Safety Regulation

1.Before starting the machine

a)Remove all the tools and sundries.

b)Check the position of the lubricated oil surface.

c)Open and close the reject valve.

d)Turn the belt pulley at least one circle to make sure the machine run smoothly.

e)Check all the safety and protecting equipment whether in the right state or not.

f)The air compressor must be placed stably. Fix the truckles in case of vibration, which may result in displacement of the machine.

2. Maintenance

a) Before maintaining, the machine must be stopped first, the pressure must be discharged and the machine must completely cool down.

b) While doing the maintenance job a nameplate should be put on the switchboard showed: **"warning: machine is under maintaining, start is forbidden!"** At the same time the compressor should be cut off in case of the machine is started by accident.

a. Cut off the fuse and lock the fuse box.

b. Cut off the motor's power.

c) For safety valve: the pressure discharge test should be done every year. If it has being stay for a long time, it should be pull up and down the ring to let it be driven in motion in case of being blocked by some sundries.

d)For shield, warning sign, pressure gauge, regulating valve, pressure switch and electromagnetism switch are all should be examined regularly to make sure that they are all in the normal working state.

e) For the air tank: the compression should be done the resistance test regularly, at least once every 10 years.

g)Any kind of the inflammable, explosive, easy to volatilize and harmful to the health cleansers are forbidden to use while cleaning compressor and accessories. All the accessories should be rinsed and dried after cleaning.

Receiving machine and installation

1. Check the following items after receiving machine.

a) Check the quantity, name and type of air compressor you order.

b) Check whether the machine is damaged or dirty in the delivery.

c) Check whether the machine is in line with the packing list.

2. Place the air compressor.

a) Placed in a clean air and good ventilation place to prolong the service life of the machine and save energy.

b) In a place with sufficient light and space in order to maintain.

c) The machine should be placed horizontally ,the belt side should be against the wall, but the gap between the wall and the machine must more than 30 cm so that the fan can work well .

d) The rubber mat should be placed under the truckles to reduce the vibration.

3. Please check the tension of the belts.

The method is press (about 3–4.5kg power) the middle of the two pulleys. If the belt is 10–15 mm lower than the original height that would be suitable, it should be adjusted when it is too tight or too loose.

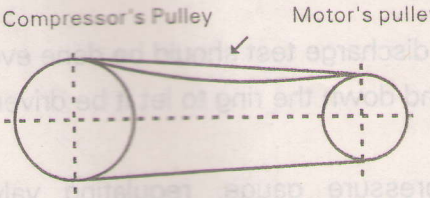


Fig 1

a) If the belts are too tight it will increase the load of motor, which may become hot and increase the consumption. The belts are apt to broken because of the great strain.

b) If the belts are too loose it will become easy to slide and become very hot even burnt. The rotational speed of the air compressor will not stable under such situation.

Notice: while adjusting make sure that the motor's pulley and the compressor's pulley stay in the same plane.

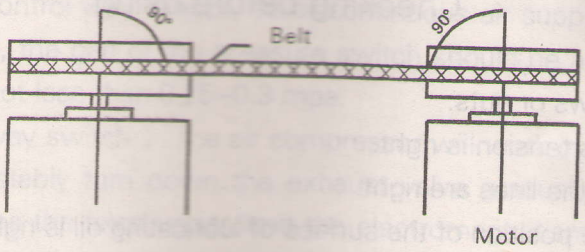


Fig 2

4. Wiring.

a) Use the rubber cables as the power wires. The selection of wire cross-section can accord the motor's rated current (3Ah per square mm)

b) Check the power's current, voltage, and capacitance whether they meet the demand of the motor.

c) The air compressor must be connected reliably to the ground.

5. Lubricating oil

a) Summer: LDB150 winter: LDB100

b) Keep the surface of the lubricating oil between the two red lines (as showed by fig.3)

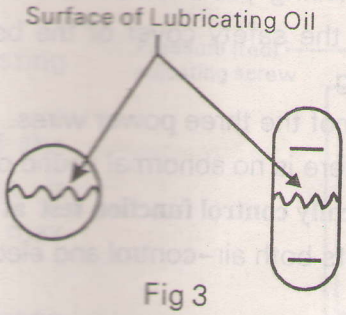


Fig 3

c) If the quantity of the oil is not enough the machine will not run normally even damaged.

d) However, using too much oil not only a waste of money but also leading to carbon accumulated in the exhaust valve, which will influence the efficiency of the machine and reduce the service life of the machine.

e) Pay attention to the quality of the oil, if it is too dirty please change it in time.

Checking before using

1. Check all the screws or nuts.
2. Whether the belt's tension is right.
3. Check whether all the lines are right.
4. Check whether the position of the surface of lubricating oil is right.
5. Check whether the use of the wires and the wiring of all the electric settings are acted as stipulation, whether the wiring are right and firmly.
6. Check whether the pulley can run smoothly by running manually. (Be careful in case of the pulley hurt the hand) .

Precautions after running

1. If all of the above has been finished you can open the exhaust valve completely, then press the "start" button(or close the switch) let the machine start without load, this can prolong the service life of the motor and the air compressor.

Note: if it the first start after wiring you should make sure that the turning direction is the same as the direction showed on the safety cover of the belts through start–stop. The three–phase motor can change the turning

through change wiring any two of the three power wires.

2. Five minutes after start if there is no abnormal sound or vibration then it can work normally.

Note: Do the pressure automatically control function test at first running .

KB series air compressor adopts both air–control and electriccontrol–working way except the other ways required by the users.

The three–way–switch is placed outside the electromagnetism switch, push it up the air compressor will work in electric–control way. After the machine start and running stably, turn down the exhaust valve gradually make the pressure rise, when the pressure reach the fixed upper limit the pressure switch will cut off the power and the compressor stop running. And then open the exhaust valve gradually, when the pressure falls down to the fixed lower limit, the pressure switch connect the power make the compressor run again. So, this is the "load unload–

Running in electric–control way is apply to discontinuous air supply situation, in order not to start the motor frequently, the gap of the pressure switch should be adjusted as big as possible, generally the gap should not less than 0.25–0.3 mpa.

Pull down the three way switch , the air compressor will work in air–control way .Start the machine after it running stably turn down the exhaust valve gradually make the pressure rise. When the pressure reaches the fixed upper limit the electromagnetism valve will work make the compressor run without load then open the exhaust valve gradually. When the pressure falls to the fixed lower limit the compressor will work again. So, this is the "loading–unloading–loading" model.

Running in air– control way is apply to the continuous air supply situation. The gap of the pressure switch should not less than 0.2mpa.

Under the electric–control situation, when the pressure reaches the fixed upper limit and the compressor will stop automatically, but the compressor is still electrophorus

However, when the pressure falls down to the lower limit it will work automatically again. It is dangerous to touch the transmission system in case of hurt.

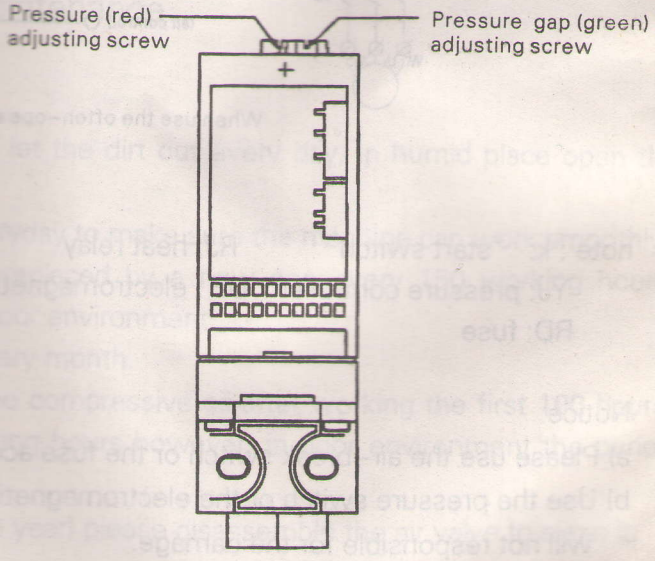
Pressure Switch Adjustment

1.Turn the pressure–adjusting screw clockwise it will

increase the upper limit of the working pressure , make sure that it below the air compressor's max working pressure .

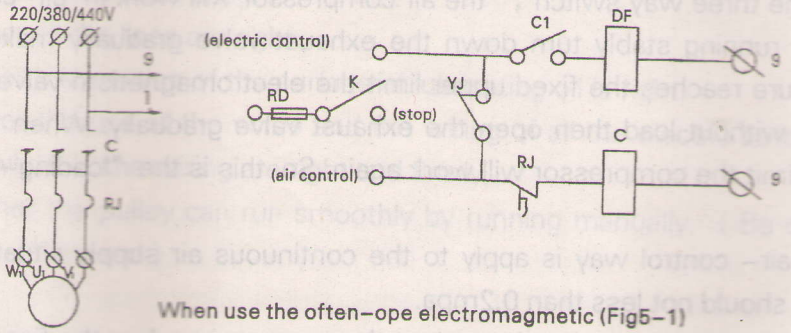
2.Turn the pressure gap adjusting screw clockwise will increase the working pressure gap.

Notice: the pressure switch has been adjusted to the normal working state please don't adjust it by yourself. If it is really needed to adjust please ask some experienced technicians for help.

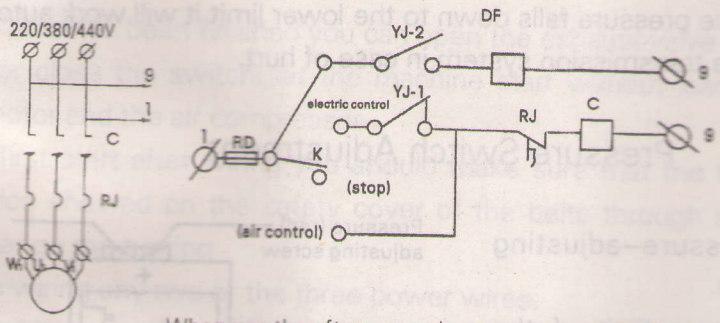


Pressure switch Fig.4

Electric Principle Chart of air–control, electric– control and pressure control.



When use the often–ope electromagmetic (Fig5–1)



When use the often–ope electromagmetic (Fig5–2)

note : k: "start switch" RJ: heat relay C: AC contact
YJ: pressure controller DF : electromagnetic valve
RD: fuse

Notice:

a) Please use the air–break switch or the fuse according to the stipulation of the motor.

b) Use the pressure switch or the electromagnetism switch appointed by our company, or we will not responsible for the damage.

Safety Valve

The discharge valve of the safety has been fixed before dispatched from the factory please don't adjust it by yourself. If you have some questions please contact the seller!

About Air Control System

KB series air compressors have both air and electric control system. Air control is load–unload–load system, which applies to continuous air–supply situation.

Electric control is the load–stop–load control system, which applies to discontinuous air–supply situation.

The both air and electric control type air compressors have two–control system that can work under each of the control systems according to the real situation. If the motor starts frequently over ten times an hour please switch to air control system by adjusting the manually–operate–switch to protect the motor. If the air compressor unloading for a long time please switch to the motor–control system to reduce consumption.

Maintenance

1. Keep the machine clean.
2. Open the relief valve on the tank to let the dirt out every day, in humid place open the valve every 4 hours.
3. Please check the oil level surface everyday to make sure the machine can work smoothly.
4. The air filter should be cleaned or replaced by a new one every 150 working hours; however the period should be shortened in poor environment.
5. Check the belts and all the screws every month.
6. For a new machine please change the compressive oil after working the first 100 hours, then please change the oil every 1000 working hours however, in poor environment the period should be shortened.
7. After running for 1,000 hours (or half a year) please disassemble the air valve to clean it.