

HL777 步进罗拉车按键款操作说明书 V1.2

1、安全上的注意事项：

使用前请详细阅读本技术资料与所搭配的缝制机械说明书，配合正确使用。

- 1.1
- (1) 电源电压与工作频率：请遵照马达与控制箱铭牌所标之规格。

(2) 电磁波干扰：请远离高频电磁波机器或电波发射器等，以免所产生的电磁波干扰本驱动装置因而发生错误动作。

(3) 接地：为防止杂讯干扰或漏电事故，请做好接地工程（包括缝纫机、马达、控制箱、定位器）。
- 1.2
- 拆卸马达或控制箱时勿带电拔插；控制箱里面有危险高压电，所以关闭电源后要等 1 分钟以上方可打开控制箱盖。
- 1.3
- 为保证人身安全，请在维修机械或进行穿针作业时关闭电源。
- 1.4
-  这个标示符号表示机器安装时，如有错误恐会伤害到人体或机器会受到损坏。

所以机器方面有危险性的地方会有此标志。

 这个标志符号表示有高压电等，电气方面有危险性的地方会有此标志。
- 1.5
- 本装置保证在正常工作情况且无人为失误的操作下，保修期为一年。

2、系统参数表

No.	项目	内容	设定范围	默认值	级别
1	踏板最高速	设定踏板的最高转速	200～3000rpm	3000	I
2	软启动针数	0：无软启动功能 1~9：软启动针数	0～9	3	I
3	软启动使能	0：无效 1：有效	0/1	1	I
5	摆针方向	摆针方向 0：关 1：开	0/1	0	III
6	步进零位	步进零位	0～4000	1000	I
7	上滚轮补偿	上滚轮同步补偿	0～100	58	I
8	下滚轮补偿	下滚轮同步补偿	0～100	50	I
9	上滚轮方向	上滚轮方向 0：关 1：开	0/1	0	I
10	下滚轮方向	下滚轮方向 0：关 1：开	0/1	0	I
13	入布角度设置	入布角度设置	0～180	25	III
14	出布角度设置	出布角度设置	150～360	185	III
15	前密缝上滚轮针距	前密缝上滚轮针距	0～50	10	II
16	前密缝下滚轮针距	前密缝下滚轮针距	0～50	10	II
17	松线电磁铁占空比	松线电磁铁占空比	10～100	60	III
18	后密缝上滚轮针距	后密缝上滚轮针距	0～50	10	II
19	后密缝下滚轮针距	后密缝下滚轮针距	0～50	10	II
20	前密缝针数	前密缝针数	0～10	1	II
21	软启动速度 1	软启动第 1 针速度	200～800rpm	600	I
22	软启动速度 2	软启动第 2 针速度	900～1200rpm	1000	I
23	软启动速度 3	软启动第 3～9 针速度	1300～1800rpm	1500	I
24	压脚软下降功能	0：无效 1：有效	0/1	1	I
25	抬压脚使能	抬压脚使能设定 0：无效 1：有效	0/1	1	I
26	后密缝针数	后密缝针数	0～10	1	II
27	上电定位	0：无效 1：有效	0/1	1	I
28	翻抬开关信号模式	0：常开 1：常闭 2：禁止保护	0/1/2	0	I
29	压脚软下降时间	时间越长压脚下降越慢	10～500ms	120	II
30	底线计数使能	0：无效 1：有效	0/1	0	I
31	底线初值设定	底线初值设定	200～4000	1600	I
32	前密缝速度	前密缝速度	200～1800rpm	1000	II
33	后密缝速度	后密缝速度	200～1800rpm	1000	II
34	标准固缝速度模式选择	标准固缝速度模式选择 0：自动 1：踏板控制	0/1	0	III
35	计件倍率设定	0：无计件功能 1～50：计件按倍数+1	0～50	0	I
36	计件数初值设定	计件数初值设定	0～1000	1000	I
38	计件选择设定	0：计件加 1：计件减	0/1	0	I
39	前密缝方向	前密缝方向	0/1	0	II
40	后密缝方向	后密缝方向	0/1	0	II
41	低速速度	踏板最低速度	150～300rpm	200	I
42	踏板曲线选择	0：正常 1：加速慢 2：加速快	0/1/2	2	I
43	长针距开关	长针距开关 0：关 1：开	0/1	0	I
44	剪线速度	剪线速度	100～500rpm	260	I
45	压脚软下降占空比	压脚软下降占空比	1～30	5	I
46	放压脚延迟时间	为确认压脚已放下的延时	0～800ms	80	II
47	压脚抬起占空比	压脚抬起占空比	50～95	94	II
48	抬压脚全压时间	抬压脚全压时间	0～800ms	120	II
49	压脚软提升档位	压脚软提升档位	0/1/2/3	0	II
50	压脚抬起保持时间	压脚抬起保持时间	0～12s	12	II
51	抬压脚输出占空比	抬压脚输出占空比	0～35	23	II
52	定长缝速度	定长缝速度	200～3000rpm	1600	II
53	前固缝速度	前加固缝速度	200～3000rpm	1200	I
54	前固缝补偿 1	前固缝补偿 1	0～100	0	I
56	后固缝速度	后加固缝速度	200～3000rpm	1200	I
57	后固缝补偿 1	后固缝补偿 1	0～100	0	I
59	连续固缝速度	连续加固缝速度	200～3000rpm	1800	I
60	连续加固补偿 1	连续加固补偿 1	0～100	0	I
61	连续加固补偿 2	连续加固补偿 2	0～100	0	I
62	开始运行的踏板行程	开始运行的踏板位置，相对于踏板中立时的行程	10～50	20	I
63	开始加速的踏板行程	开始加速运行的踏板位置，相对于踏板中立时的行程	10～100	50	I
64	运行高速的踏板行程	运行到最高速的踏板位置，相对于踏板中立时的行程	10～150	90	I
65	压脚抬起的踏板行程	压脚抬起动作的踏板位置，相对于踏板中立时的行程	-10～-100	-25	I
66	压脚降下的行程	压脚降下动作的踏板位置，相对于踏板中立时的行程	5～50	10	I
67	剪线动作的踏板行程 1	无抬压脚功能时，开始剪线的踏板位置相对于踏板中立时的行程	-10～-100	-25	I
68	剪线动作的踏板行程 2	有抬压脚功能时，开始剪线的踏板位置相对于踏板中立时的行程	-10～-100	-40	I
69	下停针位	下停针位位置调整	0～200	60	I
70	反转提针功能	0：无效 1：有效	0/1	0	I
71	反转提针角度	反转提针角度	0～45°	20	I
72	机器润滑开关	机器润滑开关	0/1	0	I
74	底线倍率设定	底线倍率设定	0～20	0	II
75	基准位置调整	基准位置调整	0～240°	0	I
76	上停针脚微调	上停针脚微调	0～200	100	I
77	上死点角度	上死点角度	0～360	290	I
78	机头按键功能切换	机头按键功能选择	0/1/2	0	II
79	恢复出厂参数	3：恢复自行设定参数 5/8：恢复出厂参数	0～15	0	I
80	缝绉最高速度	缝绉最高转速	300～3000rpm	2500	II
81	摆幅计算系数	摆幅计算系数	50～90	66	II
82	试用时间	试用时间调整	0～2000	0	III
84	减噪音功能	减噪音调节	1～6	1	I
85	剪线起始角度	剪线起始角度	10～200	60	III
86	剪线电磁铁占空比	剪线电磁铁占空比	10～100	80	III
87	剪线结束角度	剪线结束角度	300～355	345	III
88	松线吸合角度	松线吸合角度	0～360	300	II
89	松线释放角度	松线释放角度	0～356	350	II
90	语言选择设定	0：关闭 1：中文 2：英文	0～2	1	I
92	踏板抬压脚命令时间	踏板后踩，抬压脚命令有效时确认时间	10～300ms	80	II
93	踏板中立行程调整	踏板中立行程调整	85～115	100	II
94	自动测试模式设定	0：标准时间模式 1：针数模式 2：简易时间模式 3：出厂老化模式（请勿在机头上使用此模式）	0/1/2/3	3	III
96	自动测试速度	自动测试速度	200～3000rpm	2200	III
97	自动测试停顿时间	自动测试停顿时间	0～360	20	III
98	自动测试运行时间	自动测试运行时间	0～360	30	III
100	上滚轮首针正补偿	上滚轮首针正补偿	0～40	20	II
101	下滚轮首针正补偿	下滚轮首针正补偿	0～40	20	II
102	滚轮切换电流	滚轮切换电流	1～5	2	II
103	滚轮切换节点调节	滚轮切换节点调节	0～50	0	II
104	上滚轮高速电流补偿	上滚轮高速电流补偿	1～5	4	II
105	下滚轮高速电流补偿	下滚轮高速电流补偿	1～5	4	II

106	上滚轮低速电流补偿	上滚轮低速电流补偿	1～5	3	II
107	下滚轮低速电流补偿	下滚轮低速电流补偿	1～5	3	II
120	急停角度	急停角度	180～360	360	II
121	主轴初始角度	主轴初始角度	0～200	0	II
122	电机加重使能	电机加重使能 0：关 1：开	0/1	0	II
123	电机加重力度	0：无效 1～15 力度调整	0～15	2	II
124	机型选择设定	机型选择设定	0～99	2	II
129	显示屏背光设置	显示屏背光设置	0～10	5	I
131	厂家参数保存选择	0：无效 1：保存所有当前厂家参数	0/1	0	III
135	单双针机型选择	单双针机型选择 0：单针 1：双针	0/1	0	III
161	衔接段数	切换针距衔接段数	1～10	3	I
162	第一段针距	第一段针距	10～50	30	I
163	第二段针距	第二段针距	10～50	30	I
164	第三段针距	第三段针距	10～50	30	I
165	第四段针距	第四段针距	10～50	30	I
166	第五段针距	第五段针距	10～50	30	I
167	第六段针距	第六段针距	10～50	30	I
168	第七段针距	第七段针距	10～50	30	I
169	第八段针距	第八段针距	10～50	30	I
170	第九段针距	第九段针距	10～50	30	I
171	第十段针距	第十段针距	10～50	30	I
172	第一段针数	第一段针数	0～15	0	I
173	第二段针数	第二段针数	0～15	0	I
174	第三段针数	第三段针数	0～15	0	I
175	第四段针数	第四段针数	0～15	0	I
176	第五段针数	第五段针数	0～15	0	I
177	第六段针数	第六段针数	0～15	0	I
178	第七段针数	第七段针数	0～15	0	I
179	第八段针数	第八段针数	0～15	0	I
180	第九段针数	第九段针数	0～15	0	I
181	第十段针数	第十段针数	0～15	0	I
215	压脚抬起电流	压脚抬起电流 0. 1A	0～50	30	III
216	压脚放下电流	压脚放下电流 0. 1A	0～50	5	III
217	抬起保持电流	抬起保持电流 0. 1A	0～50	15	III
218	放下保持电流	放下保持电流 0. 1A	0～50	1	III
219	压脚抬起时间	压脚抬起时间 ms	50～250	150	III
220	压脚放下时间	压脚放下时间 ms	50～250	200	III
221	放置缝料厚度	放置缝料厚度	0～400	260	III
222	压脚抬起高度	压脚抬起高度	0～400	375	III
223	步进偏移角度	步进偏移角度	0～400	200	III
224	膝靠功能设置	膝靠功能设置	0/1	0	III
225	膝靠最大压脚高度	膝靠最大压脚高度	0～100	100	III
226	膝靠零位电压	膝靠零位电压	0～250	120	III
227	膝靠压脚判断速度	膝靠压脚判断速度	200～1000	500	III
228	膝靠压脚微抬高度	膝靠压脚微抬高度	0～50	0	III
229	剪线进刀电流	剪线进刀电流 0. 1A	0～50	20	III
230	剪线退刀电流	剪线退刀电流 0. 1A	0～50	20	III
231	剪线保持电流	剪线保持电流 0. 1A	0～50	10	III
232	剪线保持时间	剪线保持时间 ms	0～200	2	III
233	剪线进刀时间	剪线进刀时间 ms	5～250	50	III
234	剪线退刀时间	剪线退刀时间 ms	5～250	50	III
235	剪线动作角度	剪线动作角度 0. 1°	0～400	150	III
236	滚轮锁定时间	滚轮锁定时间	0～10	3	III
237	时间设置	时钟设置	0～23	12	I
238	时间设置	分钟设置	0～59	0	I
239	时间设置	秒钟设置	0～59	0	I
240	加速灵敏	加速灵敏设定	1～4	3	III
241	高速 KP	高速 KP 设定	2～10	6	III
242	低速 KP	低速 KP 设定	2～10	9	III
243	踏板操控模式	踏板操控模式	0～3	2	III
244	踏板速度百分比	踏板速度百分比	50～100	100	II
245	起缝松线针数	起缝松线针数	0～10	0	II
246	起缝松线占空比	起缝松线占空比	10～100	40	II

注：表内参数为标准化，如有不符，以实际为主。

3、系统监控状态

操作面板默认模式下，按 P 键后同时按下“触发”键，进入系统监控状态。通过+、-键选择需要查看的项目，按 S 键进入 / 返回所选项目。如需退出监控界面，按 P 键即可。

显示序号	项目名称	单位		显示序号	项目名称	单位
JJ	计件数	件		U7	机头型号	/
U1	电机速度	rpm		U8	DSP 版本号	/
U2	电机电流	0. 01A		U9	DSP 类型号	/
U3	母线电压	V		VEr	HMI 版本号	/
U4	踏板电压	0. 01V		TYPE	HMI 类型号	/
U5	机头机械角	度		DX	底线计数	/
U6	电机初始角	度		JP	计件减	件

4、故障代码

故障显示	故障内容	故障可能原因	检查项目、处理
E011 E012	电机信号故障	电机位置传感器信号故障	1、电机插头是否接触良好 2、电机信号检测器件是否损坏 3、缝绉机手轮是否安装到位
E021 E023	电机超负荷	电机堵转 电机超负荷	1、电机插头是否接触良好 2、机头或剪线机构是否卡死 3、是否缝制规格厚度以上布料 4、电流检测信号是否正常
E101	硬件驱动故障	电流检测非正常 驱动器硬件损坏	1、系统电流检测回路是否工作正常 2、驱动器件是否损坏
E111 E112	系统电压过高	实际电压偏高 制动回路故障 电压检测有误	1、系统进线电压是否过高 2、制动电阻是否工作正常 3、系统电压检测回路是否工作正常
E121 E122	系统电压过低	实际电压偏低 电压检测有误	1、系统进线电压是否过低 2、系统电压检测回路是否工作正常
E131	电流检测回路故障	电流检测非正常	系统电流检测回路是否工作正常
E133	OZ 回路故障	OZ 回路非正常	系统 OZ 回路是否工作正常
E134	DBFLT 故障	自动电阻回路非正常	自动电阻插头是否接触良好自动电阻是否损坏
E201	电机电流过大	电流检测非正常 电机运转非正常	1、系统电流检测回路是否工作正常 2、电机信号是否正常
E211 E212	电机运转非正常	电机运转非正常	1、电机插头是否接触良好 2、电机信号是否不匹配
E301	操作盒通讯不良	机头操作盒通讯数据丢失	1、操作盒插头是否接触良好 2、操作盒器件是否损坏
E402	踏板 ID 故障	踏板辨识故障	踏板接头松动
E403	踏板零位校正故障	踏板零位校正值超出范围	踏板损坏或者校正时踏板不是停止状态
E501	翻抬开关故障	翻抬开关有效	放下机头或者检查翻抬开关
E601	硬件驱动故障	摆针电机 STEP2 硬件过流	系统电流检测回路是否工作正常驱动器是否损坏
E602	硬件驱动故障	摆针电机 STEP2 软件过流	系统电流检测回路是否工作正常驱动器是否损坏
E603	硬件驱动故障	摆针电机 STEP2 电流检测回路	系统电流检测回路是否工作正常驱动器是否损坏
E604	电机信号故障	摆针电机 STEP2 初始机械角度	送布电机插头是否接触良好
E605	电机信号故障	摆针电机 STEP2 初始时编码器或者 转子卡死	送布电机插头是否接触良好机械是否有卡点
E610	上滚轮步进电机故障	上滚轮步进电机硬件过流	上滚轮步进电机插头是否接触良好 驱动器件是否损坏
E611	下滚轮步进电机故障	下滚轮步进电机硬件过流	下滚轮步进电机插头是否接触良好 驱动器件是否损坏
E612	风扇故障	风扇堵转	1、风扇插头是否接触良好 2、风扇风叶是否被异物接触导致无法转动
E613	摆针电机位置误差大	摆针电机位置误差大	检查摆针电机零位是否正确
L. bob	底线提示	底线计数值为负	更换底线后长按 S 键取消提示状态
P. bob	计件提示	计数值为零	按 S 键进入界面，长按“前固缝”键 2 秒以上取消提示状态
P. oFF	掉电显示	电源关闭	等待电源重新开通
EvaL	试用期限到期	试用期限到期	联系经销商处理

HL777 Stepping Post Bed Machine Key Model operating instructions V1.2

1. Safety precautions

Before use, please read this technical information and the manual of the sewing machine with which it is paired in detail, and cooperate with the proper use.

1.1 (1)Power Voltage and Operating Frequency: Please follow the specifications on the motor and control box nameplate.

(2)Electromagnetic interference: Keep away from high-frequency magnetic wave machines or radio wave transmitters, etc., so as to prevent the electromagnetic wave generated from interfering with the driver and causing incorrect operation.

(3)Grounding: In order to prevent noise interference or leakage accidents, please do the grounding work (including sewing machines, motors, control boxes, positioners).

1.2 Do not unplug and unplug with electricity when disassembling the motor or control box; there is dangerous high voltage inside the control box, so wait for more than 1 minute after turning off the power before opening the cover of the control box.

1.3 For personal safety, turn off the power when servicing machinery or performing needle threading operations.

1.4 ⚠ This symbol indicates that if there are errors during the installation of the machine, it may harm the human body or damage the machine。So there will be this sign in places where there is danger on the machine side.

⚡ This symbol indicates the presence of high voltage electricity, and places with electrical hazards will have this symbol.

1.5 This device is guaranteed to have a one-year warranty under normal operating conditions and without human error.

2. System Parameter Table

No.	Item	Content	Set Range	Default Value	Level
1	Maximum pedal speed	Set the maximum speed of the pedal	200～3000rpm	3000	I
2	Soft start needle count	0: No soft start function 1～9: Number of soft start pins	0～9	3	I
3	Soft start enable	0: Invalid 1: Valid	0/1	1	I
5	Needle direction	Needle direction 0: off 1: on	0/1	0	III
6	Step zero position	Step zero position	0～4000	1000	I
7	Upper roller compensation	Synchronous compensation of upper roller	0～100	58	I
8	Lower roller compensation	Synchronous compensation of the lower roller	0～100	50	I
9	Direction of the upper roller	Up roller direction 0: off 1: on	0/1	0	I
10	Direction of the lower roller	Lower roller direction 0: off 1: on	0/1	0	I
13	Installation angle setting	Installation angle setting	0～180	25	III
14	Layout angle setting	Layout angle setting	150～360	185	III
15	Front sealing seam roller needle distance	Front sealing seam roller needle distance	0～50	10	II
16	Front seam lower roller needle distance	Front seam lower roller needle distance	0～50	10	II
17	Duty cycle of loose thread electromagnet	Duty cycle of loose thread electromagnet	10～100	60	III
18	The needle spacing of the roller on the rear seam	The needle spacing of the roller on the rear seam	0～50	10	II
19	Bottom roller needle spacing for rear tight seam	Bottom roller needle spacing for rear tight seam	0～50	10	II
20	Number of stitches in the front seam	Number of stitches in the front seam	0～10	1	II
21	Soft start speed 1	Soft start first needle speed	200～800rpm	600	I
22	Soft start speed 2	Soft start second needle speed	900～1200rpm	1000	I
23	Soft start speed 3	Soft start 3rd to 9th needle speed	1300～1800rpm	1500	I
24	Soft foot lowering function	0: Invalid 1: Valid	0/1	1	I
25	Lift and press the foot to enable	Lift foot enable setting 0: Invalid 1: Valid	0/1	1	I
26	Number of stitches in the back seam	Number of stitches in the back seam	0～10	1	II
27	Power on positioning	0: Invalid 1: Valid	0/1	1	I
28	Flip up switch signal mode	0: Normally open 1: Normally closed 2: Prohibited protection	0/1/2	0	I
29	Foot pressure soft descent time	The longer the time, the slower the foot pressure drops	10～500ms	120	II
30	Bottom line counting enabled	0: Invalid 1: Valid	0/1	0	I
31	Bottom line initial value setting	Bottom line initial value setting	200～4000	1600	I
32	Front sealing speed	Front sealing speed	200～1800rpm	1000	II
33	Rear sealing speed	Rear sealing speed	200～1800rpm	1000	II
34	Standard joint speed mode selection	Standard seam speed mode selection 0: Automatic 1: Pedal control	0/1	0	III
35	Piece rate setting	0: No piece rate function 1-50: piece rate multiplied by 1	0～50	0	I
36	Initial value setting for piece rate	Initial value setting for piece rate	0～1000	1000	I
38	Piece rate selection setting	0: piece rate plus 1: piece rate minus	0/1	0	I
39	Front seam direction	Front seam direction	0/1	0	II
40	Rear seam direction	Rear seam direction	0/1	0	II
41	Low speed	Minimum pedal speed	150～300rpm	200	I
42	Selection of pedal curve	0: Normal 1: Slow acceleration 2: Fast acceleration	0/1/2	2	I
43	Long needle distance switch	Long needle distance switch 0: off 1: on	0/1	0	I
44	Cutting speed	Cutting speed	100～500rpm	260	I
45	Pressure foot soft decrease duty cycle	Pressure foot soft decrease duty cycle	1～30	5	I
46	Delay time for foot pressure release	To confirm the delay of the presser foot being lowered	0～800ms	80	II
47	Foot lift duty cycle	Foot lift duty cycle	50～95	94	II
48	Lift and press the foot for full pressure time	Lift and press the foot for full pressure time	0～800ms	120	II
49	Press foot soft lift gear	Press foot soft lift gear	0/1/2/3	0	II
50	Press the foot to lift and hold for a certain amount of time	Press the foot to lift and hold for a certain amount of time	0～12s	12	II
51	Lift foot output duty cycle	Lift foot output duty cycle	0～35	23	II
52	Fixed length seam speed	Fixed length seam speed	200～3000rpm	1600	II
53	Front seam speed	Front reinforcement seam speed	200～3000rpm	1200	I
54	Front seam compensation 1	Front seam compensation 1	0～100	0	I
56	Rear seam speed	Rear reinforcement seam speed	200～3000rpm	1200	I
57	Rear seam compensation 1	Rear seam compensation 1	0～100	0	I
59	Continuous seam fixing speed	Continuous reinforcement seam speed	200～3000rpm	1800	I
60	Continuous reinforcement compensation 1	Continuous reinforcement compensation 1	0～100	0	I
61	Continuous reinforcement compensation 2	Continuous reinforcement compensation 2	0～100	0	I
62	Start pedal travel	The pedal position at the beginning of operation, relative to the stroke when the pedal is neutral	10～50	20	I
63	Start the pedal stroke for acceleration	The pedal position at which acceleration begins, relative to the stroke when the pedal is neutral	10～100	50	I
64	Running high-speed pedal travel	Travel to the highest speed pedal position relative to the neutral pedal position	10～150	90	I
65	The pedal travel for raising the foot	The pedal position of the foot lifting action, relative to the stroke when the pedal is neutral	-10～-100	-25	I
66	The stroke of lowering the presser foot	The pedal position of the foot lowering action, relative to the stroke when the pedal is neutral	5～50	10	I
67	Step stroke 1 for cutting thread action	When there is no function to lift and press the foot, the pedal position at which cutting begins is relative to the stroke when the pedal is neutral	-10～-100	-25	I
68	Step stroke 2 for cutting thread action	When there is a function to lift and press the foot, the pedal position at which cutting begins is relative to the stroke when the pedal is neutral	-10～-100	-40	I
69	Stop needle position	Adjustment of the lower stop needle position	0～200	60	I
70	Reverse needle lifting function	0: Invalid 1: Valid	0/1	0	I
71	Reverse needle lifting angle	Reverse needle lifting angle	0～45°	20	I
72	Machine lubrication switch	Machine lubrication switch	0/1	0	I
74	Bottom line magnification setting	Bottom line magnification setting	0～20	0	II
75	Adjustment of reference position	Adjustment of reference position	0～240°	0	I
76	Up stop pin fine adjustment	Up stop pin fine adjustment	0～200	100	I
77	Top dead center angle	Top dead center angle	0～360	290	I
78	Head button function switching	Head button function selection	0/1/2	0	II
79	Restore factory parameters	3: Restore self set parameters 5/8: Restore factory settings	0～15	0	I
80	Maximum sewing speed	Maximum sewing speed	300～3000rpm	2500	II
81	Calculation coefficient for swing amplitude	Calculation coefficient for swing amplitude	50～90	66	II
82	Trial period	Trial time adjustment	0～2000	0	III
84	Noise reduction function	Noise reduction regulation	1～6	1	I
85	Starting angle of thread cutting	Starting angle of thread cutting	10～200	60	III
86	Duty cycle of thread cutting electromagnet	Duty cycle of thread cutting electromagnet	10～100	80	III
87	End angle of thread cutting	End angle of thread cutting	300～355	345	III
88	Loose thread suction angle	Loose wire suction angle	0～360	300	II
89	Release angle of loose thread	Release angle of loose thread	0～356	350	II
90	Language selection settings	0: Close 1: Chinese 2: English	0～2	1	I
92	Pedal lift foot command time	Confirm the time when the pedal is pressed and the command to lift the foot is valid	10～300ms	80	II
93	Neutral stroke adjustment of pedal	Neutral stroke adjustment of pedal	85～115	100	II
94	Automatic testing mode setting	0: Standard time mode 1: Needle count mode 2: Simple time mode	0/1/2/3	3	III
96	Automatic testing speed	3: Factory aging mode (do not use this mode on the machine head)	200～3000rpm	2200	III
97	Automatic testing pause time	Automatic testing speed	0～360	20	III
98	Automatic test running time	Automatic testing pause time	0～360	30	III
100	Upper roller first needle positive compensation	Automatic test running time	0～40	20	II
101	Lower roller first needle positive compensation	Upper roller first needle positive compensation	0～40	20	II
102	Roller switching current	Lower roller first needle positive compensation	1～5	2	II
103	Roller switch node adjustment	Roller switching current	0～50	0	II
104	High speed current compensation for the upper roller	Roller switch node adjustment	1～5	4	II
105	High speed current compensation for the lower roller	High speed current compensation for the upper roller	1～5	4	II
106	Upper roller low-speed current compensation	High speed current compensation for the lower roller	1～5	3	II
107	Low speed current compensation for the lower roller	Upper roller low-speed current compensation	1～5	3	II
120	Emergency stop angle	Low speed current compensation for the lower roller	180～360	360	II
121	Initial angle of spindle	Emergency stop angle	0～200	0	II
122	Motor weighting enable	Initial angle of spindle	0/1	0	II

123	Increase the intensity of the motor	Motor weighting enable 0: off 1: on	0～15	2	II
124	Model selection settings	0: Invalid 1-15 force adjustment	0～99	2	II
129	Display screen backlight setting	Model selection settings	0～10	5	I
131	Manufacturer parameter saving selection	Display screen backlight setting	0/1	0	III
135	Selection of single and double needle models	0: Invalid 1: Save all current manufacturer parameters	0/1	0	III
161	Number of connecting segments	Switch the number of needle spacing connection segments	1～10	3	I
162	The first needle spacing	The first needle spacing	10～50	30	I
163	Second needle spacing	Second needle spacing	10～50	30	I
164	Third needle spacing	Third needle spacing	10～50	30	I
165	Fourth needle spacing	Fourth needle spacing	10～50	30	I
166	Fifth needle spacing	Fifth needle spacing	10～50	30	I
167	The sixth needle spacing	The sixth needle spacing	10～50	30	I
168	Seventh needle spacing	Seventh needle spacing	10～50	30	I
169	Eighth needle spacing	Eighth needle spacing	10～50	30	I
170	The ninth needle spacing	The ninth needle spacing	10～50	30	I
171	Tenth needle spacing	Tenth needle spacing	10～50	30	I
172	Number of stitches in the first paragraph	Number of stitches in the first paragraph	0～15	0	I
173	Second paragraph needle count	Second paragraph needle count	0～15	0	I
174	Third paragraph needle count	Third paragraph needle count	0～15	0	I
175	Fourth paragraph needle count	Fourth paragraph needle count	0～15	0	I
176	Number of stitches in the fifth paragraph	Number of stitches in the fifth paragraph	0～15	0	I
177	Number of stitches in the sixth paragraph	Number of stitches in the sixth paragraph	0～15	0	I
178	Number of stitches in the seventh paragraph	Number of stitches in the seventh paragraph	0～15	0	I
179	Number of stitches in the eighth paragraph	Number of stitches in the eighth paragraph	0～15	0	I
180	Number of stitches in the ninth paragraph	Number of stitches in the ninth paragraph	0～15	0	I
181	Number of stitches in the tenth paragraph	Number of stitches in the tenth paragraph	0～15	0	I
215	Press the foot to lift the current	Pressure foot lifting current 0.1A	0～50	30	III
216	Press the foot to release the current	Press down the foot with a current of 0.1A	0～50	5	III
217	Lift and hold the current	Lift and maintain a current of 0.1A	0～50	15	III
218	Put down and maintain the current	Put down and maintain a current of 0.1A	0～50	1	III
219	Pressure foot lifting time	Foot pressure lifting time in milliseconds	50～250	150	III
220	Foot press down time	Foot press down time in milliseconds	50～250	200	III
221	Placing seam thickness	Placing seam thickness	0～400	260	III
222	Press the foot to lift the height	Press the foot to lift the height	0～400	375	III
223	Step offset angle	Step offset angle	0～400	200	III
224	Knee support function setting	Knee support function setting	0/1	0	III
225	Maximum foot pressure height at knee rest	Maximum foot pressure height at knee rest	0～100	100	III
226	Knee zero position voltage	Knee zero position voltage	0～250	120	III
227	Judging speed by pressing the foot against the knee	Judging speed by pressing the foot against the knee	200～1000	500	III
228	Knee press and foot lift slightly	Knee press and foot lift slightly	0～50	0	III
229	Cutting wire feed current	Cutting wire feed current 0.1A	0～50	20	III
230	Wire cutting and blade retraction current	Wire cutting and blade retraction current 0.1A	0～50	20	III
231	Cut the wire to maintain the current	Cut the wire and maintain a current of 0.1A	0～50	10	III
232	Cut the thread and maintain the time	Cut the thread and maintain the time in milliseconds	0～200	2	III
233	Cutting and cutting time	Cutting wire feed time ms	5～250	50	III
234	Cutting and cutting time	Cutting and cutting time in milliseconds	5～250	50	III
235	Cutting line action angle	Cutting line action angle 0.1 °	0～400	150	III
236	Roller locking time	Roller locking time	0～10	3	III
237	time setting	Clock setting	0～23	12	I
238	time setting	Minute setting	0～59	0	I
239	time setting	Second setting	0～59	0	I
240	Acceleration sensitivity	Acceleration sensitivity setting	1～4	3	III
241	High speed KP	High speed KP setting	2～10	6	III
242	Low speed KP	Low speed KP setting	2～10	9	III
243	Pedal control mode	Pedal control mode	0～3	2	III
244	Pedal speed percentage	Pedal speed percentage	50～100	100	II
245	Number of stitches for loose threads	Number of stitches for loose threads	0～10	0	II
246	Duty cycle of loose stitching	Duty cycle of loose stitching	10～100	40	II

Note: If the above faults cannot be eliminated according to the inspection items, please seek technical support.

3. System Monitoring Status

In the default mode of the operation panel, press the P key and simultaneously press the “trigger” key to enter the system monitoring state. Use the “+” and “-” keys to select the item you want to view, and press the S key to enter/return to the selected item. To exit the monitoring interface, press the P key.

Display serial	Project Name	Unit		Display serial	Project Name	Unit
JJ	Piece rate	PCS		U7	Machine Head model	/
U1	Motor speed	rpm		U8	DSP version number	/
U2	Motor current	0.01A		U9	DSP type number	/
U3	Bus voltage	V		VEr	HMI version number	/
U4	Pedal voltage	0.01V		TYPE	HMI type number	/
U5	Machine head mechanical angle	°		DX	Bottom line count	/
U6	Initial angle of motor	°		JP	Piece rate reduction	PCS

4. Fault code

Display	Content	Possible Cause	Inspection Items, handling
E011 E012	Motor signal malfunction	Motor position sensor signal malfunction	1.Is the motor plug in good contact? 2.Is the motor signal detection device damaged 3. Is the sewing machine handwheel installed properly
E021 E023	Motor overload	Motor stalling Motor overload	1.Is the motor plug in good contact? 2. Is the machine head or cutting mechanism stuck? 3. Is the fabric sewn with specifications or thickness above? 4. Is the current detection signal normal
E101	Hardware driver failure	Current detection abnormal driver hardware damage	1. Is the system current detection circuit working properly? 2. Are the driving components damaged
E111 E112	System voltage too high	Actual voltage is too high, brake circuit fault Voltage detection error	1. Is the incoming voltage of the system too high? 2. Is the braking resistor working properly 3. Is the system voltage detection circuit working properly
E121 E122	System voltage too low	The actual voltage is too low and the voltage detection is incorrect	1. Is the incoming voltage of the system too low 2. Is the system voltage detection circuit working properly
E131	Current detection circuit fault	Abnormal current detection	Is the system current detection circuit working properly
E133	OZ circuit malfunction	OZ circuit abnormal	Is the OZ circuit of the system working properly
E134	DBFLT malfunction	The automatic resistance circuit is abnormal	Is the automatic resistor plug in good contact and is the automatic resistor damaged
E201	Excessive motor current	Abnormal current detection, abnormal motor operation	1. Is the system current detection circuit working properly? 2. Is the motor signal normal
E211 E212	Abnormal operation of the motor	Abnormal operation of the motor	1. Is the motor plug in good contact? 2. Is the motor signal mismatched
E301	Poor communication in the operation box	Communication data loss of machine head operation box	1. Is the plug of the operation box in good contact? 2.Are the components of the operation box damaged
E402	Pedal ID malfunction	Pedal identification fault	The pedal joint is loose
E403	Pedal zero position correction fault	The pedal zero correction value exceeds the range	The pedal is not in a stopped state when it is damaged or calibrated
E501	Flip switch malfunction	The flip switch is effective	Put down the machine head or check the flip switch
E601	Hardware driver failure	Needle motor STEP2 hardware overcurrent	Is the system current detection circuit working properly and is the driver damaged
E602	Hardware driver failure	Needle motor STEP2 software overcurrent	Is the system current detection circuit working properly and is the driver damaged
E603	Hardware driver failure	STEP2 current detection circuit for needle motor	Is the system current detection circuit working properly and is the driver damaged
E604	Motor signal malfunction	Needle motor STEP2 initial mechanical angle	Is the plug of the fabric delivery motor in good contact
E605	Motor signal malfunction	At the beginning of STEP2, the encoder or rotor of the needle motor gets stuck	Is the plug of the fabric delivery motor in good contact and is there any mechanical sticking point
E610	Upper roller stepper motor malfunction	Hardware overcurrent of upper roller stepper motor	Is the plug of the upper roller stepper motor in good contact and is the driving component damaged
E611	Lower roller stepper motor malfunction	Hardware overcurrent of the lower roller stepper motor	Is the plug of the lower roller stepper motor in good contact and is the driving component damaged
E612	Fan malfunction	Fan stalling	1. Is the fan plug in good contact 2. Is the fan blade unable to rotate due to foreign object contact
E613	The position error of the needle motor is large	The position error of the needle motor is large	Contact the dealer for handling
L.bob	Bottom line reminder	The bottom line count value is negative	After changing the bottom line, press the S button to cancel the prompt
P.bob	Piece rate reminder	The count value is zero	Press S key to enter the interface, and long press "front seam" button for more than 2 seconds to cancel the prompt state
P.oFF	Power off display	Power off	Wait for power supply to resume.
EvaL	Trial period expires	Trial period expires	Contact the dealer processing