

Integrated lockstitch with thread trimming

1.Safety precautions

- Before use, please read this manual and lockstitch machine's manual at the same time, thanks for your cooperation.
- 1.1 (1) The voltage and working frequency: please according the name plate of motor and contorlling box.
- (2) Electromagnetic interference:Please stay away from high-frequency magnetic wave machines or Radio wave transmitter etc.In order to prevent the generated electromagnetic waves from interfering with the drive device and causing wrong action.
- (3) Grounded:To prevent noise interference or leakage accidents,Please do grounding works including sewing machine, motor and control box.
- 1.2 If Disassemble motor and controlling box,please Turn off the power in advance.Dangerous high voltage electricity in the electric control box, so please waiting more than 1 mins after Turn off the power, then to disassemble the control box
- 1.3 To ensure the safety of life,Please turn off the power when repair the machine or threading needles.
- 1.4  This symbol indicates when the machine is installed,if made a mistake,the human body or the machine may be damaged,Therefore, there will be this mark in the dangerous place of the machine.
-  This symbol indicates that there is high voltage, etc.Electrically dangerous places have this mark.
- 1.5 This products guarantees a one-year warranty under normal working conditions and no-one error operation.

2.Instructions

3.1 Reset

In the shutdown state, press   at the same time to turn on, then press the "S" key to confirm to recover

3.2 Monitoring mode

Long press the “S” to enter the monitoring state, press   to change the monitoring serial number, press the “S” to check.

3.3 Factory debugging mode

Long press the thread trimming key to enter the debugging mode, press   to choose debug item, press “S” to enter corresponding mode.

- 1-dJ Motor test mode, Press the trimming key to start the test, and the test result will be displayed after completion.
- 2-bJ Calibrate the handwheel position, turn the handwheel to the upper needle positioning position, and reconfirm the position after running.

3.4 Aging mode

Press and hold the P key and S key at the same time to turn on the motor, you can directly enter the P26 parameter, and choose to start aging.

3.5 Secondary parameter mode

Press the P key to turn on, and directly enter the secondary parameter mode, you can view the P21-P40 parameters.

Long press the P key, enter the password 111, you can also enter the secondary parameter mode.

3.6 Three-level parameter mode

Long press the P key, enter the password 824, enter the three-level parameter mode, you can check the P41-P60 parameters.

3、Monitoring mode

Display No:	Item number	unit
JJ	Counting	Piece
SPd	Speed	RPM
CUR	Current	0. 1A
UdC	Voltage	V
PdL	Pedal	/

Display No:	Item number	unit
PoS	Angle	degree
dJ	Motor	/
i d	Model	/
vEr	Version	/

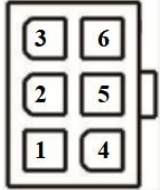
Note: Long press the thread trimming button on the piece count display interface to reset the piece count.

4、Key Description

Function parameter edit		Enter or exit the editing of function parameters
Parameter view save		View and save the content of the selected parameter number: After selecting the parameter number, press this key to view and modify the operation, after modifying the parameter value, press this key to exit and save the parameter
Up selection		1.Increment key for parameter item in parameter selection area 2. Set the value increment key in the parameter content area
Down Select		1.Decrease key of parameter item in parameter selection area 2.Set the value decreasing key in the parameter content area
Slow start		To setting open or cancel the slow start sewing function
Thread trimming		Set to use or cancel the thread trimming function.
Stop needle position selection		Switch the stop position of the needle after sewing (upper stop position/lower stop position)

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5、Electrical control



Definition	Signal（light）	Ground wire(Jog needle)	32V(Electromagnet）
Foot position	6PIN	5PIN	4PIN
Definition	5V(Sewing lights)	Signal（inching for add stitch）	Thread trimming（Electromagnet）
Foot position	3PIN	2PIN	1PIN

6、Failure description

Error code	Fault content	Reason	Inspection items and how to fix
E-01	System voltage is too high	Actual voltage is too high Incorrect voltage detection	Whether the incoming line voltage of the system is too high Whether the system voltage detection circuit works normally
E-02	System voltage is too low	Actual voltage is low Incorrect voltage detection	Whether the incoming line voltage of the system is too low Whether the system voltage detection circuit works normally
E-05	Pedal ID failure	Pedal recognition failure	Loose pedal joint
E-07 E-08	Motor overload	Motor blocked,Motor overload	Whether the motor plug is in good contact Whether the machine head or trimming mechanism is stuck Whether to sew fabrics above the specification thickness Whether the current detection signal is normal
E-09 E-11	Motor signal failure	Motor positioning signal failure	Whether the motor encoder interface is in good contact
E-15	Hardware overcurrent	Current detection is abnormal The motor is running abnormally	Whether the system current detection circuit is working normally Whether the hardware drive device is working normally
E-17	Flip switch failure	Flip switch effective	Put down the machine head or check the flip switch
E-18	Software overcurrent	The motor continues to run with high current	Whether the system current detection circuit is working normally
E-19	Motor overload	Long-term overload operation of the motor	Check whether the head motor is suitable
E-20	Parameter reading and writing failure	Parameter read or save failure	Whether the control box plug is in good contact Whether the control box device is damaged
E-21	Current detection circuit failure	Current detection circuit failure	Whether the system current loop detection is normal
E-22	OZ loop failure	OZ loop detection abnormal	Check whether the OZ circuit is normal
E-23 E-24	Abnormal motor speed	The rotating speed of the motor is abnormal	Whether the motor encoder interface is in good contact Whether the initial angle of the motor is abnormal

7、Parameter list

Parameter	Description	Range	Initial value	Content value name description and remarks
P-01	Maximum speed	200～3700	3700	Maximum speed setting during sewing
P-02	Synchronizer selection	0～2	1	"0" mean Needle up,"1" mean Needle down ,"2" mean without signal
P-03	Soft start switch	0～1	1	"0" mean open, "1" mean turn off
P-04	Soft start Speed	200～1500	400	Soft start speed function setting
P-05	Number of soft start stitches	1～15	1	Number of soft start stitches
P-06	Minimum speed	200～500	200	Minimum speed setting during sewing
P-07	Upper needle position adjustment	-15～15	0	Upper needle position adjustment
P-08	Down needle position adjustment	0～240	175	Position adjustment of lower needle stop
P-09	Automatically find the needle position when starting up	0～1	0	"0" mean can't find upper needle position adjustment,"1" mean find upper needle position adjustment
P-10	mahcine head protection switch detection	0～2	1	"0" mean no detection,"1"Detect zero signal,"2" mean Detect positive signal
P-11	Acceleration curve adjustment	0～4	1	Speed controller acceleration and climb slope setting
P-12	Reverse needle lift switch	0～1	0	"0" mean turn off,"1" mean open
P-13	Reverse the needle lifting angle	0～45	20	Reverse the needle lifting angle
P-14	Brightness adjustment of lights	0～100	100	Brightness adjustment of lights
P-15	Needle supplement method	0～3	3	"0" mean Half stitch,"1" mean One stitch,"2" mean Continuous half stitch,"3"Continuous one stitch
P-16	Thread trimming function switch	0～1	1	"0" mean turn off,"1" mean open
P-17	Thread trimming speed	100～400	280	Thread trimming speed
P-18	Piece magnification	0～20	0	0: No piece counting function 1-20: Add 1 to the piece count value for each set time of thread trimming
P-19	Initial piece count setting	0～1000	100	Initial value of piece count reduce
P-20	Piece counting direction setting	0～1	0	0: piece count plus; 1: piece count reduce
P-21	Motor running direction	0～1	1	"0" mean Clockwise,"1" mean Counterclockwise
P-22	Automatically running speed	200～3700	3500	Setting automatically check speed
P-23	Automatic running time	1～250	20	Automatic running-in time setting
P-24	Automatic stop time	1～250	20	Automatic running-in pause time setting
P-25	A item test	0～1	0	Speed continuous operation
P-26	B item test	0～1	0	Perform positioning cycle operation
P-30	Needle position adjustment	0～240	0	Needle position adjustment
p-33	The strength gained in thick material	0～15	0	The strength gained in thick material
p-34	The strength gained when thread trimming	0～15	0	The strength gained when thread trimming
p-35	Suction angle when thread trimming	150～200	175	Suction angle when thread trimming
p-36	The strength angle when thread trimming	200～300	260	The strength angle when thread trimming
P-37	Thread trimming release angle	300～360	346	Thread trimming release angle
P-40	Model selection	Reserved	Reserved	Reserved