New-Tech GC-8B

Instructions for Electronic Control System Operation

1. Basic Operation

P, S keys for setting parameters or other functions;

When standby, press P key to set up up up stop needle, down stop needle, no stop needle function.

When standby, press + - key to quickly adjust the setting speed; press S key, the needle bar lights up, press again and then out.

2. Parametric model

Press the combination key of P key +"+key" to enter the parameter mode and display "P00";

Press + - key to change the parameter serial number, press P key to display the corresponding parameters, press + - key to modify the specific value, press S key to exit the parameter mode, return to the normal standby state;

When the operating box set parameters, even if the pedal, it will not run, only return to standby mode can run.

Specific parameters are as follows:

Parameter number	Description of parameters	Default	Range	Step size
P1(Advanced parameters)	Sewing speed limit	4000	1000~7000RPM	50
P2	Motor direction	0	0~1	1
P3	Down-stop needle angle	12	10~14	1

P4	Starting speed	250	200~800	50
P5	Acceleration speed	3200	1200~4000	200
P6	Find up-needle position automatically	1	0~1(find)	1
P7	Aging rate	3700	1000~4500rpm	50
P8	Aging Running Time	3000	500~5000ms	100
P9	Aging pause time	2000	100~5000ms	100
P10	Reserve	0	0~1	1
P11	Pressure foot control (electromagnet)	35	20~70	1
	Pressure foot control (pneumatic)	1	0~1(1:select)	1
P12	Pressure foot down delayed operation	0	0~200ms	20
P13	Suction selection	1	0: No suction 1: Long suction 2~250 needles: Interval suction The number of needles is set every other time in the row. Suction once, stop without suction Wind)	1
P14	Interval suction maintenance time	1	1~5s(Set P13 to 2-250 Effective time)	1
P15	Number of soft start needles	0	0~15(0: No soft start, 1 Represents half needle, 2 represents one needle. Reason by analogy)	1
P16	Soft Start Speed	400	200~1500RPM	50
P17	Reserve	0	0~1	1

Attention：

P11: For the electromagnet, please set this parameter reasonably. The setting value is too small for the electromagnet to lift and too large for the electromagnet to overheat easily. When the lifting foot is lifted all the time, it will close itself after 15 seconds.

P12: This parameter is to ensure that the lifting foot is reliably lowered before sewing. When the lifting foot is not connected, the parameter is set to 0. Otherwise, the running time will be delayed when the lifting foot is stepped back and then forward.

P15: The soft start function is effective only when the upper and lower needle positions are set. When the pedal is set to stop the needle, it will stop at the upper needle position after stepping on the running pedal, then the next opening will start soft; when the pedal is set at the lower needle position, after stepping on the upper needle position after stopping or running the pedal, the next opening will start soft.

3. Recovery of factory parameters

Method 1. Enter the parameter setting, display "P00" and press "S" for 3 seconds to automatically restore the parameters.

Method 2. Press the P key to power on and restore all parameters.

4. Password mode

Press the P key +"-" key to enter the password mode, showing "0000".

Press the P key to move left and right, the current number will flicker, press the'+', -'key to adjust the value; after setting, press the S key to confirm; if the password is wrong, it will be transferred to standby mode; if correct, it will show "P00" and set the highest speed after adjusting to "P01".

5. monitor model

Press P + S key to enter the monitoring mode, it will display C-XX, press P key to display the corresponding monitoring value, press S key to return to standby mode.

The monitoring contents are as follows:

C-01: Actual Speed of Motor

C-02: AC feeder voltage (reference only when shutdown)

6. Factory aging model

Press S key to power on, and the system enters the aging mode.

Method 1. In this mode, the motor is started by pressing S + key, and the motor is stopped by pressing S + key.

Method 2. You can click on the pedal once to start aging, and then click on the pedal once to stop the machine.

Pay attention to the panel startup shutdown and pedal startup shutdown do not mix.

7. Failure mode

Fault code	Fault Content	Possible causes	Remarks
Er01	No stop position was found.	The locator plug is not plugged in properly	· Recoverable without affecting operation · If the needle position is set, it will automatically turn to non-stop operation, and prompt Er01 to alarm without stop signal. · If the small operating box is changed to needle-free setting, the alarm failure will disappear automatically.
Er02	No pedal signal found on boot	Unplugged or disconnected pedal plug	Recoverable, plug-in and run
Er03	Error in Hall Line of Motor	Check plugs	Recoverable, plug-in and run
Er04/Er11	Stemming or overload protection	Check whether the nose is stuck.	The pedal is restored
Er05	Hardware Overcurrent Protection	Overload or PCB Problem	Unrecoverable, power down
Er06	Operating Box Communication Error	Operating box and motherboard plug loosening or bad signal lines	Recoverable without affecting operation
Er07	Wheels are too different	Wheel deviation is too large in suspension applications	It can be restored without affecting the operation, but it will affect the effect of needle stop.

Er08	Hardware Circuit Problems	Check circuit boards	Unrecoverable, power down
Er09	Motors do not operate	Electric Wire Not Connected or Board Problem	Unrecoverable, power down
Er10	Overvoltage fault	Check whether the incoming voltage is too high	Normal Voltage Recoverable
U-Lo	Undervoltage alarm	Check if the incoming voltage is too low	Normal voltage can be restored without affecting operation.

8. other

This electronic control system supports direct drive and belt suspension products. For belt suspension products, wheels are calculated automatically by the system. Needle stop points are calculated by the upper needle stop sensor. Because of the slippage of the belt, the error of needle stop is larger, which is a normal phenomenon.