

3. Operation box

Function	Button	Described
Starting reinforcing-sewing		Execute starting reinforcing-sewing 2 times, to and fro.
		Execute starting reinforcing-sewing 1 times, to and fro.
ending reinforcing-sewing		Execute ending reinforcing-sewing 2 times, to and fro.
		Execute ending reinforcing-sewing 1 times, to and fro.
free-style sewing		Press treadle ahead for normal sewing, stop in the middle, behind for thread-cutting and thread wiping.
continuous reinforcing-sewing		1. Press treadle ahead for automatic sewing, to and fro, which is set at D and can reach 15times.(F) 2. Continuous reinforcing-sewing is in trigger mode by default, treadle doesn't need to be kept being pressed, and corresponding trigger light of preset sewing is solid lit. 3. Previous ending reinforcing-sewing setting is invalid if this function is valid.
preset sewing		1. Press treadle ahead to execute sewing times set at E or E, F, G, H. 2. Sewing will stop immediately if treadle is lifted; press treadle again, it will go on with the rest. 3. Ending reinforcing-sewing (if selected), thread-cutting and thread wiping will be automatically executed after sewing is completed.
parameter setting		1. For preset sewing. Trigger treadle and the system will automatically conduct sewing at E, F, G, H sections; the treadle doesn't need to be kept being pressed. 2. Solid light for continuous reinforcing-sewing mode means that it is trigger mode by default.
thread-cutting		Set or cancel thread-cutting function.
needle-lifting /stitch		Free sewing mode, can be based on the according to the length of time is different, complementary half needle, a needle or continuous feeding half needle.
Pinnumberset/check choice		1. Implementation of this key, circulating switch display 3 pin number to set the display value upper end: A, B, C, D Period of pin number, Light corresponding level; Middle end: E, F Period of pin number, Light corresponding level; lower extreme: G, H Period of pin number, Light corresponding level; 2. Corresponding to A D period of pin number, can set range 0 ~ 15 needle, B paragraph C pin number, can set range 1 ~ 15 needle, among them, the liquid crystal display A B C D E F on each for 10 11 12 13 14 15 stitches. 3. To take the thread clamp function model, according to the buttons can show long thread clamp strength adjustment (3 bright lights and three, liquid crystal display [7]), again according to the key exit.
parameter setting		1. Entering different parameter level On the sewing setting interface, the user can press the button P to enter the Parameter Interface, then the Level I parameters in the parameter list will display. On the sewing setting interface, the user can keep pressing the button for a few seconds to enter the Password Entering Interface. After entering the right maintenance password, then the user can press the button P to enter the Parameter Interface, now the Level I and Level II parameters in the parameter list will display. 2. Password setting On the sewing setting interface, the user can keep pressing the button P for a few seconds to enter the Password Entering Interface, and press the button combination of "burst button + cutting button" to enter the Password Resetting Interface. The three indicators (respectively are Indicator S1, S2 and S3 from up to down, among which one is on) corresponding to the button S indicates the current status. S1 lights up, old password input, ending the key combination trigger key + tangent key, if the correct password into the password reset interface (mistakes have stayed the S1 state), and at the same time S2 light, prompting the input new password and click confirm S3 S key input again when the light is the new password, according to S key after two input if consistent, then set success, return to parameter interface. If the new passwords entered are not the same, the Indicator S1 will be on and the LC screen will be reset, and the user shall enter the old password again. If the user presses the button P, the user will be brought back to the interface parameters and no modification will be saved. You can choose from the numbers of 0 to 9 or the letters of A to F for every single character of the password. Please do keep the new password in mind.
speed key		Speed down. Keeping pressing to lower speed, the display will automatically switch to speed set. Simple seam, free seam effective. (Application of liquid crystal panel).
		Speed up. Keeping pressing to increase speed, the display will automatically switch to speed set. Simple seam, free seam effective. (Application of liquid crystal panel).

note: After the power is above HMI display "[99]", click S (aircraft code setting interface): the first time when entering the display '-', '+', according to scan the models, S button, enter (confirmation interface), press the '-', '+', key switch to 'YES' or 'No'; selection yes: press the S key to set the selected type code, after finishing into the free joint interface.
Select No: press the S key to return to [type code set interface], '-', '+', key to continue browsing model.

4. System Info

Operation panel default mode, press the button at the same time in P made sewing needle trigger select key, enter the system monitoring state through the + key choose need to look at the project, according to the S button to enter/exit the selected projects such as the need to exit monitoring interface, according to P keys can be.

show frame numbers	Item Name	unit	show frame numbers	Item Name	unit
JJ	Plan number	piece	U5	Mechanical Angle with	limit
U1	speed of motor control	rpm	U6	Motor initial Angle	limit
U2	Motor Current	0.01A	U7	Master control program version	/
U3	Motor Voltage	V	U8	Head type	/
U4	Pedal voltage	0.01V	vEr	Operation box version of the program	/

5. Error codes

Error Code	Contents	Possible reasons	Checking and treatment
E011 E012 E013 E014	Motor signal error	Motor position sensor signal failure	If electric engine plug is well contacted; if electric engine signal detecting device has been broken; if sewing machine handwheel correctly installed.
E015	Model type error	Unable identify operating box model type	Check operating box
E021 E022 E023	Motor overload	motor stall motor overload	If electric engine plug is well contacted; if machine head or thread-cutting mechanism has been blocked completely; if materials are too thick; Electrical signal detection signal whether the normal.
E101	Hardware drivers fault	Current detection abnormal Driving hardware error	Current detection loop system is working properly; Whether the damage to the device driver.
E111 E112	Voltage too high	High input voltage Brake circuit fault Voltage detection error	System into line voltage is too high; Braking resistance are working properly; System voltage detection circuit are working properly.
E121 E122	Voltage too low	Actual low voltage Voltage detection is wrong	If the voltage on the inlet wire is too low Whether the system voltage detection circuit the normal work.
E131	Current circuit fault	Current detection abnormal	Current detection loop system is working properly.
E133	Oz circuit fault	Oz circuit fault	Oz circuit system is working properly.
E151	Magnet circuit error	Over current magnet circuit	If machine head magnet suffers short circuit; Electromagnet circuit is working properly.
E201	over current	Current detection error	Current detection loop system is working properly; Electrical signal is normal.
E211 E212	Abnormal motor operation	Current or voltage detection error	If electric engine plug is well contacted; If electric engine signal is matched.
E301	Communication error	Sci circuit error	If operation box plug is well contacted; if operation box components are damaged.
E302	Operation inner failure	Sci circuit error	To check whether the operating box is damaged.
E402	Pedal ID fault	Pedal verification fault	Pedal connection is loosen.
E403	Pedal zero position fault	The pedal zero position over range	The pedal is damaged or it is not under stop state when correction.
E501	Safety switch fault	Safety switch effective	Put down the head or check turned up switch.
P.oFF	Power off Display	Power off	Wait for power supply to resume.
EvAl	Trial expired	Trial expired	Contact the dealer processing

Note: 1. Sewing abnormal action (speed electromagnet work abnormal) : in the control interface view model is correct;
2. Turn up E501 fault when: sure it is normal to switch detection, temporary use can change the P-28 parameters;
3. If the above according to check the project cannot rule out fault, please seek technical support.

6. Accessories

NO	Product name	Amount	Product specification	Remarks	NO	Product name	Amount	Product specification	Remarks
1	Electric control box	1			9	certificate	1		
2	pedal	1	PL-302		10	Protection cover	1	80SF90-B5000-561	apolegamy
3	Operating box	1	EP-014	apolegamy	11	Tie wire belt	4	CV-160L	apolegamy
4	bracket	1	WR59-01-16	apolegamy	12	desiccant	1		
5	Stopping device	1	565	apolegamy	13	accessories package	1	WR561-lthe universal motor	apolegamy
6	Ball section connecting rod	1			14	Random accessories	1	80SF90-B5000-561	apolegamy
7	Power cord	1			15	Triangle belt	1	44	apolegamy
8	The instructions	1			16	Screw accessories packet	1	WR596	