

Condor machine Maintenance Manual 10

Note: This manual is applicable to models with serial number KM03、KM05、KM09、KM14 of Condor machine series model.



1 Machine disassembly exploded pictures



P1









P2



P4



2 Method of replacing parts due to machine malfunction

2.1 Replace the driver board

Please refer to P1 and P2 to remove the rubber plug and screws in the **red frame** and **black frame** and remove the screen and rear cover, then turn the switch knob down and pull the **white buckle** in the **red frame**



outward to remove the switch knob, and remove the screws in the right **red frame** and remove the screws that secure the board. Replace the driver board and insert the port according to the wire harness label.

2.2 Replace the mainboard

Please refer to **P1** and **P2** to remove the rubber plug and screws in the **red frame** and **black frame** and remove the screen and rear cover, then refer **P3** to remove the screws in the **black frame** at position ① and remove the screws that secure the board to replace the mainboard. Insert the port according to the wire harness label.

2.3 Replace the screen

Please refer to P1 and P2 to remove the rubber plug and screws in the **red frame** and **black frame** and remove the screen and rear cover.

2.4 Replace the power board

Please refer to **P5** to remove the screws in the **white frame**, remove the screws that secure the board and insert the port according to the wire harness label.

2.5 Replace the motor

2.5.1 Replace the spindle motor and the cutter shaft

When the motor makes abnormal noise, it needs to be replaced. Refer the **chapter 2.5.4** to remove the Z-axis screw shaft motor first, and remove the screws in the **red frame** below.



Then remove the spindle shaft to replace, insert the port according to the wire harness label.

2.5.2 Replace the X-axis screw shaft motor

When the screw motor gets stuck or bent, the X-axis screw shaft motor need to replace. Refer chapter 2.1 and 2.2 to remove the mainboard and driver board, then refer P1 and P2 to remove the screws in the yellow frame, refer P4 and P5 to remove the screws in the black frame. Then move the entire shell forward and take it out, refer P6 to remove the screws in the black frame, then pull the fixed body upwards and remove it. Then see the picture below, remove the belt first, and remove the screws in the black frame to change the motor. Remove the buckle in the right picture to replace the shaft. Do not remove the bearing when replacing the shaft.



2.5.3 Replace the Y-axis screw shaft motor

When the screw motor gets stuck or bent, the Y-axis screw shaft motor need to replace. Please refer to P1 and P2 to remove the rubber plug and screws in the red frame and black frame and remove the screen and rear cover. Then refer P3 to remove the belt and the screws in the green frame at position (2), remove the Z axis motor first and remove the screws in the white frame at position (3) to replace the motor.

Refer **chapter 2.5.4** to remove the Z-axis screw shaft motor first, then remove the Y-axis buckle according to the following picture to replace the Y-axis screw shaft.



2.5.4 Replace the Z-axis screw shaft motor

When the screw motor gets stuck or bent, **the Z-axis screw shaft motor** need to replace. Please refer to **P1** and **P2** to remove the rubber plug and screws in the **red frame** and **black frame** and remove the screen and rear cover. Then refer **P3** to remove the belt and the screws in the **green frame at position** (2) to replace the motor.

Replace the Z-axis screw shaft need to remove the screws in the picture below



Then lift the spindle forward, tilt it to one side, and then move it forward to remove it, turn to the bottom again to see the Z-axis buckle, remove it to replace the Z-axis screw shaft.



2.6 Replace the sensor

2.6.1 Replace the X-axis sensor

When the sensor is defective or damaged, it needs to be replaced. Please refer **chapter 2.5.2** to remove the screws in the **red frame** at position **X**, then replace it. Insert the mainboard port according to the wire harness label.



2.6.2 Replace the Y-axis sensor

When the sensor is defective or damaged, it needs to be replaced. Please refer to P1 and P2 to remove the rubber plug and screws in the **red frame** and **black frame** and remove the screen and rear cover, then refer P3 to remove the screws in the **red frame at position Y** to replace it. Insert the mainboard port according to the wire harness label.

2.6.3 Replace the Z-axis sensor

When the sensor is defective or damaged, it needs to be replaced. Please refer to P1 and P2 to remove the rubber plug and screws in the **red frame** and **black frame** and remove the screen and rear cover, then refer P3 to remove the screws in the **red frame at position Z** to replace it. Insert the mainboard port according to the wire harness label.

2.7 Replace the probe base

Remove the screws in the picture below



Then send the wiring harness forward, after prying open, remove the screws in the right picture below, gently lift the aluminum foil paper.





Unplug the port to remove the probe base.







2.8 Replace the knob switch

Replace the knob switch need to turn the switch knob down and pull the **white buckle** in the **red frame** outward to remove the switch knob, then replace it and insert the port according to the wire harness label.



2.9 Replace clamp parts

M5 clamp: Remove the nut in the **white frame** and remove the screws in the **red frame** on the picture below, rotate the knob outward on the left picture, then it can be disassembled. Replace the corresponding parts according to the picture on the right.





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