No.809 the Center Point Business Center Dongzhong road, Guan cheng Zone, Dongguan City Tel: 86-769-23010657

Fax:86-769-23010667

Email:tony@tonyhk.hk

Yo-yo Ball Tester **English Manual**



Model: <u>TW-263</u>

complete solution of laboratory website: http://tony0769.com

Production introduction

Much appreciated that you buying our products, we provide the high quality goods and reliable after-sales service.

To ensure the personnel safety and equipment integrity, read the operation manual carefully and pay attention to the precautions of using before operation. This manual details the design principles, standards, structure, operation, calibration, maintenance, possible faults and solution, electrical diagram and so on. The "test rule", "standard" mentioned in the manual are only for reference, if your company disagrees, just review the standards or data on you own.

Special Statement:

- This manual can not be used as the basis for any request to our company.
- •Our company keeps the final interpretation right of this manual.

Content

Safety Attention	4
1 · Introduction	4
a) Purpose	4
b) Principle	4
c) Standards	4
2 · Instrument Description	5-6
a) physical Construction	5
b) Control panel	5
c) Instrument specification	6
d) spare parts	6
3 · Instrument Installation	6
4 · Operation Specification	6-7
a) specimen prepared	6
b) operation steps	6-7
c) start to test	6-7
5 · Maintenance	7
6 · malfunction solution	7-8
7 · Quality assurance	8

Safety Attention

1. Safety Sign:

To prevent accidents and body injury, pay attention to the following warning notices:

Danger: This shows if not do as requirement, the operator will be hurt.



Attention: The project with this sign means that it may affect the test results and quality control.

I note I the project with this mark means that the auxiliary use

2. The warning and attention sign of instrument.

1	warning sign	this mark indicates the place that it need to follow the manual book to operate.
	dangerous voltage	high voltage.
	earth protection	ground terminal

I Introduction:

- 1. Purpose: used to test the safety performance of yo-yo ball.
- 2.Principle: Use round fixture to fix the yo-yo elastic rope toys. Make the toy rotation at a constant speed in the horizontal plane by using variable speed motor to have the speed of 80r/min. First started slowly, gradually increased to 80r/min (time about 10-60S). If the product rotation speed does not reach to 80r/min as air resistance, should do the test at the maximum rotation speed.
- 3. Applied standards: The instrument manufactured according to ASTM F963 standard.

II Instrument description

1.physical construction:

1. 1 physical construction: (figure 1)



1.2 function description:

- Control panel: control the operation of the machine
- Variable speed motor: adjust the test speed



3.Instrument specification(table 1)

items	specification
test speed	80R/min
scale	2 group
dimension(WxDxH)	1100x350x1300mm
weight(Kg)	≈47Kg
power	1 ∮ AC 220V

table1

4.spare parts: hex screwdriver

III Instrument installation:

1. Power request: please use correct power according to requirement of the machine nameplate.

Danger



Error range of input voltage should be within $\pm 10\%$ and ensure that the machine grounded properly to prevent machine leakage.

2. Operation environmental requirement: room temperature. (Relative Humidity: 65 + / -2; relative humidity: 20 + / -2 degrees)

3.The machine must be placed in a level and stable platform for installation.

IV Operation Specification

1.test-piece of provision:

- 1.1 Choose several assembled toys randomly as specimens.
- 1.2 The product is used as the test sample should have no obvious defects, such as damaged, loose, etc.

2. Operation steps:

- 1. Things should be confirmed before operation:
- 1.1 Make sure the power supply is correct.
- 1.2 Fix one side of the specimen on the hook of the motor.
- 1.3 Hold the yo-yo ball with hand.

3.start to test:

- 3.1 Plug in the power switch.
- 3.2 Open the power switch button.
- 3.3 Reset the counter number to zero and set the test times.
- 3.4 Press the green start button to start the test, the yo-yo ball in your hand will be threw out along the rotation direction.
- 3.5 The speed regulator slowely reach to speed of 80 R/min
- 3.6 Observe where is other side of yo-yo ball on the scale.

(remark)





the notes above are only for reference, please refer to relevant standard documents for more details.o

V Maintenance

- 1.Daub the lubricating oil on the reducer and rotating part of machine every three months so that the machine runs smoothly.
- 2. Machine should be clean every day before and after each test, and the clamps holder should spray anti-rust oil regularly.

VI Malfunction solution

	malfunction	Reasions	sulution
•	Open powerswitch,light is	Power not input.	Check and repair the power line by
	not bright	Fuse burning.	electrician
			Change new as same capacity.
•	Machine running with great	Motor malfunction.	Repair or replace the same type.
	abnormal noise	Reductor failure.	Change new as the same size.
		The running bearing failure	Change new as the same size.

VII Quality Assurance

- 1. The maintenance service is free for one year(consumables is not free, excluding travel expenses).
- 2. Free service mainly vouchers: Warranty card issued by our company is the most important certification when the service is controversial.

Thus: a) please keep your warranty card well, if loss within a month, please contact our customer service department.

- b) the card is invalid if any altered or no stamp added of our company.
- 3. Case of the following circumstance, we will also charge for technic and materials as appropriate in the warranty period:
- a) the nature disaster
- b) wrong operation or the user's fault
- c) do not use the power as required
- d) dismantle and repair without permission.
- e) error cause by lending to others
- f) make alterations
- g) self-correction that failed
- h) transfer or delivery carelessly

Tony international (HK) Co, LTD

website: http://tonyhk.hk / http://tony0769.com complete solution of laboratory Page 8 of 8