Wheel Balancer

BY- 6S

User Manual

Technical performance of BY series tire balancer

-This machine adopts central computer system imported components, high intelligence, high stability.
-The main shaft of the mechanism is driven by imported bearing, with high wear-resisting precision and low noise.
-With the most advanced computer drive system, high stability.
-With automatic dynamic and static balance detection function.
-With the function of balancing three kinds of aluminum alloy steel rings.
-It has self - correction and self - diagnosis function.

The machine can be used to balance the lead

1.Code Balancer
(Common steel and aluminium alloy steel rings)

2. Paste Balance Block
(aluminium alloy steel ring)
Note: the weight error of the balance block can directly affect the detection effect of this machine.

Attention to the Use of Installation Box

1. Do not the tire balancer in extreme temperature and humidity. Avoid placing beside heating equipment, faucets, air humidifiers or stoves.

2. Don't put the balance machine in front of the window where the sun can directly enter. In unavoidable cases, curtains, baffles or shields should be used to shield the balancer.

3. Avoid contact with large amounts of dust, ammonia, alcohol, diluents or spray adhesives.

4. The balancer should be fixed on a smooth ground. Avoid placement next to air compressors or objects that may vibrate.

5. Do not approach the machine when using.

6. The specification of the power outlet of the tire balancing machine is 110 v volts (AC) with a rated output current of at least 10 A(amperes).

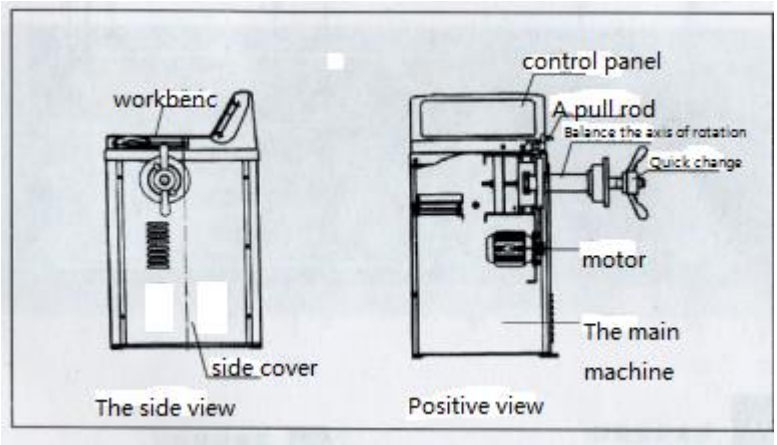
7. Tire balancing machine should use a separate power outlet, do not connect other wires to the power outlet of the balancing machine, and note that the socket must be

reliably connected to the power cord of the balancing machine to avoid human stampede.

8. Between the back and the wall of the balancer, there should be a distance of 50 CM to ensure good ventilation and heat dissipation.

9. Contact your maintenance service personnel before moving the balance machine.

BY main components of tire balancer



Installation debugging method

1. Switch on and display HLP

2. Press F+FINE key to display the window is lit up

3. Press ALU key to enter the setting program. The current spindle tooth position is displayed, and the spindle can be rotated forward and backward to check the phototelex Sensory work.

4. Go to the spindle to 114, press Start, enter the spindle distance setting (the default value is 195, which can be skipped if it is consistent with the real boundary) and measure to the outer edge of the spindle flange with a ruler.
Enter the measured value with B + or B -.
Press A + to exit.

5. Go to the spindle -0-, press Start key, enter the spindle zero clearance program, (this program can clear the spindle since

Press Start key to START the spindle, automatically reset and store and exit.

6. Press C to exit.

7. Put on the tire, input the tire data and then press F+C key to calibrate.

8. Press Start to display Add 100 after starting. Rotate the tire until the outside spot lights are all on, outside the tire

After hanging 100 grams of lead blocks above the spindle, press START to display 100 ADD. Remove the outside 100 grams of lead blocks, turn the tire to the inside point lights are all on. After hanging 100 grams of lead blocks above the inside spindle of the tire, press START to display END CAL.

Balancing machine debugging is over.

Aging of balancing machine

1. Press F+FINE key to display the window is lit up

2. Press ALU key to enter the setting program. The current spindle tooth position is displayed, and the spindle can be rotated forward and backward to check the phototelex Sensory work.

3. Turn to the spindle to 100 and press Start to enter the aging procedure for 100 times.
Press START

Key after startup and count to start 100 times after the end of the buzzer prompt.

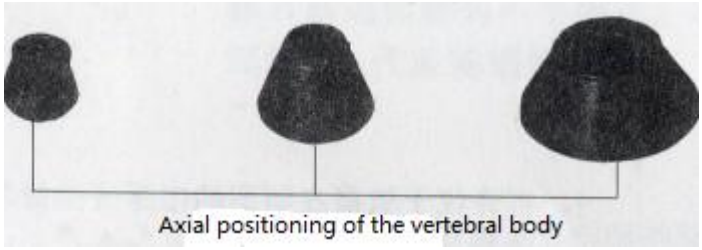
Balancing machine self check

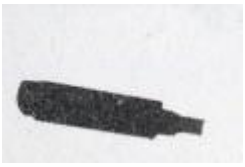
1. Press F+FINE key to display the window is lit up

2. Press ALU key to enter the setting program. The current spindle tooth position is displayed, and the spindle can be rotated forward and backward to check the work of the photoelectric sensor.
Forward loops are added from 0 to 127, and reverse loops are reduced from 127 to 0. You can also check the red light on the photoelectric plate, slowly turn the spindle, and the red light will flicker alternately.

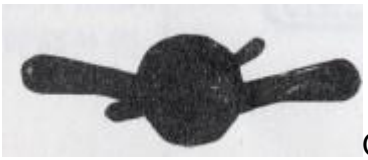
3. Press ALU button again to enter the pressure sensor detection.
The values of about 60 to 70 are displayed on both sides respectively. When the spindle is pressed by hand, the values on both sides will change, which proves that the two sensors work normally.

BY series tire balancer standard accessories



 screw

 Width measuring calipe

 Quick change of nuts

 Balance block disassembly clamp

Optional accessories for BY series tire balancer

 shield

 Special - made large cone

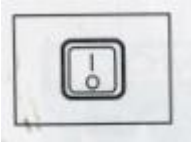
 Special - made fl ange

Standard Annex for Tire Balancer (List)

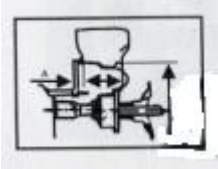
Balance block disassembly clamp	1

Width measuring caliper	1
Axial - positioning cone	4
Quick - change nut	1
Balancer Lead Screw	1

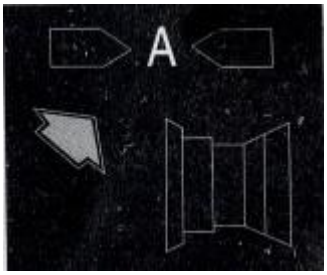
Basic operation of tire balancer



1. turn on the power switch on the left side of the machine to display 411, and then the display 9,10 to A ","8.0".



2. installation of tyres
Select the axis cone matching the center hole of the rim, install it in the center of the rotating shaft, and lock it with a quick change nut. (The maximum weight of the wheel must not be greater than 70 Kg).



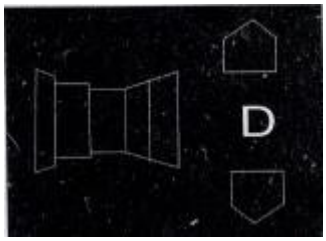
3. input A value data.

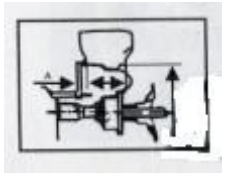
Pull the A ruler to the position of the rim mounting balance block and press 

push-button， enter the data on the pull ruler into the display 10, where the display 9 is A"

4. Enter the L value data

Measure the width of the cali per in the attachment , press the  button to input the data on the cali per into the display , when the display is " L"





5. input D value data

After confirming the rim diameter, press the  button to enter the data into the display 10, where the display 9 is D"

6. press the start button

Start operation, a few seconds later, the machine automatically stops.

(B type pull down shield, can run automatically.)

7. shows imbalance

At this point the number of display 9,10 is the tire imbalance, with the hand to turn the wheel,  positioning constantly flashing.

8. until (11),(12) one of the indicator lights are fully lit, indicating that the highest rim is an unbalanced point at this time, where (11) represents the inner side point of the rim and (12) represents the outer side point of the rim.

9. the corresponding balance block measured by the display at the rim imbalance point, the display 9 represents the inner side of the rim and the display 10 represents the outer side of the rim.

10. Repeat the operation steps 6 to 9 until 9,10 shows "00".

11 . Remove the wheel from the balance rotation shaft and end the operation procedure .

Function Select

When this light is on, it is suitable for other tires on both sides of motorcycle tires or rims which can not be balanced

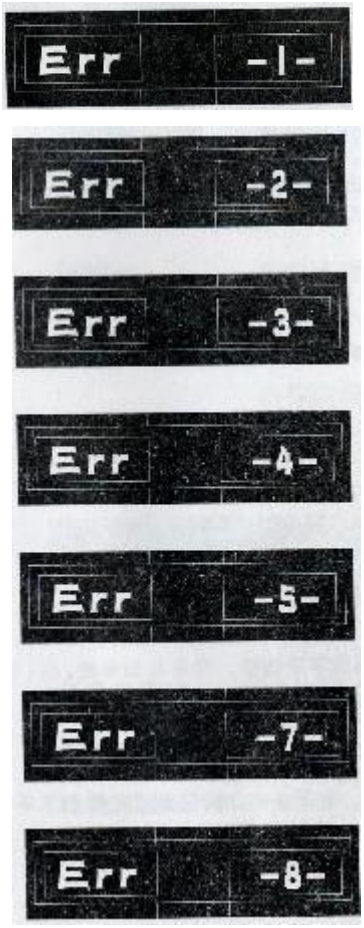
When this light is on, it is suitable for the alloy ring tire with the balance block attached to the shoulder of the rim.

When the light is on , the outside of the rim and the clip balance block on the inside .

When this light is on, it is suitable for the alloy ring tire which is pasted on the outer side of the alloy rim.

When the four sets of indicators are out , the standard balance mode (the computer is automatically set each time it is turned on) .

BY Series Balance Computer Self-Def code



1. no rotation signal, motor does not turn or position sensor position is wrong, sensor bad and plug contact, computer board bad, etc.

2., the coil speed is less than 60 rpm, during the measurement of the computer phone. Too loose and too tight tires and belts can cause errors.

3.the calculation error, the unbalanced amount exceeds the operation range.

4. motor reversal, position sensor wiring error.

5. press the start key, the protective cover is open.

6. self - calibration errors or self - calibration data loss requires re - calibration .

7. data memory content is lost or damaged.

8. a self-calibration error, it may be the second rotation without adding 100g of balance or Pressure sensor cable broken, pressure sensor broken, plug contact poor.

Main Technical Specification

Motor	110 V, 60 Hz, 1 Ph, 1.5 HP (1.1 kW)
Working Temperature	32 ℉ - 122 ℉ (0 ℃ - 50 ℃), humidity ≤ 80 %
Cycle Time	6 to 9 seconds
Data Entry	Keypad
Balancing Modes	Dynamic / Static / Alloy
Rim Diameter Capacity	10 - 26 in (254 - 660 mm)
Rim Width Capacity	1.5 - 20 in (38 - 508 mm)
Max. Wheel Diameter	50 in (1270 mm)
Max. Wheel Weight	143 lbs (65 kg)
Shaft Size	36 mm
Max. Shaft Weight	176 lbs (80 kg)
Balancing Speed	180 RPM
Accuracy	0.035 ounces (1 gram)
Display	Standard Or Metric
Self Calibration	Yes
Power Cord Length	78 47/64 in (2000 mm)
Noise Level	< 75 dB
Product Dimensions	L 23.62 x W 37.40 x H 36.22 in (600 x 950 x 920 mm)
Product Weight	198.42 lbs (90 kg)

Daily use and precautions of balancer

1.balancer must remove the packaging bottom plate, fixed installation smooth.
2.The casing must be grounded protected .
3.It is forbidden to move the spindle of the balancing machine and not to cause any collision of the spindle.
4.Dam - proof measures shall be taken to extend the service life of the peace machine .
5.Attention to the use of power supply, voltage up to 110V, it is recommended to configure voltage regulator.

General common faults and troubleshooting methods :

Failure performance	Fault cause	Remedy
Not on display	1.Check external circuit 220v for normal . 2.power supply board failure. 3.power supply board to the computer connection line is loose . 4.computer board has failed .	1.Check the external power supply. 2.Replace the power board. 3.Check the plug connection. 4. Replace the computer.
Display is normal , but start switch and A, The L, C input button fails .	1.The touch switch is in poor contact. 2. Dead.	1.Open the cover and plug in the touch switch plug. 2.Reboot.
Normal but no brakes after starting	1. computer board and power board connection loose. 2.Power board malfunction 3.Computer board malfunction	1.Plug the computer board to the power board . 2.Re place the power supply board . 3.Re the computer board .
Slow slow brake not working, flat value not allowed	The belt is too loose.	Adjust motor position or replace belt.
Use is normal, but the flat value is not correct.	1. instrument is unstable. 2. Effect of cone or quick nut. 3. Abnormal or not on wheels Tight. The power supply in the machine is unstable. The external circuit voltage fluctuates too much. 6. Change of calibration value. 7. Memory change.	The 1. is excluded according to the inspection results . The 2.resets the fast nut . 3. Check for normal power plug 4. users resolve grid instability Fixed the same time . 5. if the fault is troubleshooting , Re place the computer board . 6. is adjusted according to the method . 7. is adjusted according to the method . 8. will re - enter the three dis\In-1\SFA parameters by the parameter value calibrated in the chassis , then adjust and check if the machine is normal .

Method of adjusting three parameter values:

In normal use, if there is too much or uneven lead block phenomenon, first of all, if the above phenomenon occurs under self-calibration, then adjust the parameters of the triplet.

1. adjustment angle SFA value: after self-calibration, it is found that the position of 100g lead block is not directly below the spindle or the value is not correct, Can use this function to see 100 grams of lead block imitation off the spindle about how many degrees. Remove this lead and hold down the R and START start keys, About nine seconds later, The monitor stops flashing, Press the A value corresponding to the (-) key after pressing the corresponding (+) key display when all the (F) key at this time the left display window appears dis symbol, On the right, Without thinking about it, Press the (+) key corresponding to the A value again (where the key represents the entry) to display the value on In—1 right, Press the A (+) to get into the SFA window, The right window shows the value of the position of the 100 g lead block. When it is necessary to change its value. You can press the (+) of the L key or (-) to adjust the deviation of 100 grams from the spindle at self-calibration, Keep pressing A corresponding (+) key to exit, Back to school, Sometimes it is necessary to adjust the SFA value to 100 g lead block directly below the spindle.

2.adjust the dis value: this is used to solve the problem of inner inaccuracy, flatten the rim, put 100g lead block on the outside, see the value on the display window should be in the range of 104-96, take 100g lead block on the inside, if the display value is normal in the range 104-96, If the search method is the same as the SFA value, adjust the (+)(-) key to the L key.

3. adjust In-1 value: this can solve the problem of internal and external score, If you put 100 grams of lead on the inside, If the inside shows 990, If the number is 10, you need to adjust this, After self-calibration, enter I n-1, state to adjust memory value In-1 value (the (+)(-) key corresponds to the L key) if the display value exceeds 110 g, Need to reduce this, After the completion of the retreat to the initial state of self-calibration.

(1).CB series balancer operation panel to UP represent (+) key, DOWN represent (-) key.

(2).CB series balancer operation panel represents (R) key SEL (F) key.

3.adjusting the values of the three parameters, be sure to unload 100 grams of lead, each parameter must be adjusted to make the computer board remember the data you re-enter.