Assembly of RAETTS high speed centrifugal blower

Email: sales@raettsgroup.com/dannis@raetts.com
Website: www.raettsgroup.com

First, we started to assemble our motor base. In our base are 4 shock absorbers with 8 holes and 8*16 combination screw. What we need to pay attention to is that the shock absorbers need to be pushed to the same place, all to one side. This is a positioning, and then tighten it.

Next assemble the base. First, the base is installed under the motor. The screws we use are m12*30 outer hexagon screws. The tool we use is a 19 open wrench. Then aim at these four holes, install the screws then tighten with the wrench.

Next, install the motor flange. There are two flanges, which need to be spliced into one piece. The smooth side is above. The four holes are respectively aimed at the four holes above the motor. First, put one flange in, aim at the two holes, and then insert another piece and splice them together.

After the flange of the motor was installed, we started to install the aluminum plate. The pump head can be installed to the left, forward or right depending on the requirements. Our normal installation position is the direction of the pump head to the left. The four holes should be aligned. The screws to be used are M12*50mm hex screws, we put them in. Need to use 12mm spring pad, 12mm flat pad, 12mm nut each four, we put them up.

The next thing I want to tell you is that the installation position of the four screws is related to the tension of our tensioner. Take our 5.5KW blower as an example, we need to push it to this side. But for other powers, we will have another installation method, and we will have a special video explanation later. After pushing this side, the aluminum plate needs to be parallel to the base plate, and then we tighten it. The tool to be used at this time is a 19mm open end wrench.

Now that the aluminum plate is installed, we start to install the tensioner. First we installed the spring on the lock plate shaft. There are two holes in the lock plate shaft, and there are 4 holes in this groove. There are two holes in the lock plate shaft, and there are 4 holes in this groove.

We first put the hole of the lock plate shaft on the spring. The spring in this position must be installed in place. After that, we put the spring into the first hole below. Next we will use this left-hand screw to fix the lock plate shaft. Use a 10mm hex wrench and tighten.

Next we will install this wheel on the lock plate shaft. The wheels are divided into upper and lower sides, one side is a large oil seal, and the other side is a small oil seal. We put a small oil seal down, a large oil seal up, and install it.
After installing the tensioner, we put the oil seal inner ring in. The oil seal inner ring is covered with a pressure cap. We fix it with 10*20 anti-tooth screw, then lock it with an 8mm inner hexagonal wrench. Then we used the 6mm inner hexagonal wrench to borrow force and locked the tensioner. After installing the tensioner, we should pay attention to whether our spring is in place, and try the spring’s elasticity.

After installing tensioner, we begin to install the belt pulley. This is our motor belt pulley. The next step is very important. First, we use an 8 mm inner hexagonal wrench to loosen the three screws and take out belt pulley base. We insert the flat key first, and then knock it with a rubber hammer.

Next, we will install the base, use a 6mm inner hexagonal wrench to loosen the two screws. The key groove position is aligned with the key groove on the axis of the motor. Then use a depth ruler tool, from the flat position of the belt pulley base to the position of the aluminum plate, we pre-installed the height of 21mm. If belt pulley is not parallel, we need to adjust it.

Now using a 2.5mm inner hexagonal wrench to tighten the machine-meter screw. Next, use the 6mm inner hexagonal wrench to tighten the two screws. We should pay attention to tightening the two screws in turn. It is wrong to tighten one side only.

After tightening the base of belt pulley, install belt pulley. This position of the belt pulley is aligned with this line of belt pulley base. This is a method for us to balance. After that, we put these three screws on. Then belt pulley has already been assembled.

After finishing installing belt pulley, we put the whole machine on the platform. Next, we install the blower head. We will use 8 m8*30 inner hexagonal screw. The tools used are 6 mm inner hexagonal wrench and 8 mm inner hexagonal wrench. First, put two screws to the screw hole, and then take out the pump head gasket to align with these two screws.

There are eight holes here. Aim at two screws with two holes. Put these two screws on blower head first. At this position be careful that the belt pulley can't collide with the aluminum plate. Tighten these two screws first, then tighten the remaining screws. Here we can press tensioner down. Now, blower head has been assembled.

After installing of blower and blower head, we started to install the high speed belt. We will used an 8 mm hexagonal wrench and a universal belt. Firstly, use an 8mm inner hexagonal wrench to push tensioner down. Then put belt on a small pulley first, then put belt on a large pulley, and then push belt in.

After the belt is installed, we can turn the big pulley to hear whether blower head has abnormal noise. After blower head is assembled, next we need to pay attention to the fact that this side of the big belt pulley needs to be parallel with the side of the small belt pulley. If it is not parallel, it will have some effect on our belt, such as accelerating the wear and tear of the belt and generating some noise.
Next, we use a lever ruler to measure the parallelism. If it is parallel, the installation step is OK. If it is not parallel, we need to move the base of the belt pulley back and forth to achieve parallelism.

Next we started installing blower cover. This is our blower cover. We will use 6*16 inner hexagonal combination screws and M5 inner hexagonal wrench. Put all screws into holes first, but note that don't tighten them up, because there will be a slight deviation. When all screws are put into holes, it is ok to tighten them, And now we can tighten them up.

Next is the last step of installing the blower, the installation of the wire connector. This is a wire connector of m32*1.5. First, loosen the screw, then remove screw cap. Because screw hole has teeth, so we should take screw cap off, then put wire connector into the screw hole.

The above is the installation step of RAETTS high speed centrifugal blower. For more information, please contact RAETTS’s engineers. About blowing water, we are professional!