

ZXJYD-IIY

Insulation Oil Dielectric Strength Tester



Before the speech

Dear user:

Thank you for choosing this Insulation oil dielectric strength tester ! In order to make it convenient for you to operate the instrument skillfully as soon as possible, we have equipped with a detailed operation manual, from which you can get information about product introduction, use method, instrument performance, safety precautions and many other aspects.

Before using the instrument for the first time, please read this operation manual carefully, and operate and maintain the instrument according to this manual, which will help you better use the product and extend the service life of the instrument.

In the preparation of this manual, although we have carried out our work in a scientific and rigorous manner, we believe that the information provided in this manual is correct and reliable. However, there must be a mistake in this manual. If you find any mistakes in the manual, please take time out of your busy schedule, try to inform us as soon as possible, and please supervise us to correct them quickly! All the staff of our company will be very grateful!

The company reserves the right to improve the use function of the instrument. In case of any inconsistency between the function of the instrument and that described in the operation manual during the use process, the actual function of the instrument shall prevail. We hope that this instrument can make your work easier and more pleasant. We hope you can experience the relaxed and better feeling of office automation in your busy work!

When you are satisfied with our instruments, please recommend them to your friends! When you have valuable opinions and suggestions on this instrument, please contact us. We will try our best to give you a satisfactory reply. Thank you again for your support to our company!



Contents

I 、 The First Summary.....	- 4 -
II 、 The second Instrument characteristics.....	- 4 -
III、 The third Technical index.....	- 5 -
IV、 The fourth Conditions of use.....	- 6 -
V 、 The fifth Description of chassis and panel components.....	- 6 -
VI、 The sixth Diagram of operation steps.....	- 7 -
VII、 The seventh Matters needing attention.....	- 13 -
VIII、 The eighth Simple troubleshooting.....	- 14 -
IX、 The ninth Complete set of instruments.....	- 15 -

I 、 The First Summary

This model of Insulation oil dielectric strength tester for insulating oil is a high accuracy and full digital industrial instrument developed by all the scientific research and technical personnel of our company, according to the relevant standards and regulations of insulating oil testing, giving full play to their own advantages, after many field tests and long-term unremitting efforts. The machine is easy to operate and beautiful in shape. Due to the use of automatic digital microcomputer control, so the measurement accuracy is high, anti-interference ability is strong, safe and reliable.

II 、 The second Instrument characteristics

1. The instrument is controlled by a large capacity single chip microcomputer, which is stable and reliable;
2. The instrument is equipped with temperature, humidity and clock display functions, and can be customized for infrared oil temperature measurement;
3. The wide range watchdog circuit is set in the instrument to prevent the crash;
4. A variety of standard options. The instrument program is equipped with GB / t507-1986, GB / t507-2002, dl429.9, iec156 and self programming operation, which can adapt to a variety of choices of different users;
5. The oil cup of the instrument is made of special glass and high polymer materials, which are processed finely to prevent oil leakage and corrosion;

6. The unique high-voltage sampling design of the instrument allows the test value to enter the A / D converter directly, avoids the error caused in the analog circuit, and makes the measurement result more accurate;
7. The instrument has over-current, over-voltage, short-circuit and other protection functions, and has strong anti-interference ability and good electromagnetic compatibility;
8. Can switch between Chinese and English at will to meet the needs of any customer;
9. The instrument itself has data analysis function to assist the staff to determine the oil quality;
10. USB or RS232 data transmission (Selective configuration);

III、 The third Technical index

1. Booster capacity 1.5 KVA
2. Step up speed 0.5kv/s-5.0kv/s (increasing every 0.5) 10 gears
3. OptionalError 0.2kv/s
4. Output voltage 0-100 kV (optional)
5. Voltage accuracy (2% reading + 2 words)
6. Power distortion rate < 1%
7. Electrode gap standard 2.5mm
8. Test times 6 times (1-9 times optional)
9. Static release time 900s (0-9000 s optional)
10. Interval rest time 300s (0-900s optional)

11. Mixing time 15s (0-250s optional)

12. Overall dimension: 650mm × 470mm × 410mm

13. Instrument weight 42 kg

IV、 The fourth Conditions of use

1. Ambient temperature 0-40 °C
2. Relative humidity $\leq 85\%$
3. Working power AC 220V ($1 \pm 10\%$)
4. Power frequency 50 Hz ($1 \pm 10\%$)
5. Power consumption < 200 W

V、 The fifth Description of chassis and panel components



1. Liquid crystal display: Display date, time, operation parameters, test results,

operation menu prompt and other relevant information;

2. Switch: Print the average of single and multiple test results;
3. Temperature and humidity senso: Temperature and humidity senso;
4. Oil cup cover: After opening, put or take out the oil cup. After closing, test can be carried out;
5. High pressure safety mark: A triangle indicating the danger of high pressure;
6. Power socket: Good insertion of AC 220V 50Hz power cord;
7. Ground wire post: Reliable ground connection column;
8. 232 interface: Transmits data to communicate with computers;

VI、 The sixth Diagram of operation steps

1. Plug in the power cord, turn on the power switch, and the LCD displays the power on page (Figure 1)

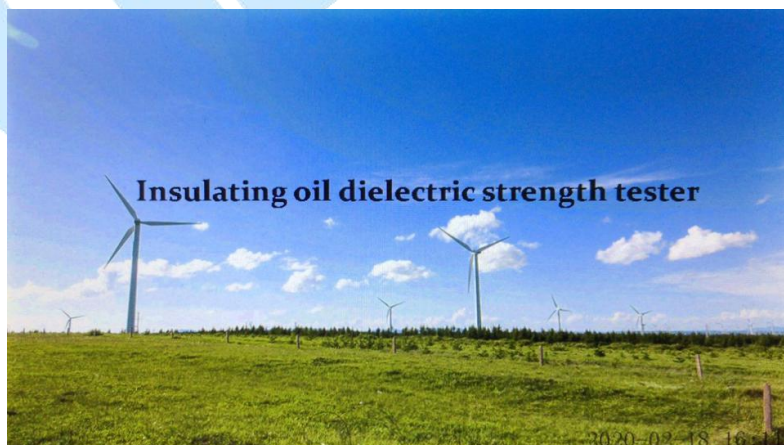


Figure 1 power on page

2. Under Figure 1, press any position to enter the next level page (Figure 2);Including: standard selection, rapid test, data query, system calibration (professional debugging),system clock, printing mode, language selection,

oil temperature measurement (optional) 8 options.

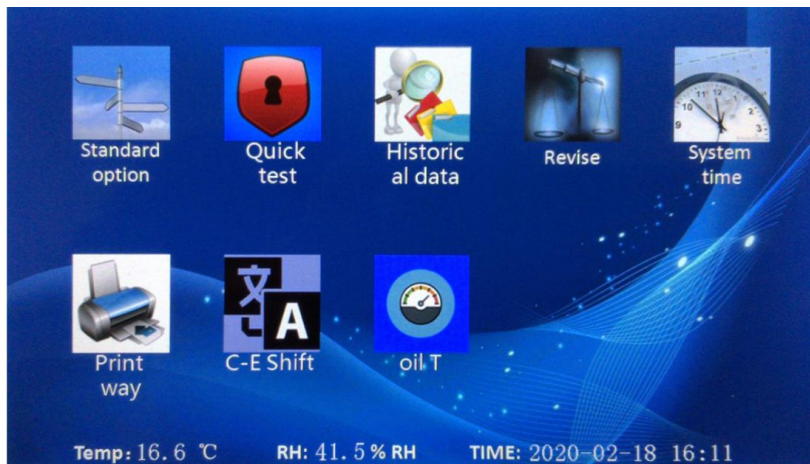


Figure 2 selection page

3. Enter the standard selection interface according to the standard selection (Figure 3). Including: GB / t507-1986, GB / t507-2002, dl429.9, iec156 and two reserved user-defined standards.

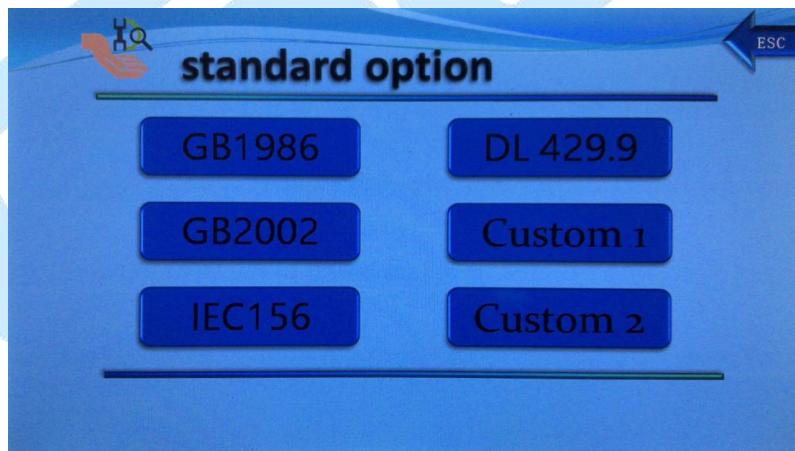


Figure 3 standard selection page

Under the page of Figure 3, select the required experiment standard, such as gb2002, and enter (Figure 4).

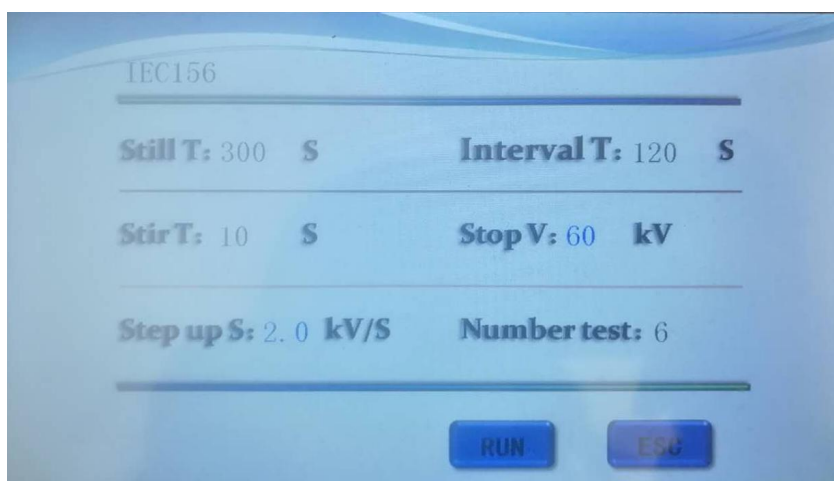


Figure 4 cup position selection sub page

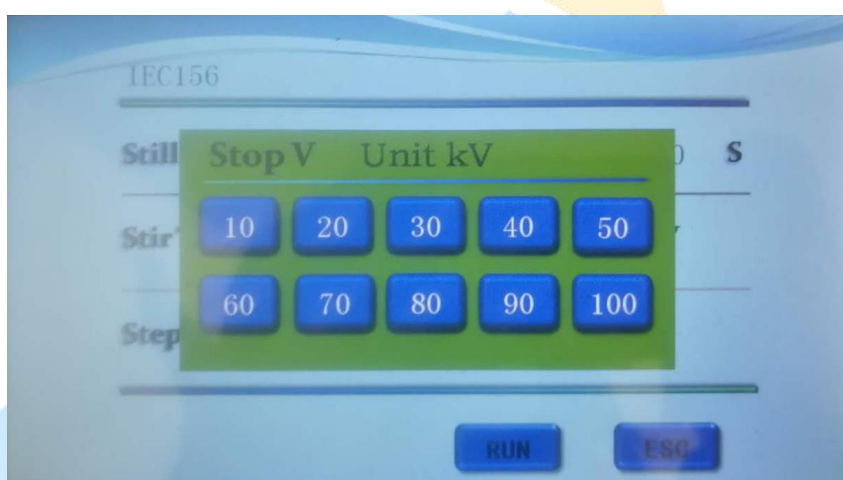


Fig. 5 stop and rise voltage selection interface



Fig. 6 step up speed selection interface

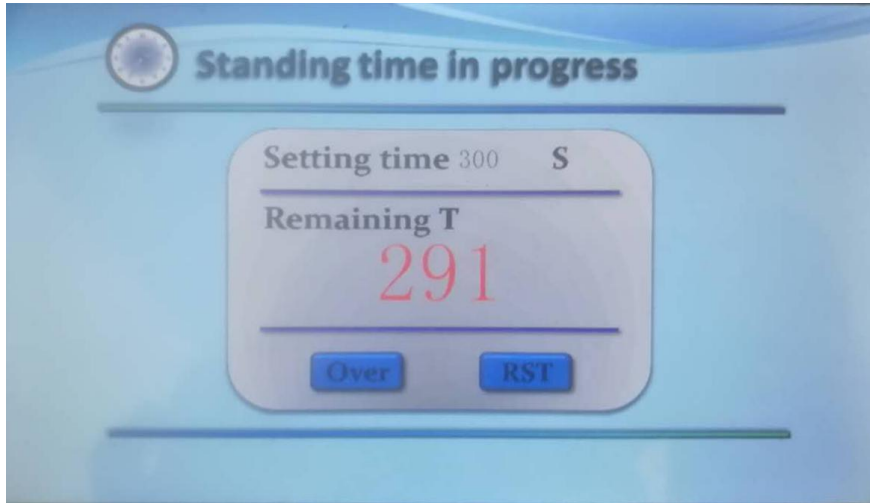


Figure 7 start interface

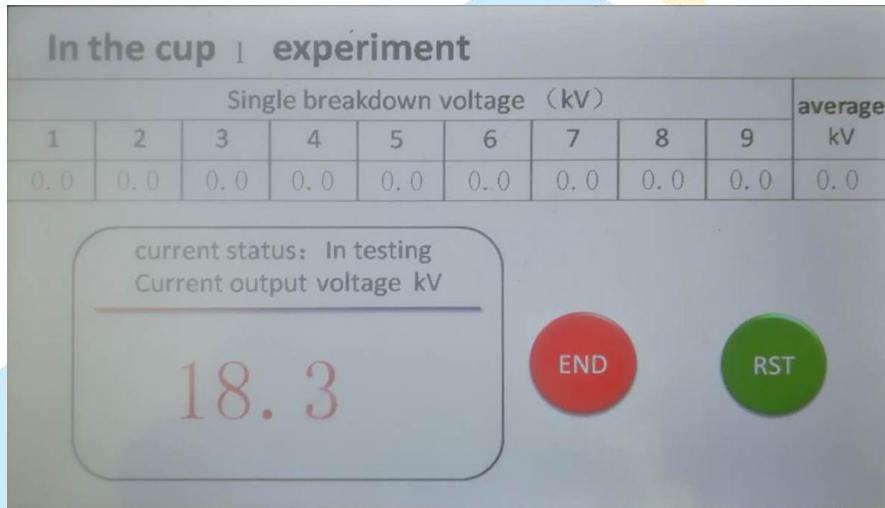


Figure 8 boosting interface

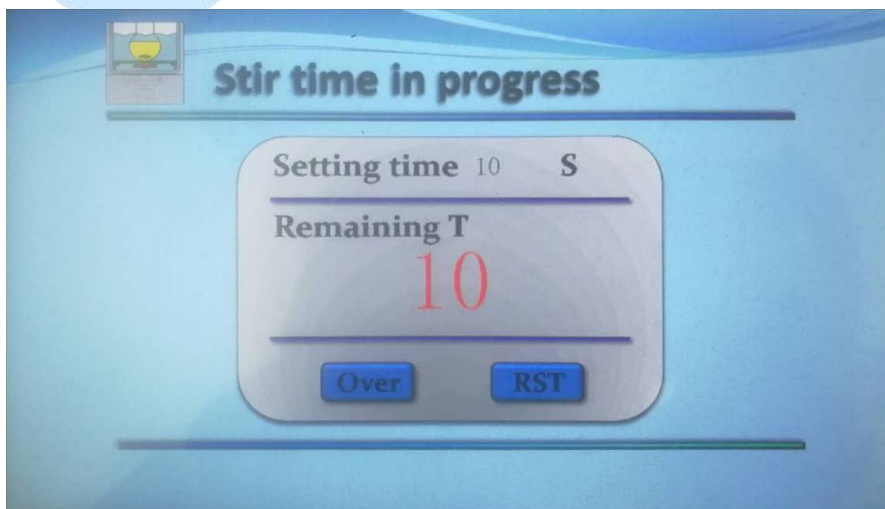


Figure 9 mixing timing interface

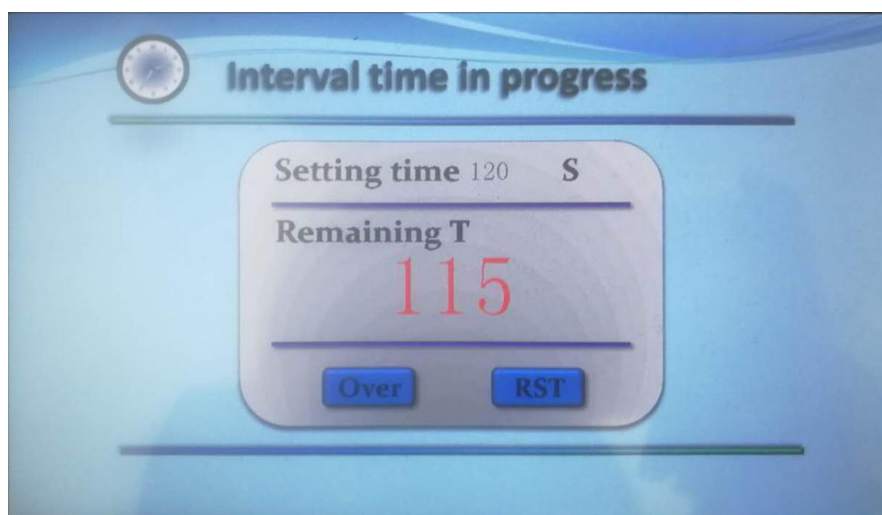


Figure 10 interval time interface

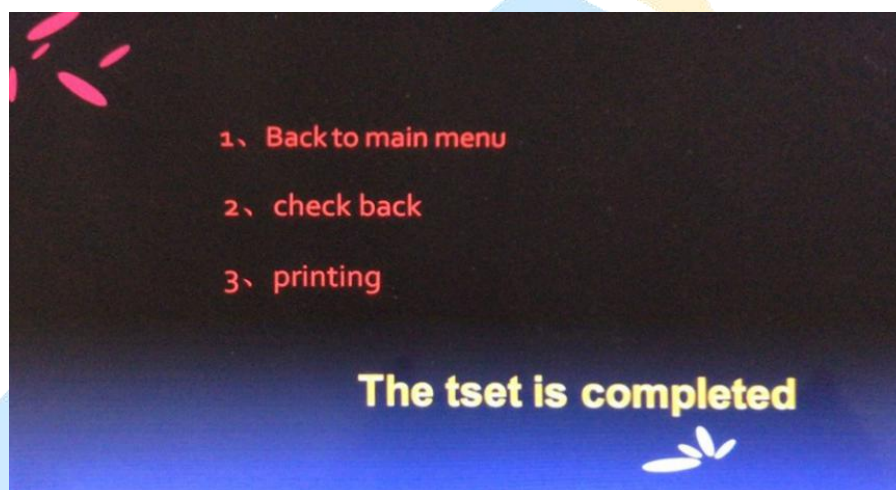


Figure 11 test completion interface

4. On the page of Fig. 4, select the stop voltage and boost speed as shown in Fig. 5 and Fig. 6, select the required parameters, and press start to see Fig. 7. The instrument is executed according to the selected program, the static time figure 7, the boosting interface figure 8, the mixing timing Figure 9, and the interval time figure 10. After the experiment is completed, the test completion Figure 11 is displayed. In this interface, you can choose to return to the main menu, data query and data printing. That is to finish the experiment.

5. On the page of Figure 2, enter the historical data interface (Figure 12) by data query.



NO:4 Test Time:2020Y 1 M 0 D 8 S 23 M

Units(kV)					
1	51.7	2	44.3	3	45.2
4	49.5	5	57.6	6	48.7
7	54.8	8	57.6	9	49.5

AVERAGE: 50.9 kV

Buttons: print, upload, Page U, Page D, ESC

Figure 12 historical data page

6. On the page of Figure 2, the system clock (Figure 13) can calibrate the system time and date. Printing mode (Figure 14), manual printing and automatic printing can be selected (data will be printed automatically after the experiment). Language selection (Figure 15), Chinese and English switching can be selected.

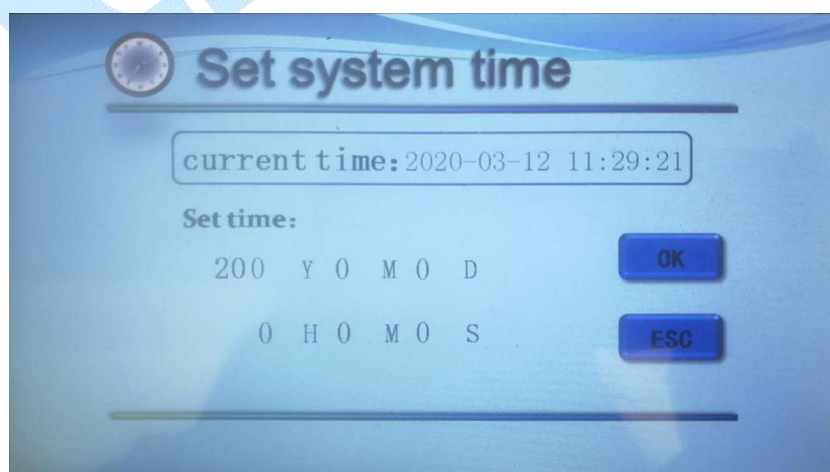


Figure 13 system time setting page

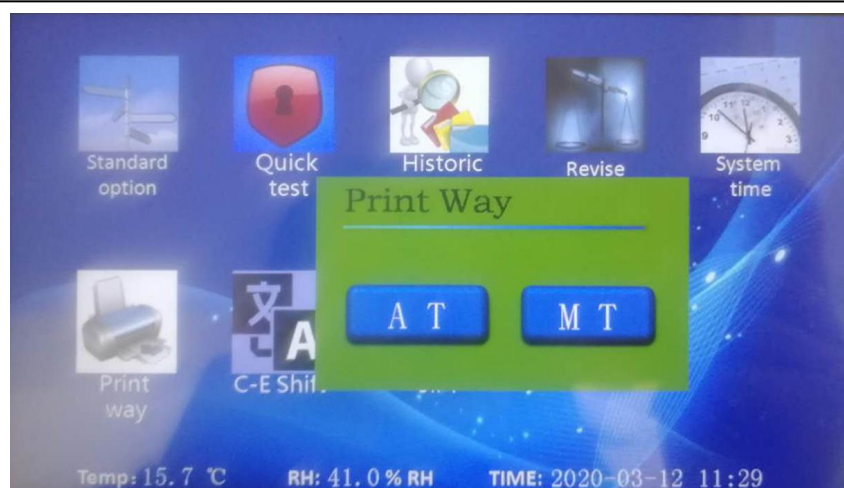


Figure 14 print mode selection page

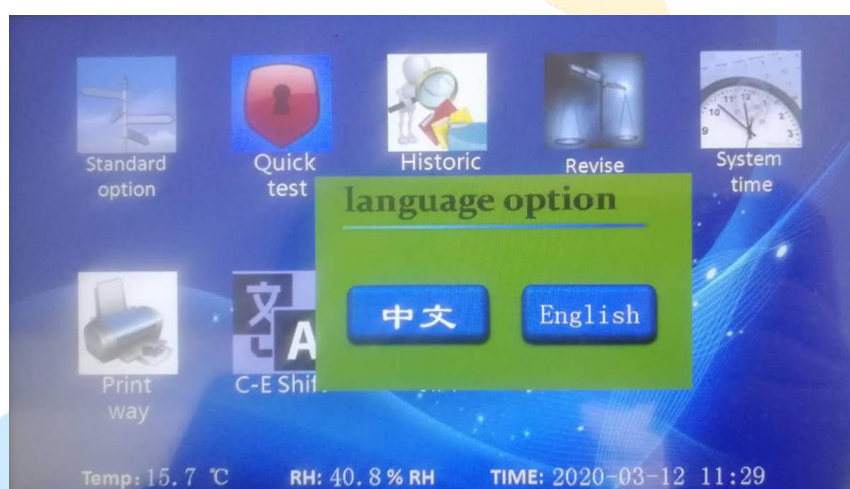


Figure 15 language selection page

VII、 The seventh Matters needing attention

1. Read this operation manual carefully before using this instrument;
2. The instrument operator shall be familiar with the general use knowledge of electrical equipment or analytical instruments;
3. The instrument can be used at home and abroad, but it should be kept away from rain, corrosive gas, high concentration dust, high temperature or direct sunlight and other places;
4. The oil cup should be kept clean. During the shutdown period, enough dry

and qualified insulating oil shall be added for soaking to keep the oil cup free from moisture and electrode oxidation;

5. After continuous use of electrode for one month, routine inspection and maintenance shall be carried out. Check and adjust the electrode gap to restore the standard value; observe whether there is dark spot on the electrode surface with a magnifying glass; if there is such a phenomenon, wipe the electrode surface with a silk cloth to restore it to its original state;
6. The maintenance and commissioning of the instrument shall be completed by professional personnel;
7. Before connecting the power supply, carefully check whether the connecting wire is firm, and the instrument shell must be reliably grounded!
8. After the power supply is turned on, the operator is strictly prohibited to touch the oil cup case cover to avoid the risk of electric shock!
9. In case of any abnormality during the use of the instrument, cut off the power supply immediately!

VIII、 The eighth Simple troubleshooting

1. Check whether the power cord is plugged in well and whether the safety tube is intact if there is no reaction during startup;
2. Check whether the oil cup tank cover is properly covered without boosting;
3. Check if the voltage rise is normal but does not break down, and if the setting limits the voltage rise stop;;
4. Check whether there is dirt in the oil cup without display after breakdown;

5. Check whether there is paper in the printer if the paper cannot be printed out;
6. Replace the printing paper printer has installed the printing paper at the factory. If the printing paper is used up, you need to install new printing paper by yourself. Installation method: open the printer paper bin, put the printing paper in and extend a part. The printing paper light is facing the thermal sawtooth direction.

IX、 The ninth Complete set of instruments

NO.	Name	Qty
1	Insulation Oil Dielectric Strength Tester	1
2	Grease cup	1
3	Elbow	2
4	Impeller	2
5	Standard gauge	1
6	Tweezers	1
7	Protective tube	2
8	Ground wire	1
9	Power line	1
10	Printing paper	1
11	Manual	1
12	Qualification Certificate	1
13	Warranty Card	1