WR58L High series manual V1.2

1. Safety instruction

Please read the operation manual and related sewing machinery datasheet carefully before correct use.

1.1 (1) Power voltage and frequence: please refer to motor and control box nameplate.

(2) Interference from electromagnetic wave:please keep far away strong magnetic or high radiation environment in order to avoid obstructions and make to misoperation.

(3) Grounding: to avoid the noise obstructions or leakage of electricity accident(including sewing machine,motor,control box and positioner.

1.2 Please make sure power off at least 1min and then can open control box cover, because there are dangerous high voltage.

1.3 Please turn off the power while repairing or wearing needle in order to protect operater's safty,

1.4 ⚠ Used where potential dangers exist.

⚠ Used where high voltage and electric danger exist.

1.5 Product warranty period of one year on condition that this machine is operated correctly and no man-made damage.

2.System parameter table

No	Project		Content	Setting range	default value	Level
1	Sewing speed		Set sewing speed	200~3000rpm	2000	I
2	Soft-start function		0 : No soft-start function 1~99 : Soft start stitches	0~99	3	I
3	Ornamental bartacks		Invalid 1: Effective	0/1	1	I
4	Fixed-length seam sewing speed		Set fixed-length seam sewing speed	200~3500rpm	2000	I
5	Sewing mode		0 : Free sewing 1 : Simple Sewing	0/1	0	I
9	Reverse limitted feed speed		Reverse limitted feed speed,when the manual switch closed	500~1500rpm	700	I
19	Function of stop after bartack at the start of sewing		Function of stop after bartack at the start of sewing 0 : Invalid 1 : Effective	0/1	0	I
20	The manual switch function of the reverse feed stitching of sewing		0 : Only reverse feed stitching 1 : And needle compensation 2 : Only reverse feed stitching , standby does not work	0/1/2	0	I
21	Soft-start speed 1		The first stitch speed	100~3000rpm	400	I
22	Soft-start speed 2		The second stitch speed	100~3000rpm	600	I
23	Soft-start speed 3		The third stitch speed	100~3000rpm	600	I
24	Function of soft-down of presser foot		0: Invalid 1: Valid	0/1	0	I
25	Enable presser foot lift		0: Disable 1: Enable	0/1	1	I
27	Up –position function		0: Invalid 1: Valid	0/1	0	I
28	Safety switch signal mode		0: Normally open 1: Normally closed 2: No protection	0/1/2	0	I
29	The time of soft-down of pressure foot		The time of soft-down of pressure foot(time longer,down more slower)	50~500ms	300	II
30	The bottom line magnification setting		0 : Invalid 5/10/15/20 : Bottom line rate	0/5/10/15/20	0	I
31	Initial baseline setting		Initial baseline setting	200~4000	1600	I
32	Ornamental bartacks pause time		Ornamental bartacks pause time	5~500ms	50	I
34	Standard bartacks,pedal speed source choice		0: automatic standard bartacks speed 1: pedal analog speed	0/1	0	I
35	Piece-rate setting		0:No piece-function 1~50:(Piece multiples)+1	0~20	0	I
36	Initial set piece count		Initial set piece count	0~1000	100	I
41	Slow speed		The lowest pedal speed	100~400rpm	200	I
42	Pedal curve selection		0 : Normal 1 : Slow acc. 2 : Fast acc	0/1/2	0	I
44	Cutting speed		Cutting speed	100~400rpm	200	I
45	Reverse limitted feed speed enable		0 : Disable 1 : Enable	0/1	0	I
46	Delay Sewing time,when presser foot down		Delay Sewing time,when presser foot down	0~800ms	50	II
47	Time of presser foot magnet full voltage output		Time of presser foot full voltage output	0~800ms	150	II
48	Presser foot magnet voltage output duty cycle		Presser foot voltage output duty cycle	0~100	40	II
49	Presser foot magnet lift holding time		Presser foot magnet lift holding time	1~60(s)	12	II
50	Time of reverse feed stitching magnet full voltage output		Time of reverse feed stitching full voltage output	0~800ms	150	II
51	Reverse feed stitching magnet duty cycle		Reverse feed stitching magnet duty cycle	0~100	45	II
52	Reverse feed stitching magnet holding time		Reverse feed stitching magnet holding time	1~60(s)	12	II
53	Speed of bartack at the start of sewing		Speed of bartack at the start of sewing	100~3000rpm	700	I
54	Bartack at the start of sewing compensation 1		Bartack at the start of sewing compensation 1	0~100	20	I
55	Bartack at the start of sewing compensation2		Bartack at the start of sewing compensation 2	0~100	12	I
56	Speed of bartack at the end of sewing		Speed of bartack at the end of sewing	100~3000rpm	700	I
57	Bartack at the end of sewing compensation 1		Bartack at the end of sewing compensation 1	0~100	20	I
58	Bartack at the end of sewing compensation 2		Bartack at the end of sewing compensation 2	0~100	12	I
59	Overlapped sewing speed		Overlapped sewing speed	100~3000rpm	700	I
60	Overlapped sewing speed compensation 1		Overlapped sewing speed compensation 1	0~100	20	I
61	Overlapped sewing speed compensation 1		Overlapped sewing speed compensation 2	0~100	12	I
62	Pedal travel upon start		Pedal position upon start Travel position relative to medium pedal	10~50	25	II
63	Pedal travel upon acceleration		Pedal position upon start acceleration Travel relative to medium pedal	10~100	50	II
64	Pedal travel at highest rotation speed		Pedal position at highest rotating speed Travel relative to medium pedal	10~150	110	II
65	Pedal travel upon presser foot lift		Pedal position upon pedal lift Travel relative to medium pedal	−100~−10	−30	II
66	Pedal travel upon presser foot lowering		Pedal travel from presser foot lowering position to neutral position Travel relative to medium pedal	5~50	10	II
67	Pedal travel 1 upon thread trimming		Pedal position upon start trimming without presser foot function Travel relative to medium pedal	−100~−10	−30	II
68	Pedal travel 2 upon tread trimming		Pedal position upon start thread trimming with presser foot function Travel relative to medium pedal	−100~−10	−60	II
69	Down needle positioning position		To adjust down needle position	0~240	60	I
70	Reverse needle lift function		0 : Disable 1 : Enable	0/1	0	I
71	Reversal of needle lift angle		Reversal of needle lift angle	0~90°	45	I
75	Needle position adjustment		Needle position adjustment	0~240°	214	I
76	Stop needle position minor adjustment		Stop needle position minor adjustment	90~110	100	I
77	Needle bar maximum angle		Needle bar maximum angle	270~360	290	I
78	Key switch function selection		0 : Fixed sewing reverse 1 : Supplementary needle	0/1	0	I
79	return to factory-set parameter		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	0~15	0	I
80	highest speed of sewing		highest speed of sewing	200~3500spm	2500	II
82	Set period of use		0 : Disable ; 1~1000(Take hours as a unit)	0~1000	1	II
83	Aggravating function/ Machine needle emphasis function		Needle wear through cloth when used 0: invalid; 1~15 strength regulation	0~15	0	II
84	Reduce noise		0~15 Reduce noise	0~15	0	II
85	Cutting magnet pull angle		Cutting magnet pull angle	150~200	60	II
86	Power angle of shear line		To set power angle of shear line	200~300	260	II
87	Cutting magnet release angle		Cutting magnet release angle	300~360	340	II
88	Loose magnet pull angle		Loose magnet pull angle	150~250	300	II
89	Up dead position angle		Up dead position angle	270~360	320	II
90	Line slack holding time		Line slack holding time	1~60	1	II
92	Pedal presser foot lift confirm time		Pedal presser foot lift confirm time	10~500ms	80	II
93	dial line / clip line Type selection		Type selection ; 0 : dial line 1 : clip line	−15~15(0,1)	0	II

3. 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	U6	Motor initial Angle	limit
U1	speed of motor control	rpm	U7	Master control program version/ Head type	/
U2	Motor Current	0.01A	U8	Head type/ Master control program version	/
U3	Motor Voltage	V	U9	Dsp no	/
U4	Pedal voltage	0.01V	vEr	Operation box version of the program	/
U5	Mechanical Angle with	limit	TYPE	Software no	/

4.Operation box use

Function	Button	Described
Starting reinforcing-sewing	〰	Execute starting reinforcing-sewing 2 times, to and fro.
ending reinforcing-sewing	〰	Execute ending reinforcing-sewing 2 times, to and fro.
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.
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 position		Set the needle position shortcut keys , Key is effective for needle , The cancel key function is set to stop pin, .
The middle presser foot		Presser foot to set shortcut keys: set or cancel the presser foot function.
Shear line pressure foot		The shear line and presser foot set shortcut keys: set or cancel trimmer and presser foot function.
Soft start		Soft start to set shortcut keys: set or cancel the pedal soft start function.
Pinnumber set/check choice	S	1.Implementation of this key, circulating switch display 3 pin number to set the display value upper end:A、B、C, DPeriod of pin number,Light corresponding level; Middleend:E、FPeriod of pin number,Light corresponding level; lower extreme:G、HPeriod of pin number,Light corresponding level; 2.Corresponding to A 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.
parameter setting	P	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 + soft start button" to enter the Password Resetting Interface. The three indicators (respectively are Indicator S1, S2 and S3 from left to right/before three lamp, 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 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 interfaceif 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.
Teaching function		Set or cancel the teaching function.
Sewing set program		The number of needles sewing set , Set up a total of 15 segment needle number P1~PF.
speed key	↷	Speed down. Keeping pressing to lower speed, the display will automatically switch to speed set. Simple seam, free seam effective.
	↶	Speed up. Keeping pressing to increase speed, the display will automatically switch to speed set.Simple seam, free seam effective.

Teaching function :

In the long slot (a, four, program seam) mode, long press "T" one second, you can enter the teaching interface, this interface has buttons: T key, two groups of add-substract key. Role is as follows:

Add-substract key 12: change teaching segments, segment numerical only to accumulate (into the next section teaching automatically save the last needle numerical reduction), '-' key is invalid. Note: when the pedal operation, the key is invalid;

Add-substract key 34: modify teaching pin number, to stop running when the adjust pin number. Fill needle keys: press can manually fill needle, needle change.

T: exit show interface, complete the current segment number teaching (section numerical covering the original mode).

After the pedal shear line, will directly from the show and save the needle numerical, before returning to the fixed length of stitch pattern.

5 Standard needle stitch compensation adjustment

Starting reinforcing-sewing No.54 No.55	Forward sewing and reverse stitching joint		Reverse stitch number Become less and shorter , To adjust the parameters to a higher value.No.54		Forward sewing number Become less and shorter , Adjust the parameters to lower values No.54
	Reverse sewing and forward stitching joint		Forward sewing number Become less and shorter ,To adjust the parameters to a higher value No.55		Reverse stitch number Become less and shorter , Adjust the parameters to lower value No.55
ending reinforcing-sewing No.57 No.58	Forward sewing and reverse stitching joint		Reverse stitch number Become less and shorter , To adjust the parameters to a higher valueNo.57		Forward sewing number Become less and shorter , Adjust the parameters to lower valuesNo.57
	Reverse sewing and forward stitching joint		Forward sewing number Become less and shorter ,To adjust the parameters to a higher value No.58		Reverse stitch number Become less and shorter , Adjust the parameters to lower value No.58
continuous reinforcing-sewing No.60 No.61	Forward sewing and reverse stitching joint		Reverse stitch number Become less and shorter , To adjust the parameters to a higher value No.60		Forward sewing number Become less and shorter , Adjust the parameters to lower valuesNo.60
	Reverse sewing and forward stitching joint		Forward sewing number Become less and shorter ,To adjust the parameters to a higher value No.61		Reverse stitch number Become less and shorter , Adjust the parameters to lower value No.61

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;f 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 normal.
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 in testing.
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 and check turned up switch.
P.oFF	Power off Display	Power off	Wait for power supply to resume.

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.