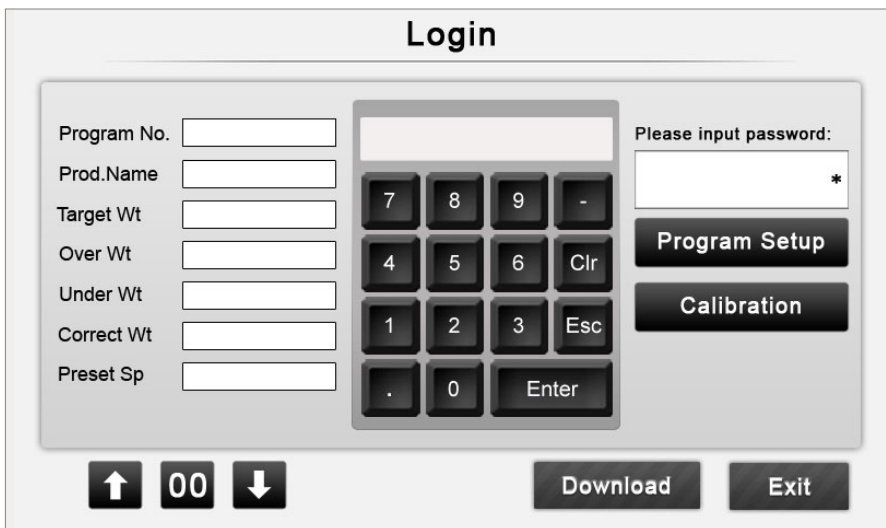
Exit

Chart 5-5-1

- (1) **Print** Plug the USB memory card into the touch screen and press "Print", then it will turn the present record into JPG picture and be saved to the USB memory card. Then you can print it by computer.
- (2) **Prev.** Show previous record.
- (3) **Next** Show next record.
- (4) **Del.All** Delete All Records: Press this button until the window comes out and the guage is over. Then all records will be deleted.
- (5) **Exit** Press the button and return back to the main menu.
- (6) **Display Record** Press the button and input record number to check the corresponding record.
- (7) **Date Search** Press the button and it will display the number keys. Input the date, it will display the last record of that day.

■ 5.6 Calibration

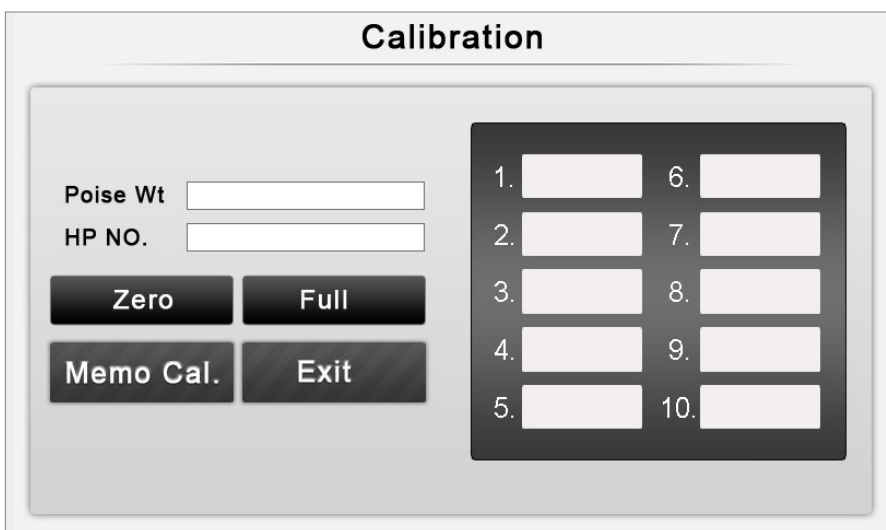
Press "Calibration" on main menu to enter into "Login" menu , shown as chart5-6-1.



The Login screen features a title bar with the word "Login". Below the title bar, there are several input fields and buttons. On the left, there are six input fields labeled "Program No.", "Prod.Name", "Target Wt", "Over Wt", "Under Wt", "Correct Wt", and "Preset Sp". To the right of these fields is a numeric keypad with buttons for digits 0-9, a decimal point, a minus sign, and "Enter". Further right is a "Please input password:" label above a password input field with an asterisk. Below the password field are two buttons: "Program Setup" and "Calibration". At the bottom of the screen, there are four buttons: an up arrow, "00", a down arrow, "Download", and "Exit".

Chart 5-6-1

- (1)**Program No.** Press the arrow key or press the number key or input number to go to any program No. you need. Then Press "Download" and then you can save any preset program without actually entering the "Program Setup" menu.
- (2) **Password** Press the password window, then input password by key board. Press "Enter" to confirm and press "Calibration" to enter into menu, shown as chart 5-6-2. The initial password is 22222222.
- (3) **Download** After you change the parameters in the program setup, you must press "Download" to save the program , until then the revised parameters will work. Please press "Download" for at least 1 second until the gauge comes up.
- (4) **Exit** Press "Exit" to return to main menu.



The Calibration screen features a title bar with the word "Calibration". Below the title bar, there are two input fields labeled "Poise Wt" and "HP NO.". To the right of these fields is a grid of 10 input fields numbered 1 through 10. Below the input fields are four buttons: "Zero", "Full", "Memo Cal.", and "Exit".

Chart 5-6-2

(1) **Memo Cal.** Memory Calibration: If you have successfully made the calibration last time and you are sure that there are no products in the weigh hopper, you can press Memo Cal. to run the calibration automatically.

(2) **Load cell calibration.**

- Input the poise weight value. ($\leq 2000\text{g}$) Recommendation: 1000g.
- Make sure there is no any product in the weigh hoppers. You can refer to the displayed weight on the right. If there are products in the weigh hopper, you can press "Empty" to clear up the products.
- Input the hopper number and a red arrow key appear behind the hopper number. Press "Zero" and after a beep tone, the zeroing is done.
- Put the poise in the weigh hopper and then press "Full" to confirm. Calibration is done now.
- Testing. If put a small standard poise ($\leq 1000\text{g}$) into the weigh hopper, the load cell will read its corresponding weight, which indicates the calibration is done successfully.
- Repeat above operations to calibrate the rest of load cells.

■ 5.7 System Setup

Press "System Setup" on main menu to enter "Login" menu , shown as chart5-7-1.

Chart 5-7-1

(1) **Program No.** Press the arrow key or press the number key or input number to go to any program No. you need . Then Press "Download" and then you can save any preset program without actually entering the "Program Setup" menu.

(2) **Password** Press the password window, then input password by key board. Press "Enter" to confirm and press "System Setup" to enter into menu "Program Setup" , shown as chart 5-7-2. The initial password is 33333333.

- (3) Download** After you change the parameters in the program setup, you must press "Download" to save the program, until then the revised parameters will work. Please press "Download" for at least 1 second until the guage comes
- (4) Exit** Press "Exit" to return to main menu.

System Setup

2011/00/00 00:00

Signal Type <input style="width: 80%;" type="text"/>	Tm HP Mode <input style="width: 80%;" type="text"/>	Buzzer <input style="width: 80%;" type="text"/>
Weighing MD <input style="width: 80%;" type="text"/>	No Comb Action <input style="width: 80%;" type="text"/>	Screen Saver <input style="width: 80%;" type="text"/>
Top Cone MD <input style="width: 80%;" type="text"/>	Max.Comb Hps <input style="width: 80%;" type="text"/>	Brightness

Motor MD Setup

Password Setup

Code: 0

Prog.Recov

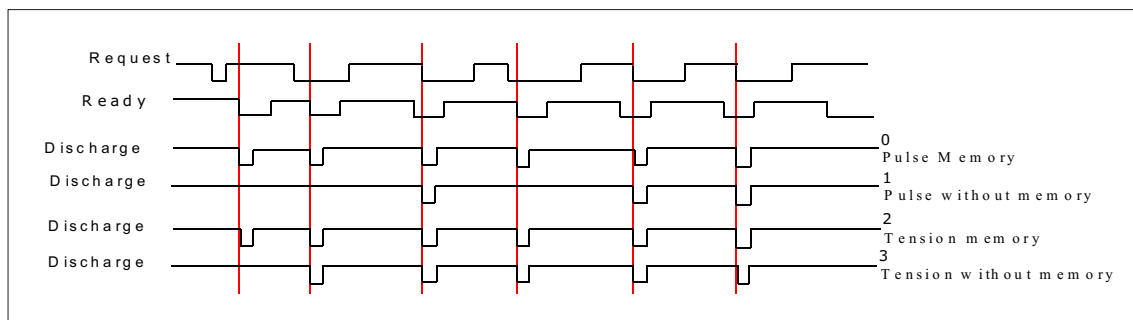
Default Setup

Exit

Chart 5-7-2

- (1) Time and Date Setting** Press the time and date which is shown on top and you can change the time and date accordingly.
- (2) Signal Type** To preset the models of receiving discharging signal received from the packaging machine. Range:0-3.

- 0: Pulse with memory: If multihead weigher receive a signal when it is not ready, it will remember the signal and discharge to the packaging machine when it is ready.
- 1: Pulse without memory: If multihead weigher receive a signal when it is not ready, it will not discharge when it is ready until it receive another request signal.
- 2: Tension with memory: If multihead weigher receive a signal when it is not ready, it will remember the signal and discharge to the packaging machine when it is ready.
- 3: Tension without memory: If multihead weigher receive a signal when it is not ready, it will not discharge when it is ready until it receive another request signal.



ATTN: Pulse signal is effective when it connect and break.

Tension signal is effective once it connect.

- (3) Weighing MD** Weighing Mode: Selection between weighing and counting by pieces.
Default et is 0.
- 0: Weighing. Unit is gram.
 - 1: Counting by pieces. Unit is Pieces.)
- (4) Top Cone MD** Top Cone Model:
- 0: vibrating mode (For easy flowing granule products)
 - 1: rotary mode (mainly for hard flowing products.)
- (5) Tm HP Mode** Timing Hopper Mode:
- 0: Single timing hopper door open (the right door).
 - 1: The two doors of timing hopper open at the same time.
 - 2: The two doors of timing hopper open by interval. (Mainly used when the weigher connected with two packing machines.)
 - 3: The timing hopper, one door discharge to packing machine, the other discharge to overweight rejecter.
 - 4: The two doors of timing hopper open at the same time. Different from mode "1" , mode "4" can prevent timing hopper doors to be opened by big dropping products. Do press "Zero" again after mode "4" be set up.
- (6) No Comb Action** No Combination Action: Select the processing ways in case of there is no any combination.
- 0: Auto enforced dumping. If there is no any combination always, the weigher computer will recalculate all combination and identifies the overweight closest to the target weight, discharge this overweight products and output the "Overweight" signal.
 - 1: Manual intervention. The weigher will stop running automatically, and display the notice "Pls do manual intervention", after the status be settled down, the weigher computer will start to recombine.
- (7) Max. Comb Hps** Maximum Combination Hoppers: It refers the hopper units that will be combined. This function is mainly to increase the speed and accuracy for weighing large target weight. The bigger the value is, the lower the speed but with better accuracy.

For 10 head weigher, the range is from 0-2.

- 0: Maximum combination hoppers is 4.
- 1: Maximum combination hoppers is 5.
- 2: Maximum combination hoppers is 6.

For 14 head weigher, the range is from 0-4.

- 0: Maximum combination hoppers is 5.
- 1: Maximum combination hoppers is 6.

- 2: Maximum combination hoppers is 7.
- 3: Maximum combination hoppers is 8.
- 4: Maximum combination hoppers is 9.

(8) **Buzzer** The button sound. ON; OFF.

(9) **Screen Saver** After a certain time, the screen light will go off until you press it again. Unit: Minute.

(10) **Brightness** Adjust the brightness of the screen.

(11) **Motor MD Setup** It is to set the running mode for different motors. Press "Motor MD Setup" enter "Motor MD Setup" menu , shown as chart 5-7-3.

Chart 5-7-3

- ① **Speed1** : Means the speed of opening the hopper door, range 0-19. The bigger value is, the faster the speed is.
- ② **Speed 2** : Means the speed of closing the hopper door, range 0-19. The bigger value is, the faster the speed is.
- ③ **Angle** : It is the actual angle the motor run, range 90°-180°.
Speed 1 > **Speed 2**. And the Angle should not be too small. During the setting, it will check automatically and display notice for unreasonable setting.
- ④ **Feed Motor Setup** : Feed Hopper Motor: The running mode of feed hopper step motor. Range 0-3.
Speed1 and **Speed 2** mean the motor speed of the forward and backward circle, range 0-18.
- ⑤ **Weigh Motor Setup** : Weigh Hopper Motor: The running mode of weigh hopper step motor. Range 0-3.
Speed1 and **Speed 2** mean the motor speed of the forward and backward circle, range 0-18.

- ⑥ **Time Motor Setup** : Timing Hopper Motor: The running mode of timing hopper step motor. Range 0-3.

Speed 1 and **Speed 2** mean the motor speed of the forward and backward circle, range 0-18.

- ⑦ **Download** : After you change the parameters , you must press "Download" to save the program ,until then the revised parameters will work. Please press "Download" for at least 1 second until the guage comes up.

(12) **Prog. Recov** Program Recovery: Press "Prog. Recov" until the guage window comes out . 1-15 sets of preset program can be recovered.

(13) **Password Set** Press "Password Set" and enter the menu, shown as chart5-7-4. New password is valid once it be input. The password should be 8 letters. So, please do remember the new password.

(14) **Default Setup** Default of original factory.

(15) **Code** Machine serial number .You can also find it on the nameplate.

Password Setup

3 3 3 3 3 3

7 8 9 -

4 5 6 Clr

1 2 3 Esc

. 0 Enter

Program Setup *****

Calibration *****

System Setup *****

Exit

Chart 5-7-4

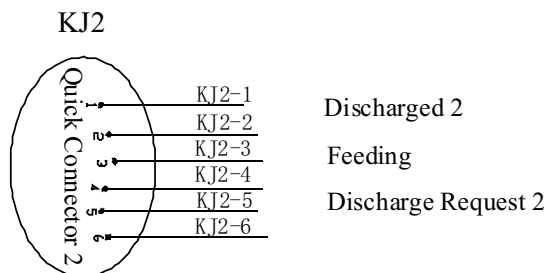
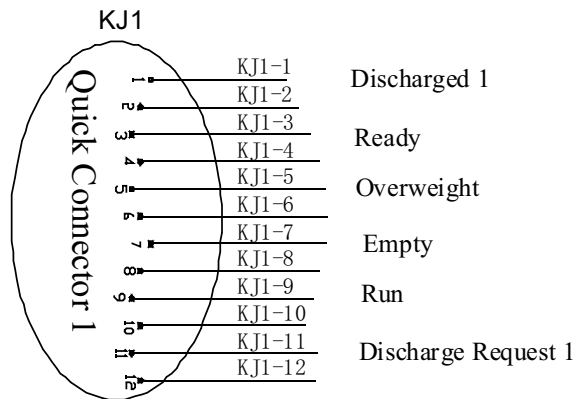
Chapter 6. Trouble Shooting & Settlement

Color & Trouble	Reason	Check & Settlement
Orange (U)	Single hopper weight exceeds the target weight	<ol style="list-style-type: none"> 1. In case of AFC=0, decrease the "LIN AMP". 2. In case of AFC=1, increase "Avg Comb Hps". 3. In case of AFC=2, decrease the value of "Avg HP Wt%". 4. Adjust the Lin AMP, make sure products be dispersed evenly.
Green (Z)	Auto zeroing	Increase "ZERO INTERVAL" properly
Light blue (L)	Single hopper weight is less than "Min HP WT%"	<ol style="list-style-type: none"> 1. Increase Linear AMP. 2. Product is enough or not.
Black (D)	The hopper is disabled	Restart the hopper in "MANUAL TEST" menu
Red (E)	Failure in single head control board communication	Check whether the single head control boards are work well or not. Change it if it's abnormal.
Big difference between the displayed WT and the actual WT	1. Zero over-floating	<ol style="list-style-type: none"> 1. Power supply must be firmly grounded 2. Recalibration
	2. Discharged weight more heavy than target weight	1. Set the "Correct Wt" as a positive value.
	3. Discharged weight lighter than target weight	1. Set the "Correct Wt" as a negative value.
	4. Products in weigh hopper are not be emptied	<ol style="list-style-type: none"> 1. Increase the value of "WG HP Opn Tm". 2. Increase the value of "Weigh HP Dly".
Discharge with pause	Wait for the discharged hopper to combination	Adjust "Over Wt" & "Under Wt"
Speed slow down	AFC improper setting	<ol style="list-style-type: none"> 1. In AFCT, "Avg Comb Hps" should be set within 3-5. 2. In AFCL, "Avg HP Wt%" should be set within 25%-33% of the target weight.
Low Pass Rate	Poor combination	<ol style="list-style-type: none"> 1. Adjust AMP to make Avg Comb Hps within 3-5. 2. Increase "Over Wt" & "Under Wt". 3. Adjust the vibrator, make sure products be dispersed evenly.
The door of hopper close with heavy sound	The motor speed setting is too fast	Adjust the motor mode
Hopper opens fast and can not be closed	Motor position checking failure	<ol style="list-style-type: none"> 1. Check to run continuously in "Manual Test". 2. If just individual motor has such problem, check if the corresponding motor position board is normal or not.
Suddenly no products discharge or frozen in running	The power switch is off or Processor may be jammed	<ol style="list-style-type: none"> 1. Check the power connected correctly. 2. Check if any wire connectors loosen or not. 3. Turn off power and restart the machine.

Chapter 7. The Meaning of the Indicated Color & Character

NO.	Color	Character	Meanings
1	Yellow	Q	Being forced to dump due to no combination
2	Red	C	Has joined the combination this time
3	Green	R	AD card in good communication before running
4	Light Blue	L	The single hopper weight is less than the preset "Min Single Hopper Weight"
5	Light Green	Z	Auto Zeroing in the running.
6	Black	D	The hopper is disabled
7	Orange	U	The single hopper weight exceeds the target weight and being enforced to dump
8	Blue	R	Ready for combination during running
9	Purple	T	Error in AD card communication

Chapter 8. Remarks of KJ1&KJ2 Cable

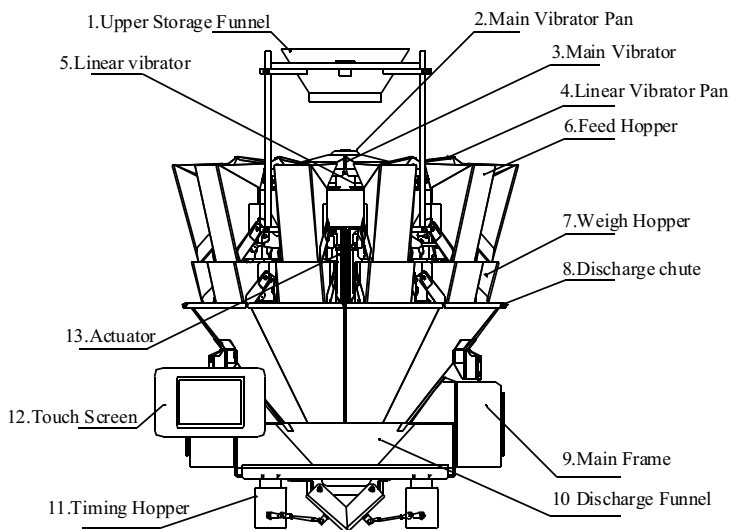


Chapter 9. Crate-Open & Check

- 9.1 To avoid damage to the machine surface as opening the crate, the top cover board should be removed firstly, then remove the siding wooden boards carefully.
- 9.2 Check if the following documents are attached with the machine:
 - ① Instruction manual.
 - ② Packing List.
 - ③ Installation manual.
- 9.3 Check the machine and spare parts under guide of Packing List.

Chapter 10. Machine Structure

10.1 Main Components



1	Upper Storage Funnel	8	Discharge Chute
2	Main Vibrator Pan	9	Machine Frame
3	Main Vibrator	10	Discharge Funnel
4	Linear Vibrator Pan	11	Timing Hopper/Bucket
5	Linear Vibrator	12	Touch Screen
6	Feed Hopper	13	Actuator
7	Weigh Hopper		

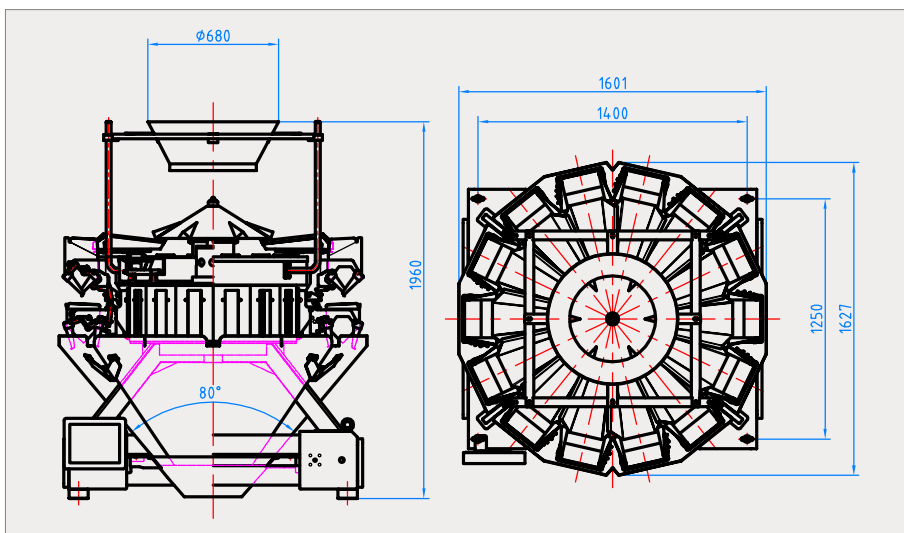


Chart 10-2-3

■ 10.3 Common Parts Installation

(1) Weigh Hopper Installation

Shown as chart 10-3-1, put the fixed plate close to the retainer bracket and then put the upper support bar in the upper position slot and push down until the lower support bar is in the lower position slot. Check and make sure the hopper is on stale position after mounted.

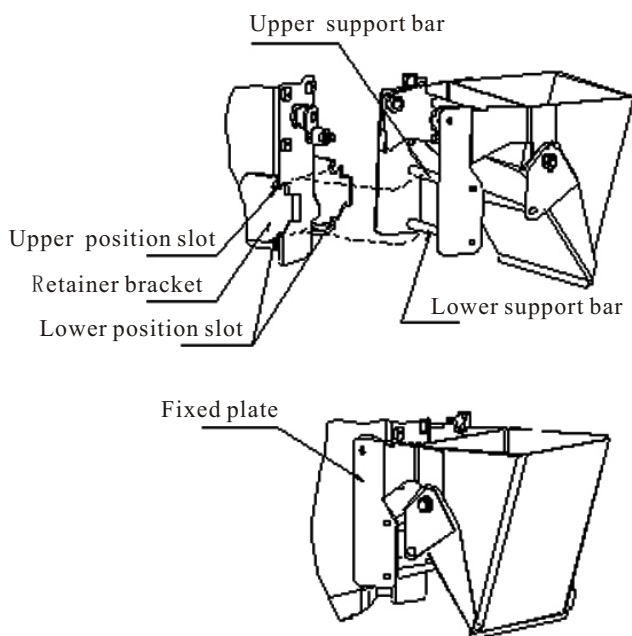


Chart 10-3-1

(2) Feed Hopper Installation

Please refer to the installation instruction of weigh hopper.

(3) Linear Vibrator Pan Installation

Linear Vibrator Pan: Shown as chart 10-3-2, loosen the locking handle, slanting insert section "a" of the Vibrator Pan to section "b" of the Vibrator. Level the Vibrator Pan and tighten the locking handle.

NOTICE: Each Linear Vibrator Pan should be well installed without bumping with each other.

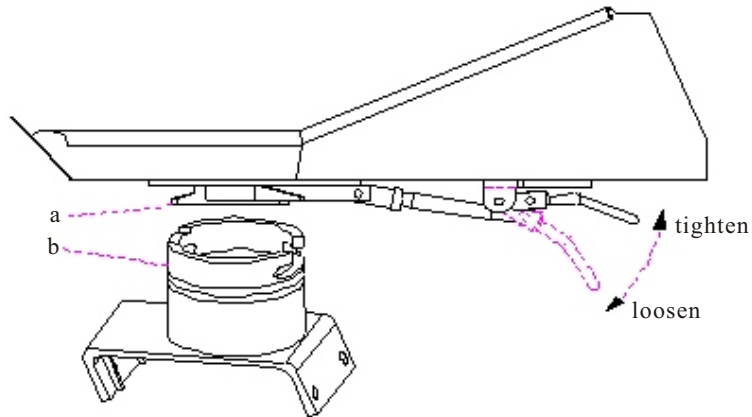


Chart 10-3-2

