WR58S9 split type sewing series specification V1.0

1. Safety Precautions

Before use, please read carefully both the technical data and the operation instructions of the corresponding sewing machine for proper operation.

1.1 (1) Power supply voltage and working frequency: please follow the specification of the motor and the nameplate of control cabinet.

(2) Electromagnetic wave interference: please keep the machine away from the high frequency magnetic wave machine or radio transmitters, etc., in order to avoid malfunctions caused by the electromagnetic interference to the driving gear.

(3) GND: To prevent noise interference or the electric leakage accident, please ensure proper earthing (including the sewing machine, motor, control box, and locator).

1.2 Before tearing down the motor or control box, make sure the plug is not charged; to avoid the dangerous high voltage in the control box, only more than 1 minute after the power is off can the cover be opened.

1.3 To guarantee personal safety, make sure the power is off when repairing the machinery or needling work is on.

1.4 ⚠ This symbol signifies that in the machine installation any mistakes could cause harm to human body or damage to the machine.
⚠ This symbol, which can be seen in places of electrical dangers, is a warning of such dangers as high voltage.

1.5 The warranty period will be one year if the machine is working under normal condition and not mistakenly operated.

1.6 ⚠ Note time to clean the sensor, prevent affect use. Recommendation 1-2 days to clean up again.

2. Parameter Table:

Serial number	Function parameter	Default	Range	Step	Parameter specification	Grade
1	Operation Mode Selection	0	0~2	1	0: semi-automatic 1: manual 2: Full-automatic	I
2	Front cut needle count	4	0~50	1	0: front cut invalid 1~50: set pin number for back cut after the front cut sensor	I
3	Back cut needle count	3	0~50	1	0: back cut invalid 1: needle initiation after the front cut sensor 2~50: set pin number for back cut after the back cut sensor set count-1	I
4	Front suction selection	1	0~1	1	0: no front suction 1: front suction on	I
5	Back suction selection	1	0~1	1	0: no back suction 1: back suction on	I
6	Long suction selection	0	0,100,150,200, 250, and on	/	0: long suction invalid 100~250: interval suction (display *10) on: always valid	I
7	Holding time for back suction or interval suction	500	100~5000(ms)	100		I
13	Before and after cutting photoelectric strength	90	0~100	1		II
14	Before and after cutting sensitivity	20	0~100	1		II
15	After cutting the photoelectric intensity	90	0~100	1		II
16	After cutting the sensitivity	20	0~100	1		II
17	Presser foot photoelectric strength	90	0~100	1		II
18	The sensitivity of foot	20	0~100	1		II
19	Presser foot function	1	0~1	1	0: invalid 1: valid	I
20	Automatic presser foot	1	1~3	1	1: Before the presser foot lifter; 2: After the presser foot lifter; 3: Before and after automatic presser foot	I
21	Needle position selection	0	0~1	1	0: upper needle position 1: lower needle position	I
22	Power on to find the above needle position	0	0~1	1	0: invalid 1: valid	I
23	Needle bar lamp brightness	3	0~5	1	0: no brightness 5: high brightness	I
24	Automatic mode	Foot	Foot/Auto	/	"Foot": Pedal to start the "Auto": Automatic startup	II
25	Presser foot safety switch	1	0~2	1	0: normally on 1: normally off 2: cancel	I
26	Bedplate safety switch	1	0~2	1	0: normally on 1: normally off 2: cancel	I
27	Safety delay time	2	0~5(s)	1	0: no delay	I
28	Full manual mode sensor switch	1	0~1	1	0:Function close 1:Function of open	II
29	Semi-automatic continuous sewing	1	0~1	1	0: Function close 1: Function of open	II
30	Semiautomatic seam free mode switching	Free	Free / Semi	Free	Free: semi-automatic mode free seam Semi: Semi-automatic mode	I
31	Auto Mop Wheel function	0	0~1	1	0: invalid 1: valid	I
35	Back-step cut selection	1	0~1	1	0: invalid 1: valid	I
38	Mesh fabric pore size	3	1~10	1	When the hole diameter larger than the sensor size should be set to be larger than 5	I
39	Small cloth patchwork function	0	0~1	1	0: invalid 1: valid(As a small triangle of fabric splicing)	I
40	Soft start pin number	0	0~9	1	0: no soft start 1~9: soft start pin number	I
41	Soft start speed	800	200~3000(rpm)	100	Soft start speed	I
42	Low-speed speed	300	200~400(rpm)	100	Minimum sewing speed	I
43	Front cut speed limit	3500	200~ P50 (rpm)	100	Front cut speed limit	I
44	Sewing speed	4500	200~ P50 (rpm)	100	Actual sewing speed setting	I
45	Anti Cheb protection switch	0	0~1	1	0:Close 1:Open	II
46	After cutting pause time	0	0~ 5000(ms)	100		II
49	Restore to factory parameter	0	0~15	1	5: restore the current level factory parameters 8: restore the current level and sewing factory parameter set According to S button, select yes, then press the S key execution	I
50	maximum sewing speed	6000	300~7000(rpm)	100	Maximum sewing speed	II
52	Sensor interval	20	1~50	1		II
53	Tangent to keep time	50	10~100(ms)	5		II
54	Presser foot lift time	500	100~2000(ms)	10		II
55	Presser foot confirmation time	10	10~300(ms)	10		II
59	Sewing delay time	200	0~800	10	Presser foot down command is issued Millisecond delay (P59) before sewing	II
60	Pedal curve selection	0	0~2	1	0: normal 1: slow down increasingly 2: speed up increasingly	II
61	Pedal neutral position	0	-15~15	1	Trimming the neutral position of the pedal	II
62	Start pedal stroke	25	10~50	1	Pedal position upon start Travel relative to medium pedal	II
63	Accelerate pedal stroke	50	10~100	1	Pedal position upon start acceleration Travel relative to medium pedal	II
64	High-speed pedal stroke	110	10~150	1	Pedal position at highest rotating speed Travel relative to medium pedal	II
65	Presser foot up stroke	-30	-100~-10	1	Pedal position upon pedal lift Travel relative to medium pedal	II
66	Presser foot down stroke	10	5~50	1	Pedal travel from presser foot lowering position to neutral position Travel relative to medium pedal	II
67	Back step stroke1	-30	-100~-10	1		II
68	Back step stroke2	-60	-100~-10	1		II
69	Lower stop needle angle	175	120~240(degrees)	1	To adjust down needle position	II
71	Stop delay pin number	0	0~100 (stitches)	1		II
75	Nose benchmark position	120	0~240	1	Needle position adjustment	II
79	The start needle Rab	20	0~50(stitches)	1		II
80	Hou Labu start needle	12	0~50(stitches)	1		II
81	Rab Close frames	10	0~50(stitches)	1		II
90	Chinese/English selection	0	0~1	1	0: Chinese 1: English	II

Parameter Description: The following conditions the user can choose according to the actual situation.

1, P24 automatic trigger mode: Changes effective fully automatic mode.

In automatic mode, change number parameter P24, automatic operation can be changed working conditions.

When select "FOOT", when the cloth presser foot sensor block, as long as the forward pedal as you can run.

When you select "AUTO", when the cloth presser foot sensor block can be run directly.

2, P28 full manual mode sensor switch: Changes effective full manual mode.

In full manual mode, change number P28 parameter, the sensor can be changed under full manual mode determination state.

When you select "0," can not determine when the sensor after cutting the cloth before the cut or blocked, by manual trimming switch and the rear pedals can also be tangent.

Select "1", when the judge cut sensor front cloth cut or blocked, when the cloth to block the sensor, according to the manual trimming switch and the pedals can not be done after the thread cutting operation.

3, P29 semi-continuous sewing: Changes effective semi-automatic mode.

In semi-automatic mode, change number P29 parameters can change semiautomatic operation conditions.

When you select "0", no such function.

Select "1", when the first sewing is completed, release the pedal without (straight stepping on it), the second time after the sewing cloth presser foot lift occlusion sensor can start sewing.

4, P30 semi-free sewing mode switch: Changing the effective semi-automatic mode.

In semi-automatic mode, change the P30 parameter number can change semiautomatic start operating conditions.

When you select "Free", at any time at any pedal sewing, do not block the presser foot sensor.

When you select "Semi", presser foot sensor must be blocked before they can sew.

5, P38 cloth mesh pore size: Change valid at No. 01 cloth pattern.

At No. 01 cloth pattern, change number P38 parameters can be achieved mesh sensor is greater than the diameter of the sewing.

The larger the mesh parameter changes should be greater.

When the parameter is set to greater than or equal to 5, it will automatically reduce the presser foot induction time.

6, P39 small cloth patchwork features: semi-automatic mode continuous stitching sewing small triangle of cloth.

In semi-automatic mode, change number P39 parameters, continuous stitching small triangle of cloth.

When you select "0", no such function.

Select "1", when the first running a small triangle of cloth to cut front sensor pause, and then another and then into a small triangle of cloth presser angle below to start sewing, and so on.

7, P45 anti-cloth protection switch: semi-automatic and fully automatic mode is active

In the semi-automatic or fully automatic mode, change the P45 parameter number, enabling anti-cloth protection.

When "0", the current is greater than the number of stitches before the cut after cut sensor and cut the distance between the sensors, the cutter will cut the cloth.

When you select "1", the current cut pin number greater than the previous cut after cut sensor and distance between the sensors, there is no pre-cut action.

3. System Monitoring State

In the default mode of the operation panel, normally, when the p key combined with ⊚ mode key are pressed, the monitoring state will be activated. Then, pressing the up or down arrow key will make you known to the relevant monitoring parameter. Enter the System monitoring state. Press the + or − key to choose the item you want to view and key S to enter or return the selected item. If you want to exit the monitoring interface, press the P key.

Display No.	Project Name	Unit		Display No.	Project Name	Unit
U1	Motor speed	rpm		U6	Initial motor angle	degrees
U2	Motor current	0.01A		D1	DSP version	
U3	Busbar voltage	V		D2	DSP model	
U4	Pedal voltage	0.01V		H1	HMI version	
U5	Nose mechanical angle	Degrees		H2	HMI model	

4. Operating box button:
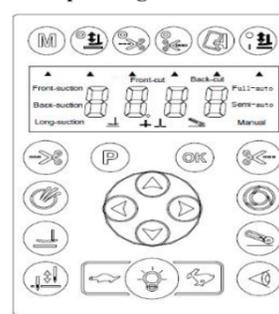
Function	According to the key
Motor speed regulation (fast)	🔁
Motor speed regulation (slow)	↩
The lamp brightness adjustment	☀
The function keys	℗
Identify key	OK
The up and down or so key	◎

Function	According to the key	Describe
Before the tangent set	✂→	Standby mode, press the key to enter setup interface, motor is prohibited; Screen shows "FT.03" number 3 before cutting needle, available at left and right keys to change the needle number, press "OK" to save, P key to return to standby mode. Under the parameter interface, press the keyboard shortcuts, cut the pin number before directly jump to P2. Before the current tangent pin number is set to 0, cut is invalid.
Before the tangent set	✂←	Standby mode, press the key to enter setup interface, motor is prohibited; Screen shows "bT. 13" said number is 12 after cutting needle, available at left and right keys to change the needle number, press "OK" to save, P key to return to standby mode. Under the parameter interface, press the keyboard shortcuts, directly jump to cut the pin number before P3. When the tangent pin number to 0 after, and cut is invalid.
Suction set	📝	Standby mode, press the key to enter setup interface, motor is prohibited; Before the screen shows "FF. 01" said suction and effective; Through the or so key changes, to 0 is null and void, invalid, on the left side of the LCD does not display the "former suction" icon; Again according to the suction shortcut keys, the screen shows "bF. 01" said after the suction and effective; Through the or so key changes, to 0 is null and void, invalid, LCD does not display after "suction" icon on the left side of the; Again according to the suction shortcut key, the screen shows "LF. 00", through the key change, change the value of: 0,10,15,20,25, switch on. Under the parameters of the interface, press the keyboard shortcuts, skip to P4 directly before the suction choice, according to the switching between the P4 / P5, P6.
Presser foot set	⬒	Icon when automatic presser foot effectively. No icon when the presser foot lifter is invalid.
The needle a choice	⬍	Press the button, a stop at the needle and the switching between the needle, effective immediately.
Set the mode	⊚	Press the button, the semi-automatic, full manual, automatic switching between operating mode, effective immediately.
Mop wheel set	⬚	In standby mode, press the key switch mop wheel function icon, the icon bright P31 = 1 mop wheel effectively, icon out P31 = 1 mop wheel is invalid. Under the parameter interface, press the key LABS in the (what do start lab/(P80) after start needle/(P81) lab closed loop switching between pin number.
Photoelectric sensor	◁	In the standby interface, press the key to bring up the presser foot sensor (only applicable correlation type sensor), before and after the cut strength of photoelectric sensor real value, the range of 0 ~ 99. "PL. 95" said presser foot sensor light intensity value is 95, and almost no is blocked; "FL. 95" said before cutting sensor light intensity value is 95; "BL. 95" said after cutting sensor light intensity value is 95, at this time if use objects blocking the sensor, you can see light intensity value smaller, close to zero. Under the interface parameters according to the key, then cut in front of the P13 sensor light intensity, P15 and cut sensor light intensity, P17 presser foot sensor switch between light intensity.

5. Function shortcut Settings

Sewing fabric choice model: In standby mode, press " ◁ " button to enter into the sensor monitoring interface, long press " OK " button to enter sewing fabric selection interface" Fb11 ", according to the "key" to change the parameter value, press the " OK " key is determined to return to the interface of sensors to monitor, press" ℗ "button to exit to return to the interface of sewing.

Sewing cloth "Fb" parameters:11: on behalf of the normal fabric (belong to not pervious to light, no mesh)

02: on behalf of the silk cloth   01: mesh cloth   00: on behalf of the nylon transparent material

Sensors installed accurate mode: Note: change the sewing cloth type, will refresh synchronous change (P13 - P18) parameters, back to the factory default values.n standby mode, select "02" cloth pattern, three sets of sensors (presser foot, before cutting, after cutting) under the condition of not obscured, press "enter" to the sensor to monitor interface, and then press "enter" sensor installation are accurate interface. Electrical design criteria is 1-2.8 ". Beyond the design range of values, please adjust the sensor installation or replacement sensor, after confirm qualified, press "exit" to return to the interface of the sewing.

Password mode: long press " ℗ " button to enter the password mode ,after entering parameters continue to press the " ℗ "key not to put, liquid crystal display 0000, according to the left and right arrow keys to change the position, according to the up and down keys to change the corresponding location value, if the password is correct, press the" OK " key, can view the advanced parameters.

Note: the grade I parameters without password; Class II parameter password as "1111".

Restore the factory Settings: long press "" button to enter parameter interface, enter the" P49 parameters will show "" 0", then transferred to the "8" right "direction", press "OK" button will be displayed after the "no", then press the "direction key" to "yes", then click "OK" button.

6. Failure code

Failure Indication	Failure:	Possible Causes	Checking Items and Handling
E011 E012 E013 E014	Electrical signal failure	Sensor signal failure in motor position	Whether the motor plug connects well. Whether electrical signal detection device is damaged Whether handwheel of the sewing machine is well installed.
E021 E023	Motor overload	Motor stalling Motor overload	Whether the motor plug connects well. Whether sewed material is thicker than that of the standard one. Whether current detection signal is normal
E101	Hardware drive failure	Abnormal current detection Driving device direct connection	Whether circuit for detecting system current woks normally Whether drive device is damaged
E111 E112 E113	System voltage is too high	Actual voltage is higher Braking circuit fault Something wrong with voltage	Whether system inlet wire voltage is too high Whether braking resistor works normally Whether system voltage detection circuit works normally
E121 E122	System voltage is too low	Actual voltage is lower Something wrong with voltage	Whether system inlet wire voltage is too low Whether system voltage detection circuit works normally
E131	Current detection circuit malfunction	Abnormal current detection	Whether circuit for detecting system current woks normally
E141	System data read/write failure	Abnormal system data reading/writing	Whether system data read circuit works normally Whether data chip is damaged
E201	Motor current is too large	Abnormal current detection Abnormal motor running	Whether circuit for detecting system current woks normally Whether electrical signal is normal
E211 E212	Abnormal motor running	Abnormal motor running	Whether the motor plug connects well. Whether electrical signal is correct
E301	Operation box communicates not well	Loss of head operation box communication data	Whether operation box plug connects well Whether operation box is damaged
E302	Operation box saves wrong data	Operation box saves wrong data	Check whether storage chip of operation box is damaged
E402	Pedal fault	Pedal did not answer	Check whether the connected pedal
E403	Pedal zero position correction failure	Pedal zero position correction beyond the scope	Pedal damages or correcting when pedal is not in the stop state
E501	Bedplate safety switch failure		
E502	Presser foot safety switch failure		

7. Accessories included

Serial number	Product name	Qty:	Specifications	Confirmation	Remark
1	Electric cabinet	1			
2	Ball rod string	1			
3	Foot Plates	1	PL-302		Including stents
4	Pedal set screw	3	M5×25		Hex flange tapping screws
5	Specification	1			
6	Power cord	1			