

Trouble Shooting

Power Supply (SP-BC40HL v.3.0)

MAKE JOBS BETTER THAN EVER

1. Communication verification:

When the BC power supply is connected to the electric screwdriver (BN series), turn on the power, the green light of the “WORK LED” on the power connection count panel will be on. When the cable is disconnected or the communication is abnormal, the green light will continue to flash.



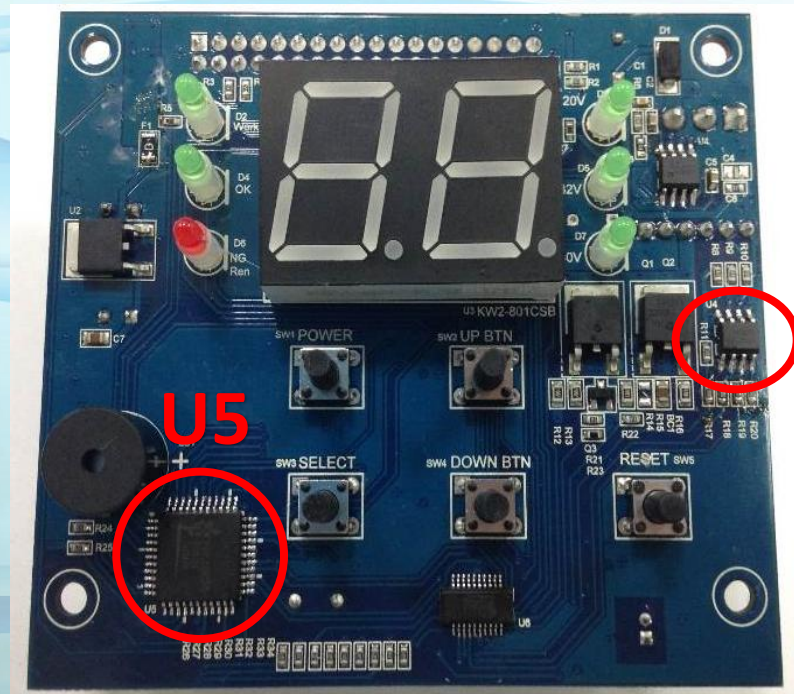
Communication signal

Testing method:

Please check the counter, the electric screwdriver, the power supply and anti-interference cable (using the cross-test method to find the abnormal device)

1. Communication verification:

As far as the counting board is concerned, if the counting display is normal, but the communication has no effect, it will cause communication (U4 and U5) abnormality (as shown below), it cannot be measured by using the multimeter. (Recommended to replace the new counter board)



U4

U5

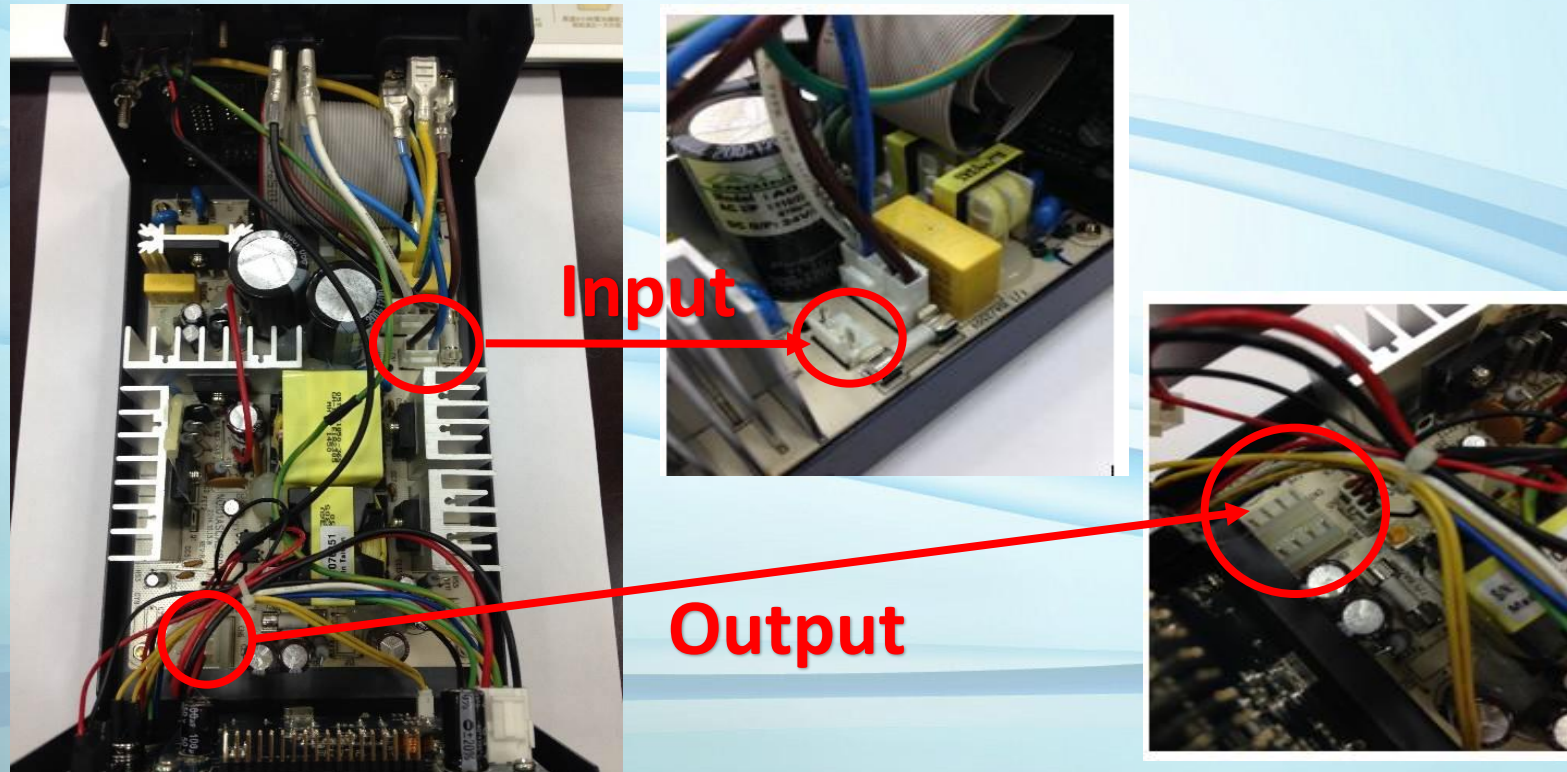
Power Board

Turn off BC40 power

2. Machine board inspection - Power board (A)

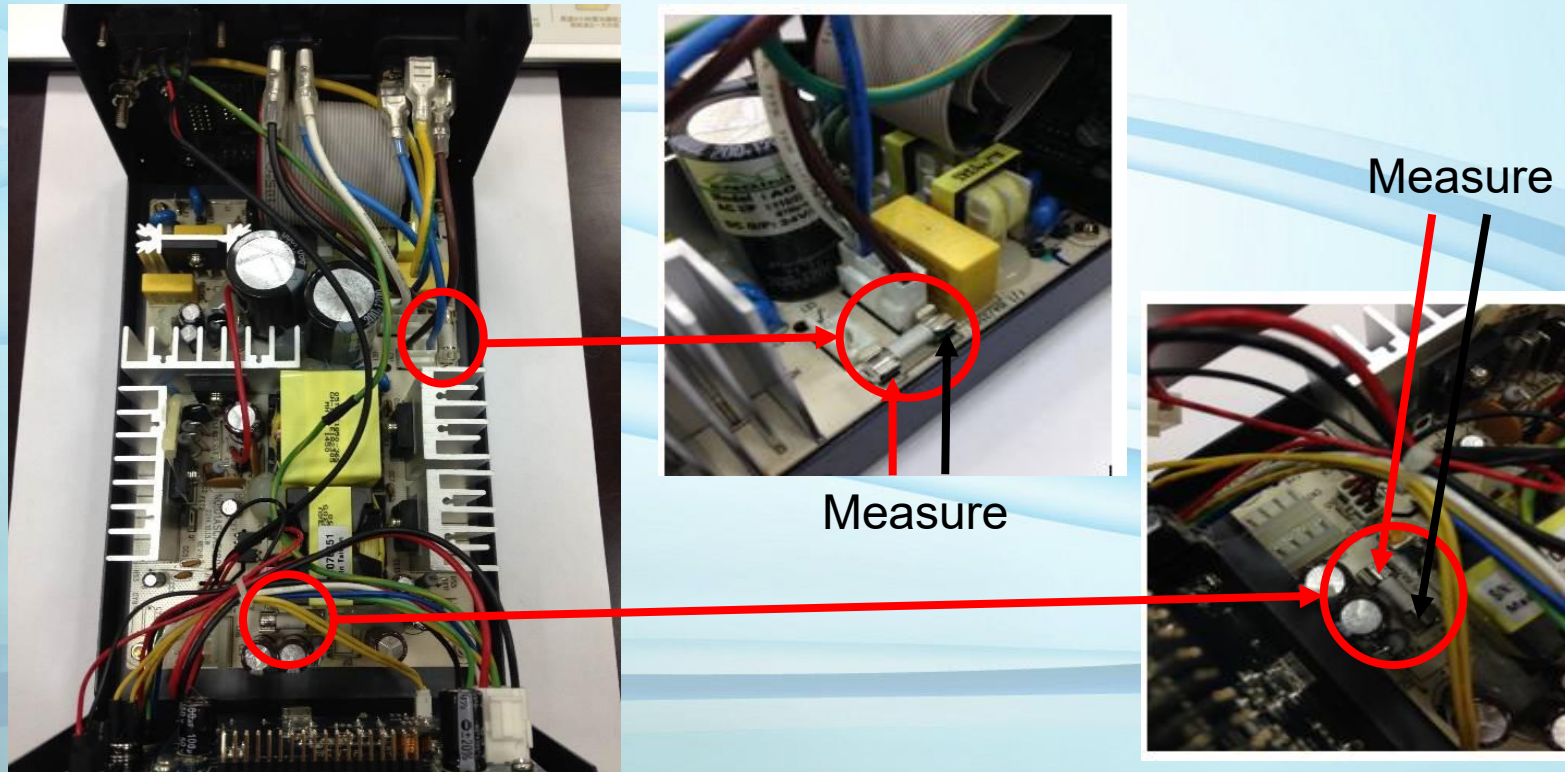
Using diode to measure the input and output PIN.

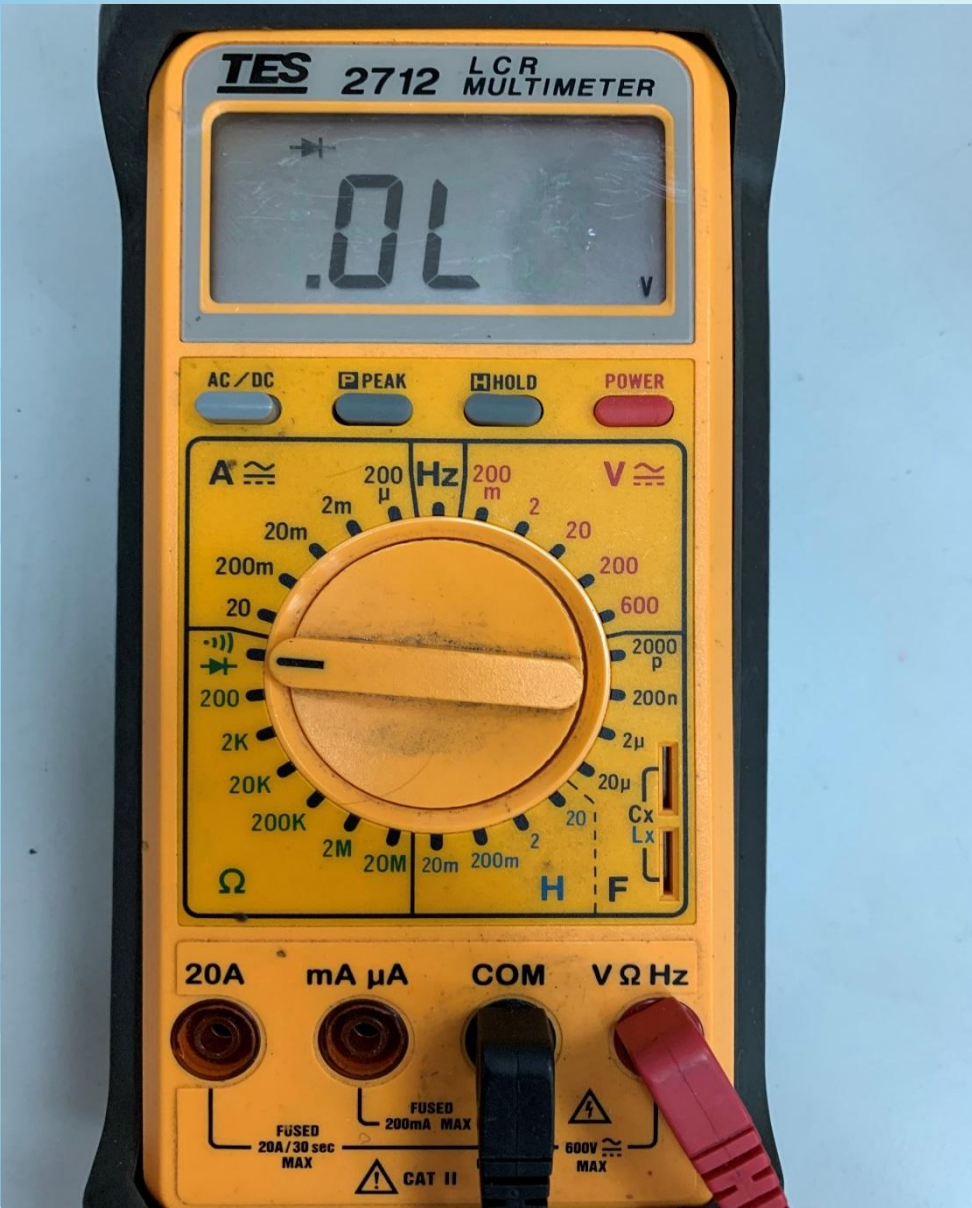
If it is short circuit indicates the power supply board is abnormal, recommended to replace new power supply board.



2. Machine board inspection - Power board (B)

Using diode to measure the two pieces of fuse on the board.
The fuse must be short circuit, if not please replace new fuse.





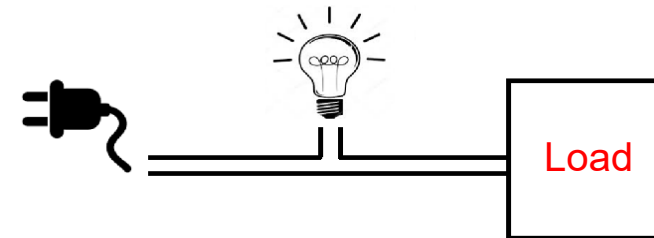
Using diode to measure the input and output.

2. Machine board inspection - Power board (C)

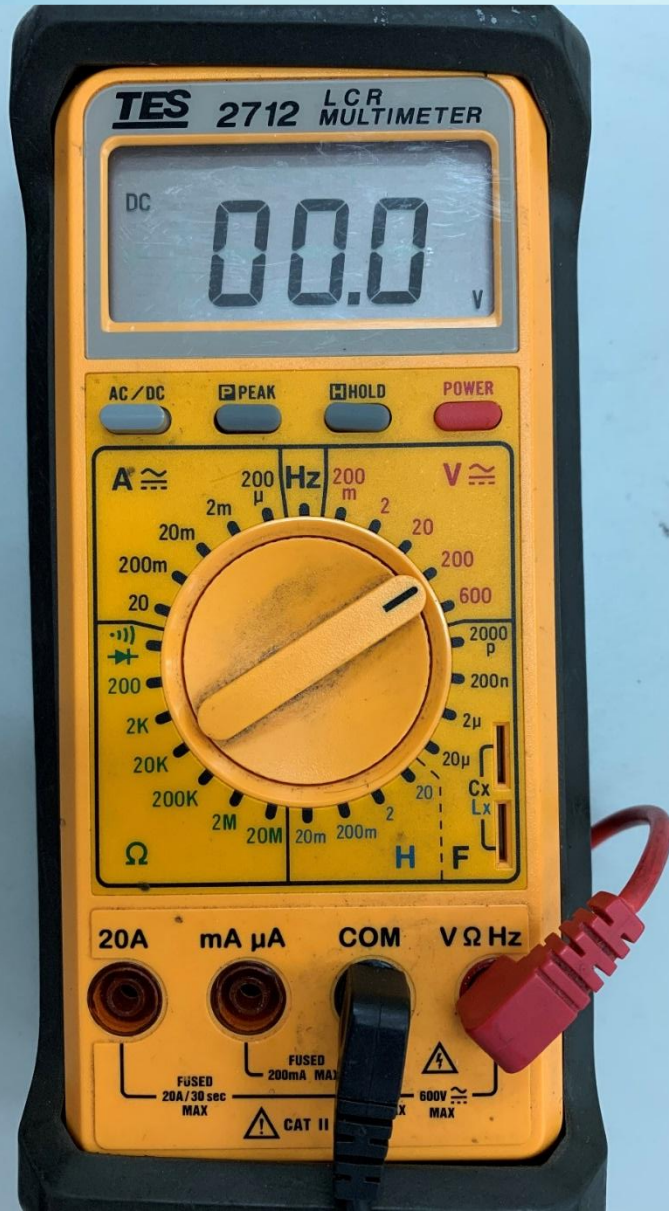
Turn on the power, detect AC switch LED is steady.
If it is not lit, it means the fuse on the input is abnormal, please recheck the fuse.
Regarding the power detection part, it is recommended to add a protection circuit at the front of the input power line, it can avoid short, causing burnout after turning on the power.



Protect the circuit



When the back side load is abnormally and short, it will create a loop instantaneously to protect the AC bulb.

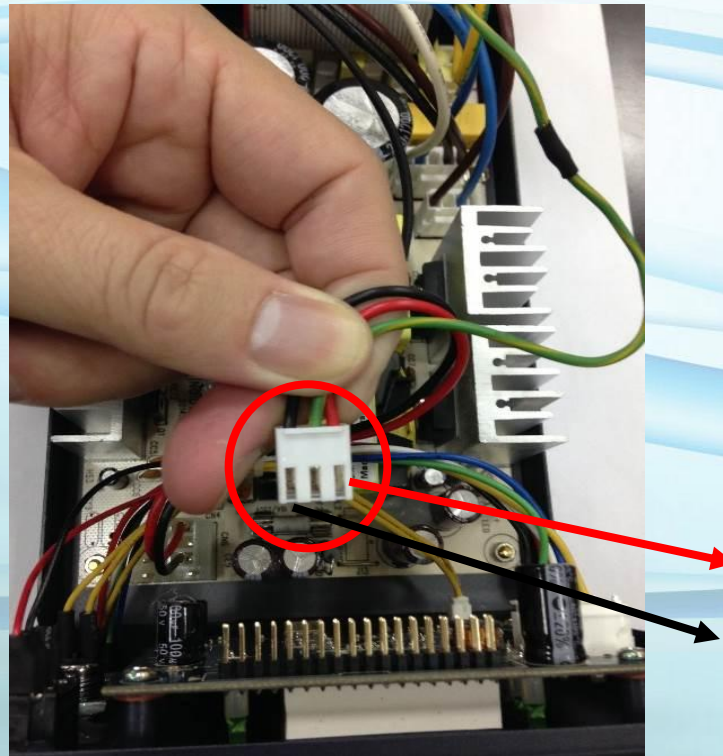


1. Turn to V200.
2. Turn on BC40 power.

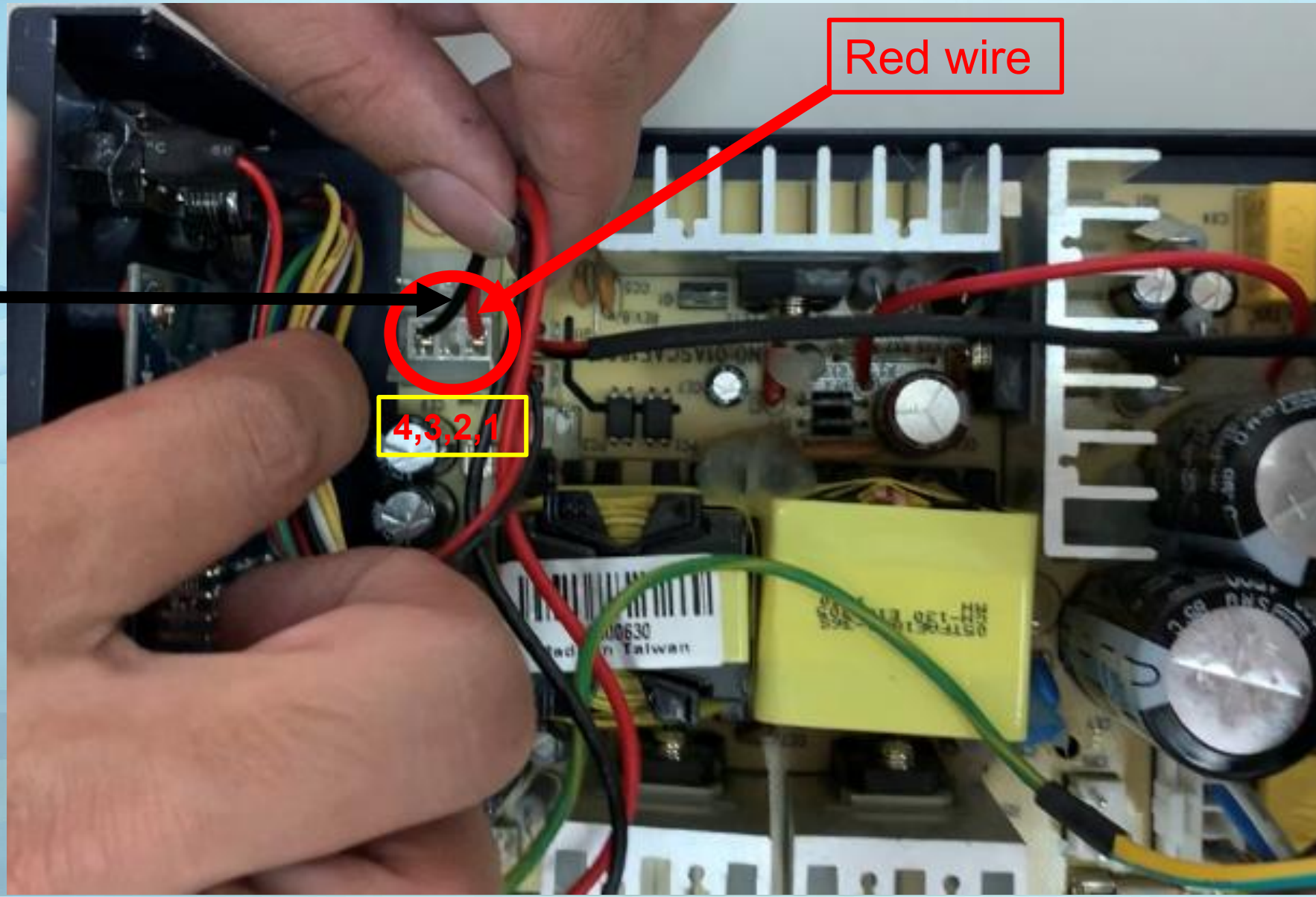
2. Machine board inspection - Power board (D)

After the above inspection procedure is normal, connect input port and measure the DC voltage and the voltage value will be display according to the output voltage (Hi/Lo) on the backplane.

If there is no voltage on the measurement terminal, it means the secondary test of PCB is abnormal. Recommended to replace the new power supply board.



There have 4 pin in the picture. Insert red wire into pin 1 or pin 2.
Insert black wire into pin 3 or pin 4.



Black wire

Red wire

4,3,2,1

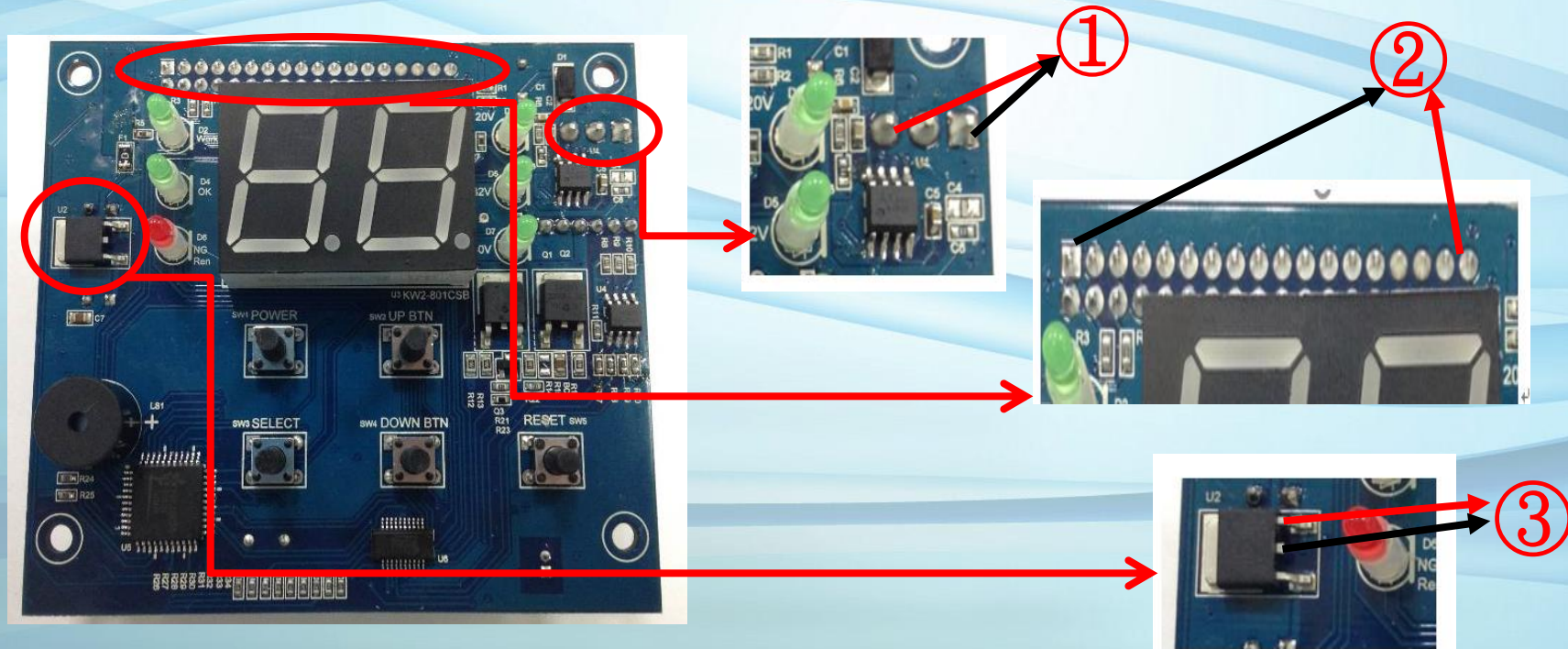
Counting Board

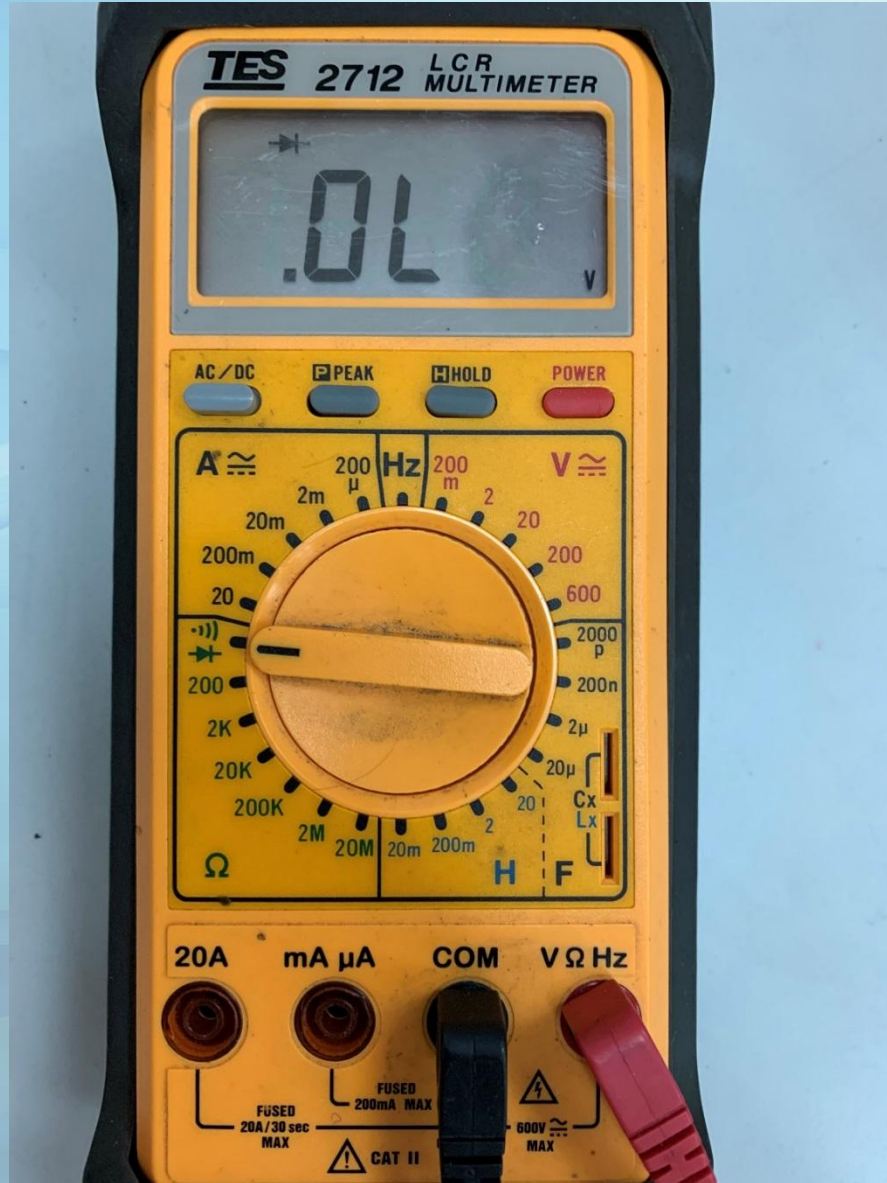
Turn off BC40 power

2. Machine board inspection – Counting board (A)

Testing whether the input terminal on the counter board and the step-down voltage are short or not.

If the input terminal is short, it indicates an abnormality on the board. If the step-down voltage is short, it indicates an abnormality, the step-down voltage is not working well. It will damage other components, recommended to replace the new counter board.





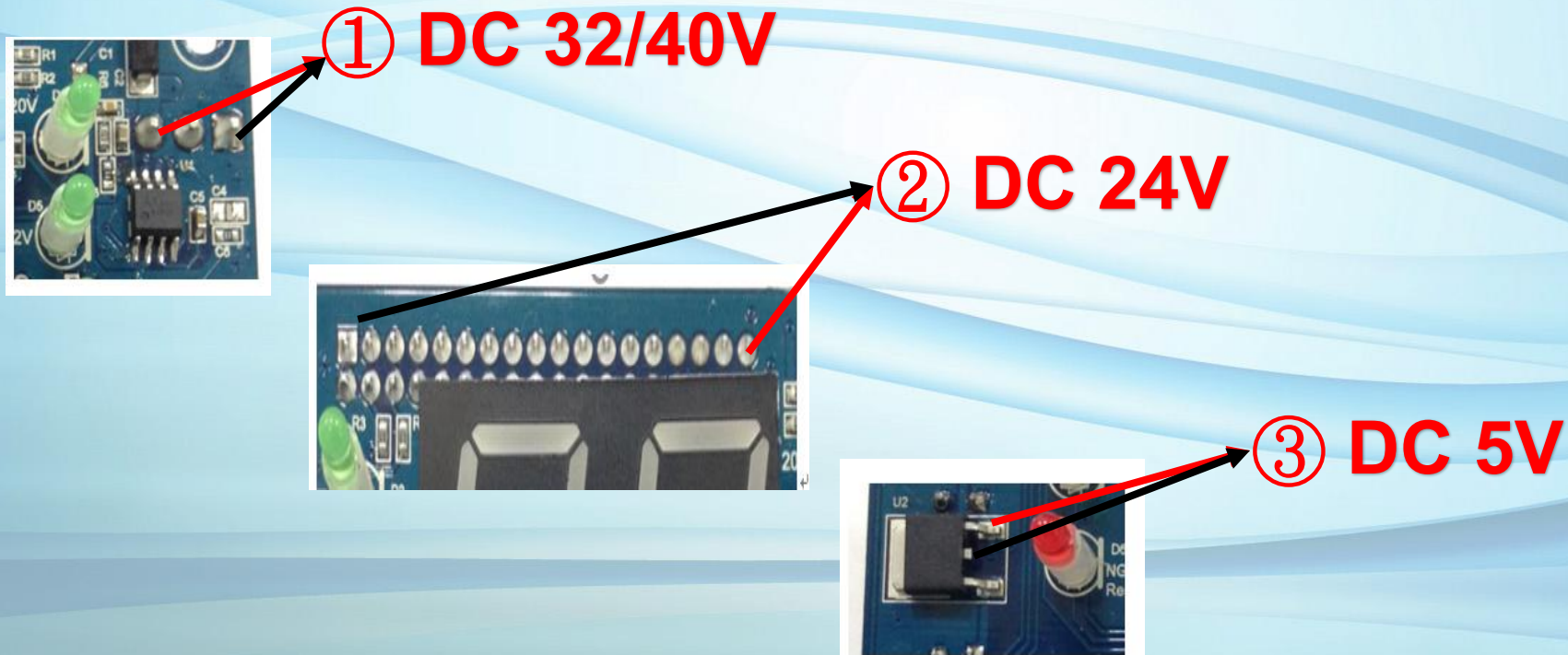
Using diode to measure the input terminal on the counter board and the step-down voltage.

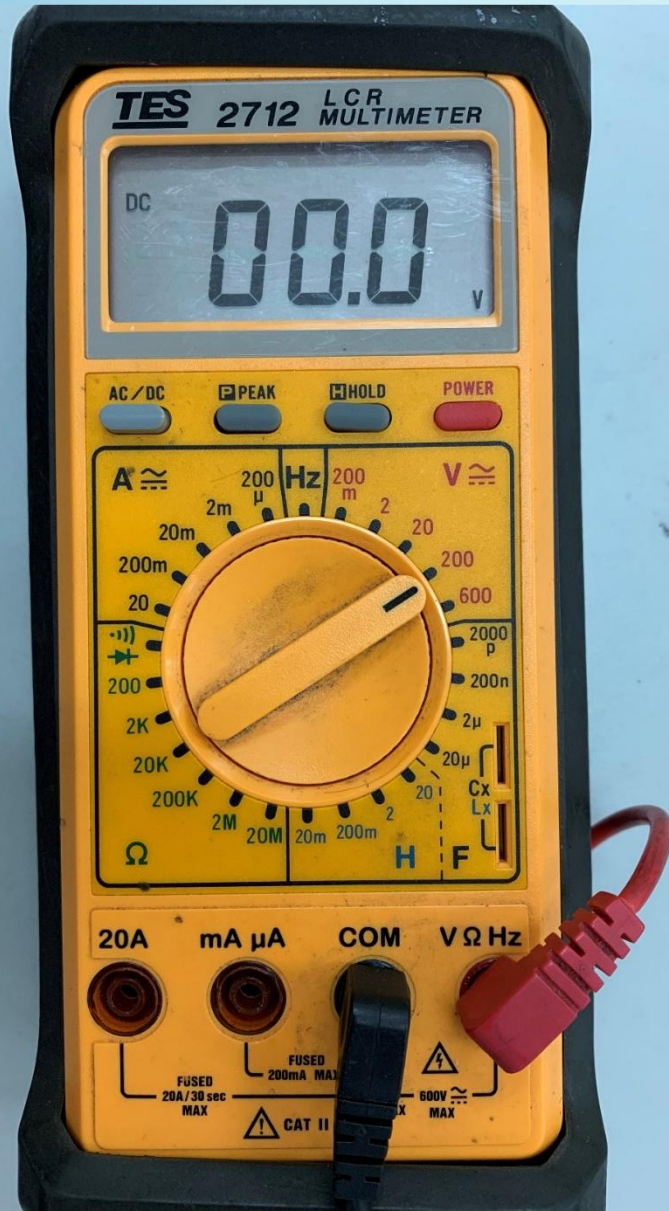
2. Machine board inspection – Counting board (B)

Connects the power supply, and measuring DC voltage.

If the voltage value is abnormal, recommended to replace the new counting board

The order will be DC 32V / 40V → DC 24V → DC 5V (the black line on the figure below is the same GND)





1. Turn to V200.
2. Turn on BC40 power.

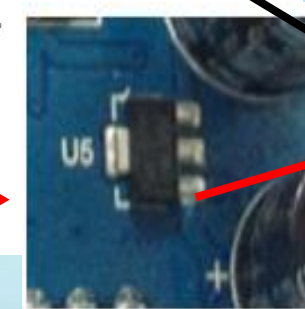
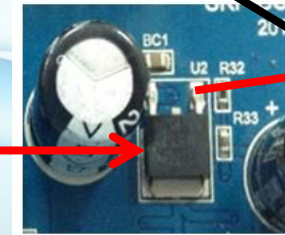
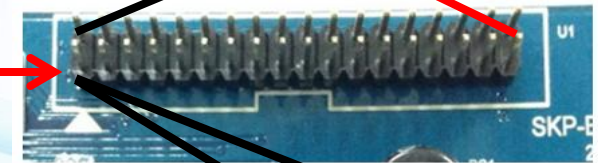
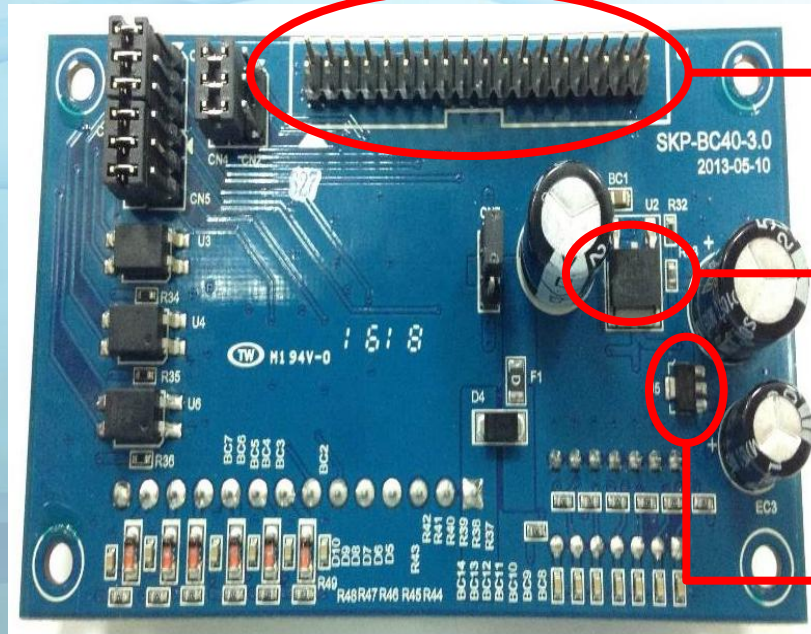
I/O Board
Turn off BC40 power

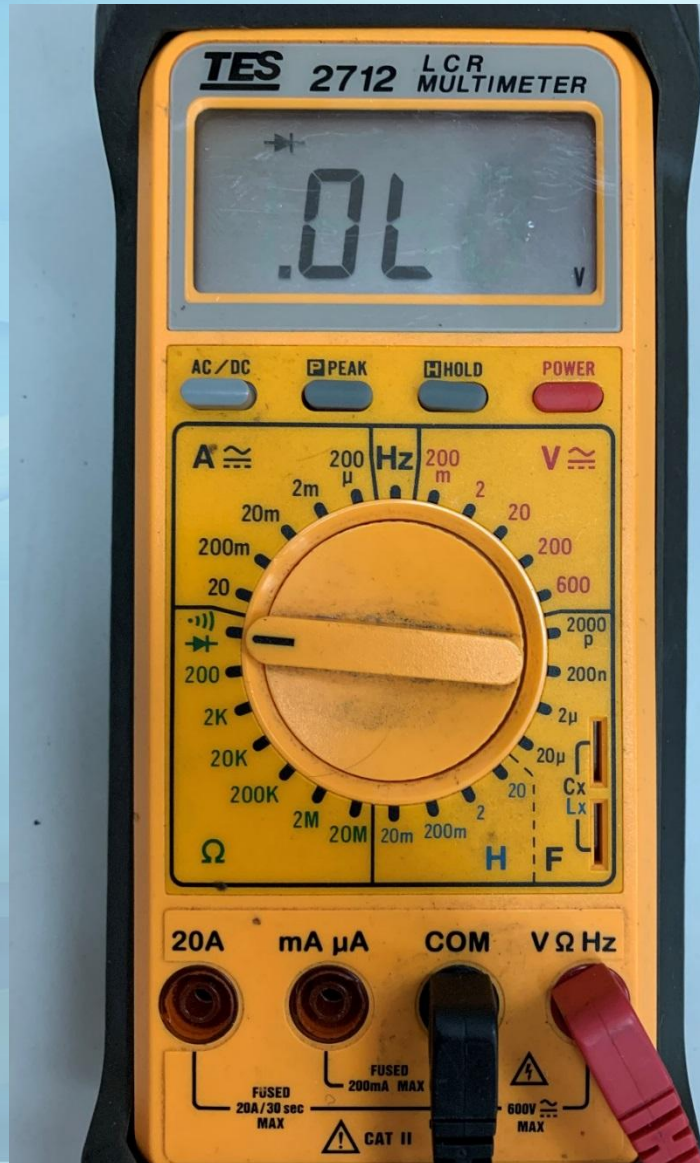
3. Machine board inspection – I/O board (A)

Measure whether the input terminal and the step-down voltage on the I/O board are short or not.

If the input terminal is short, it indicates an abnormality on the board.

If the step-down voltage is short, it indicates an abnormality, the step-down voltage is not working well. It will damage other components, recommended to replace the new counter board.





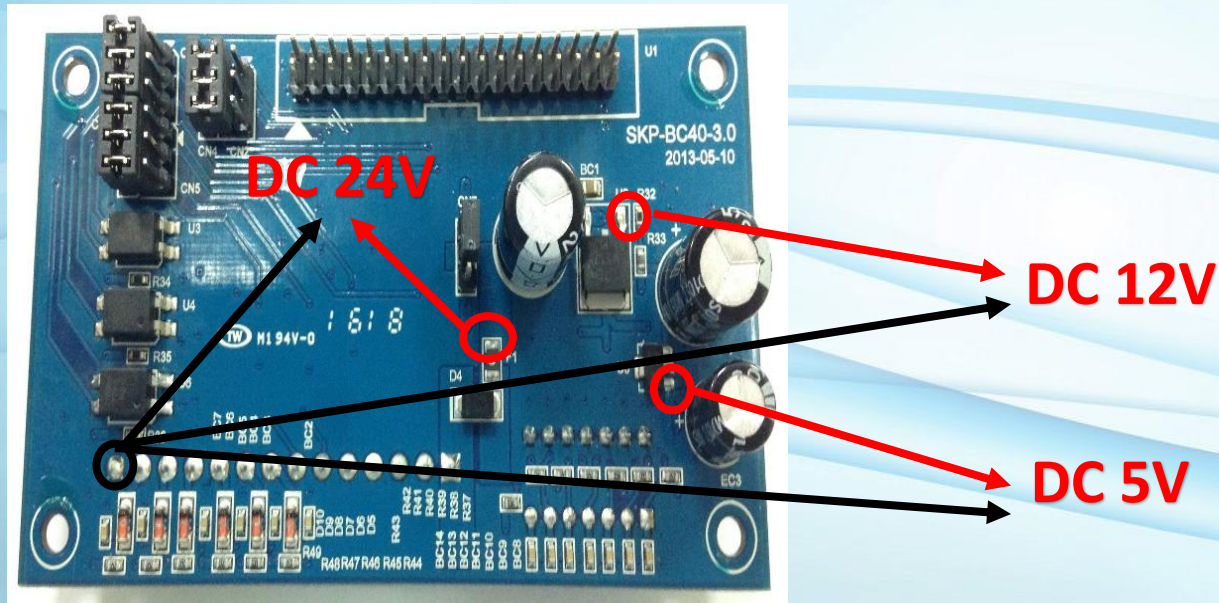
Measure input terminal
and the step-down
voltage on the I/O board

3. Machine board inspection – I/O board (B)

Connect the counting board and the power supply, measure whether the DC voltage of the board is working.

If the voltage is abnormal, recommended to replace the new I/O board

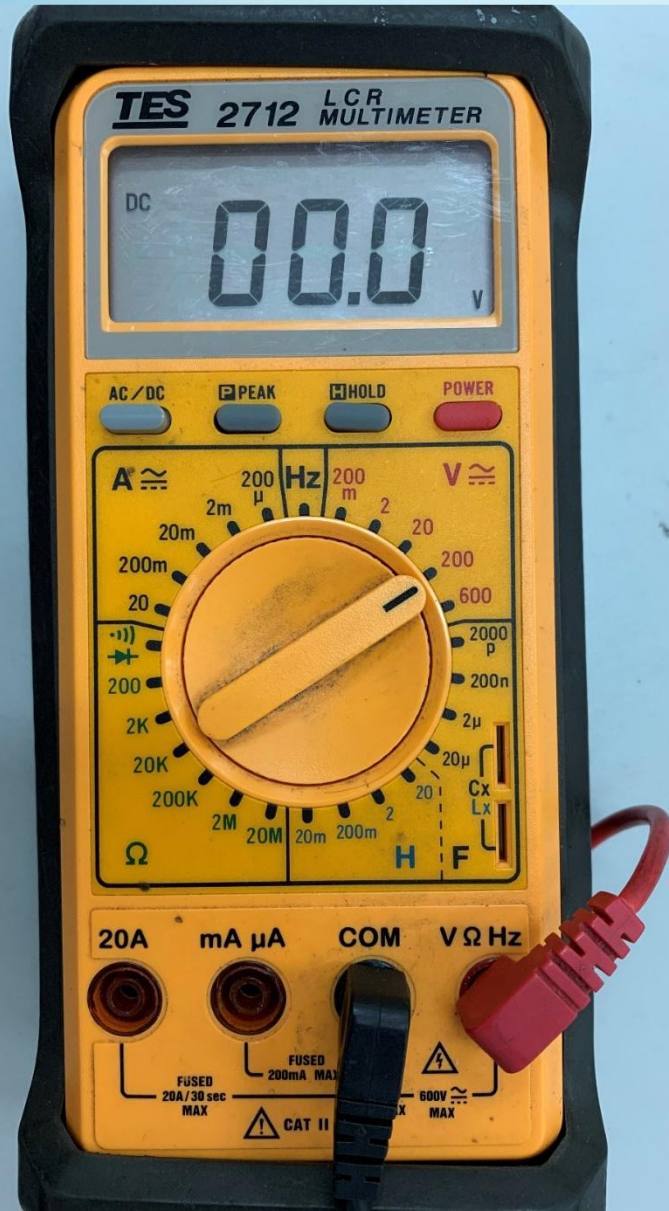
In order will be: DC 24V → DC 12V → DC 5V (the black line in the figure below is the same GND)



After the above inspection procedure is normal, detect I/O input and output status.

"INPUT" When is in the standby state, you can use the multimeter to measure the PIN8~13 corresponds to the PIN14 (GND) voltage is DC 5V or not.

"OUTPUT" When the starter state is working, the measurement output PIN2 / 3, PIN4 / 5, PIN6 / 7, and the action is established, whether the corresponding pin is short.



1. Turn to V200.
2. Turn on BC40 power.

Screen display [PC]

1. When the controller is locked, the user switches the HI/LO voltage.
2. The controller output voltage does not meets the driver specifications.
(For example, the controller sets the voltage output to 24V,
but connects the DC 40V driver)
3. The PIN2 of the power cord is abnormal.
4. Hot plug 6Pin power cord.
5. If it is used for too long, causing low voltage, and PC display will occur.

Other

Panel Hi / Lo 2Pin switch, when switch to Lo it will display short.

Thank you!

Any question you may have, pls. contact our Service Div.

	Time	Name
Check	2018/11/15	Anita
PPT Edit.	2018/11/14	Ben
Check		
PPT Edit.	2019/06/26	Ben

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