AFINIBOT A1

INSTALLATION GUIDE

Step 1 Assemble motor_end

- Put six M3*14mm inner hexagon screws and M3 cushion rings into the Motor_end , lock with M3 nuts but do not tighten ,as picture.
- Put the motor on the motor_end , locking with four M3*10mm and M3 cushion rings.
- Another two motor_ends are the same assembly



Step 2 Assemble idler_end

- Put fouaaaaar M3*14mm inner hexagon screws and M3 cushion **rings** into the **idler** end , lock with M3 nuts but do not tighten ,as picture.
- Put a **limit switch** on the **idler end**, locking with two black M2.5*10mm self_tapping screws. Put the limit switch on after the M5 nut.
- Install **Ball bearing**, Use 1pcs M5*25mm inner hexagon screw, 2pcs M5 Cushion ring, 3pcs M5 small cushion ring and

washer, big washer, plastic, small washer, nut Another 2pcs idler_ends are the

same assembly.



Step 3 Assemble Cooling fan 1



Step 4 Assemble Cooling fan 2

 Assemble the Cooling fan and the Fan_mount 2 together, locking with 2pcs M3*14mm inner hexagon screw and M3 nuts.

M3*14mm Inner

hexagon screw*2

This step already done, but wire comes out top left rather than bottom right! Turned it 180 degrees and reattached to mount







Step 7 Assemble Aluminum plate

- Firstly install_Copper_pillar on the Acrylic board , locking with 3pcs M3*10mm
 Flat_head screws from bottom to up, as picture.
- Through Aluminum plate and Pressure spring which used M3*14mm flat_head screws ,locking to the copper pillar. Actually seem to be M3*12 countersunk bolts



Do not remove blue masking tape as this helps the printed part adhere to the bed.

Step 8 Assemble Base plate

- Put 3pcs Motor_ends under the Base plate, Locking with M4*30mm inner hexagon screws and M4 cushion rings
- Put LCD display to the Base plate , locking with 2pcs
 M3*16mm Round head cross screws and M3 nuts
- Put control board assembly to Base plate , locking with 2pcs
 M3*16mm round head cross screws and M3 nuts



Step 9 Assemble Carbon fibre hollow tubes



Step 10 Connect Extruder & Carriage

- Lock the other end of the Carbon fibre hollow tube to the Extruder with 1pcs M3*25mm screws and 2pcs M3 nuts as picture. Others end are the same assembly.
- There is no mention of the anti-backlash springs Snap the spring sleeves onto either end of each carbon fibre rod Ease the spring end hoops over the spring sleeves connecting a spring between two rods at either end M3 nut Carriage Magnified M3 nut M3*25mm inner Extruder hexagen screw

Step 11 Insert the Sliding Rods.

- Insert the 6pcs Sliding rods to the Motor_end, ensure the same height of each sliding rods. Then locking the 18pcs M3*14mm screws.
- Through the Carriage to each sliding rod, attention the cooling fan 1 is on the right side.



Step 12 Assemble Top Plate

- Install the 3pcs Idler_ends to the Top plate as picture, locking with 2pcs M4*30mm inner hexagon screws and M4 cushion rings
- Put Feeder on the Top plate ,locking with 2pcs M3*14mm hexagon screws from bottom. See the picture.

Probably best to put the feeder on first. Note the diagram of the feeder is misleading. The brass and blue pipe socket (ringed in red) shown on top should in fact be underneath. It sticks through the large circular hole. The two small holes either side are for the M3*14mm bolts for mounting the feeder.



NB The limit switches must be on the bottom of the idler end

Step 13 Install Top plate

- Insert the Sliding rod to the Idler_end hole one by one.
- Locking the M3*14mm screws on the idler_end.



Step 14 Install Timing belt

Loosen stepper motor mounting bolts of X, Y and Z axes Put one end of the Timing belt into the Carriage tooth.

Another end through motor_end and idler_end , tense the belt and then insert to the carriage tooth.

Cut timing belt to correct length and then insert into carriage teeth

Push down on each motor to increase tension in timing belt and retighten motor mounting bolts.



Step 15 Connect the Cables

 Connect the DC power cable and On_off switch as picture .





Step 16 Assemble Feeding Frame



Step 17 Install Filament holder

 Put the Filament holder on the top of the machine, as picture.

