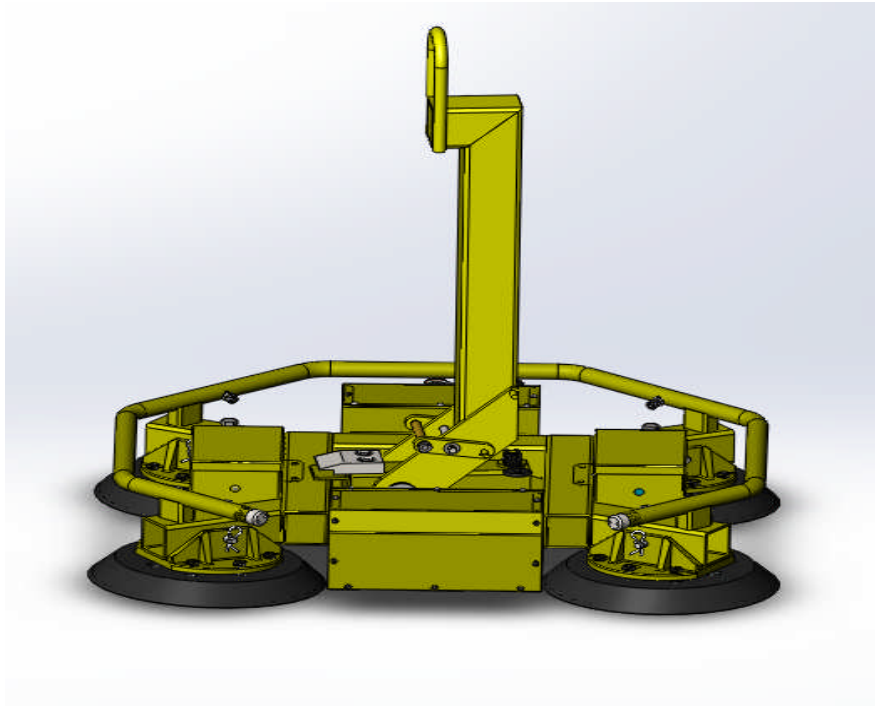# VACUUM LIFTING MACHINE

USER MANUAL

⚠READ CAREFULLY BEFORE USING⚠

DATE : 2015-01-18

1, Connection

1.1   MECHANICAL

The suction crane is connected with the rotating square pipe by a shaft with a diameter of 25mm, and the two ends of the shaft are blocked by a baffle to prevent the shaft from falling off due to its back running.

If there is an extension beam, put one end of the extension beam into the four 60 square tubes on the main frame, and fix it with a cylindrical pin.

1.2   AIR TIGHTNESS INSPECTION

Air tightness inspection: start the vacuum suction crane and place it on a flat surface. Test it with dense materials (such as smooth and flat stainless steel plate, glass, etc.). When the vacuum pump stops automatically and starts automatically, the interval shall not be less than 10 minutes. Otherwise, check all air connections.

2, Precautions before operation

1. Wear labor protection appliances when using the equipment

2, It is forbidden to stand under the work or put hands and feet under the work piece

3, Do not lift the work piece when the pipeline is broken or leaking

4. Do not use when battery voltage is insufficient

5, Operators should be trained to operate the equipment

6, The work piece shall not exceed the rated weight

7, Under load, it is forbidden to pull obliquely (the workpiece must be completely suspended to clamp the 90 ° turnover limit pin into the limit block)

8, The original charger must be used for charging

3, START THE CRANE

Turn on the start button on the electrical box, and the vacuum pump will start. First, the vacuum pump will first empty the air in the accumulator to ensure a sufficient vacuum degree. When the pressure sensor value is lower than 60%, the audible and visual alarm light will alarm; until the required vacuum value is reached, the vacuum suction crane is in a ready state. Push the manual slide valve on the right side of the electrical box (the surface color of the valve is blue). At this time, the suction cup is connected with the vacuum system, and the glass is adsorbed by the suction crane. When the vacuum pressure sensor value reaches more than 60% of the vacuum degree (- 0.6kg / F), it means it can be LIFTING.

When the vacuum pressure reaches the maximum value set by the factory, the vacuum pump will stop automatically.

4, Placement of vacuum suction crane

Turn off the power when not in use temporarily. Put the glass suction cup in a clean place to ensure that the suction cup can hang freely.

It is strictly forbidden to place the suction cup of the suction crane as a support, which will cause deformation of the rubber suction cup under long-term pressure and reduce the sealing performance of the suction cup.

5, Common faults and Solutions

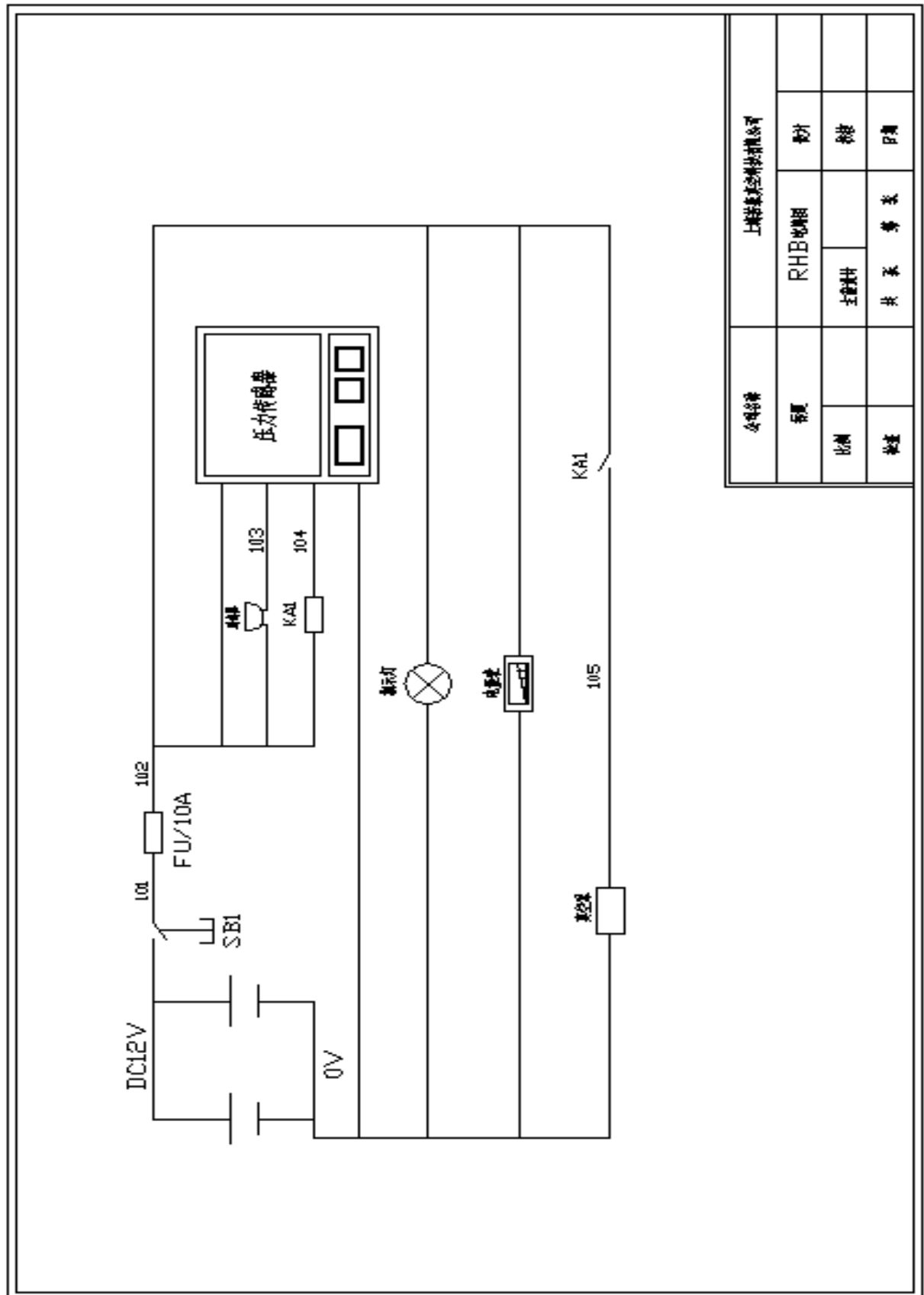|	Analyse	Solution
The workpiece is not firmly or not SUCKED	The connecting screw between suction cup and suction cup base is loose	Tighten the screws
	There is garbage between the suction cup and the workpiece being moved	Remove rubbish
	Suction cup seal damaged	Replace the suction cup seal
	Manual slide valve not pushed in place	Push the manual slide valve into place
Inaccurate value of pressure sensor	Pressure sensor damaged	Replace sensor

No pressure	Damaged or leaking pipeline	Replace the pipeline and check the air tightness
	The unused suction cup does not close the manual ball valve	Close the unused cup ball valve
Unable to deflate normally	Manual slide valve failure	Replace if necessary
Vacuum pump does not run	Under voltage	Charging immediately
	The fuse is damaged	Replace fuse

6、 Daily maintenance

NO.	Functions to check	Feq	Note
1	check the vacuum suction cup is damaged Check whether the air pipe and connecting parts are sealed and in good condition Check whether the filter is blocked or damaged	Every week	Replace the invalid rubber seal Tighten clamps as necessary Clean the filter and replace it if necessary
2	Mechanics check the connection of nuts and bolts is loose	Every week	Tighten the bolts
3	electrical Daily maintenance and inspection	Every week	It must be maintained by an electrician

Electrical schematic diagram :