

SIRUBA

電控參數說明書

ELECTRONIC CONTROL PARAMETER MANUAL

■ LBHS-1790DQ Series



前言

歡迎您使用此電腦鎖眼機控制系統。

請您仔細閱讀本說明書，以確保正確的操作使用電腦鎖眼機，請按照本說明書內注明的方式進行操作，否則，如違規操作所造成損失本公司不承擔責任。此外，請將本說明書妥善保存在安全地點，以便隨時查閱，若發生故障須由本公司指定的技術人員或專業人員進行維修。

安全注意事項

1. 安全操作的標誌及含義

本使用說明書及產品所使用的安全標誌是為了讓您正確安全的使用產品，防止您及其他人受到傷害。標誌的圖案和含義如下：

	危險	如果忽視此標記而進行錯誤的操作，會導致人員的重傷或死亡。
	注意	如果忽視此標記而進行錯誤的操作，會導致人員的受傷和設備的損壞。
		該符號表示“應注意事項”。三角中的圖案表示必須要注意的內容。（例如左邊的圖案表示：“當心受傷”）
		該符號表示“禁止”
		該符號表示“必須”。圓圈中的圖案表示必須要做的內容。（例如左邊的圖案表示“必須接地”）

2. 安全注意事項

		危險
		打開控制箱時，先關閉電源開關並將電源插頭從插座上拔下後，等待至少 5 分鐘後，再打開控制箱蓋。觸摸帶有高電壓的區域會造成人員受傷。
		注意
使用環境		
		應避免在強電氣干擾源（如高頻焊機）的附近使用本縫紉機。 強電氣干擾源可能會影響縫紉機的正常操作。
		電源電壓的波動應該在額定電壓的±10%以內的環境下使用。 電壓大幅度的波動會影響縫紉機的正常操作，需配備穩壓器。
		環境溫度應在 0°C~45°C 的範圍內使用。 低溫或高溫會影響縫紉機的正常操作。
		相對濕度應在 35%~85% 的範圍內，並且設備內不會形成結露的環境下使用。乾燥、潮濕或結露的環境會影響縫紉機的正常操作。
		壓縮空氣的供氣量應大於縫紉機所要求的總耗氣量。壓縮空氣的供氣量不足會導致縫紉機的動作不正常。
		萬一發生雷電暴風雨時，關閉電源開關，並將電源插頭從插座上拔下。雷電可能會影響縫紉機的正常操作。
安裝		
		請讓受過培訓的技術人員來安裝縫紉機。

	安裝完成前，請不要連接電源。 如果誤按啟動開關，縫紉機動作會導致受傷。
	縫紉機頭倒下或豎起時，請用雙手操作。不要用力壓縫紉機。 如縫紉機失去平衡，縫紉機滑落到地上會造成受傷或機器損壞。
	必須接地。 接駁地線不牢固，是造成觸電或誤動作的原因。
	所有電纜應固定在離活動部件至少 25mm 以外處。另外，不要過度彎曲或用卡釘固定得過緊。 會引起火災或觸電的危險。
	請在機頭上安裝安全罩殼。
縫紉	
	本縫紉機僅限於接受過安全操作培訓的人員使用。
	本縫紉機不能用於除縫紉外的任何用途。
	使用縫紉機時必須戴上保護眼鏡。 如果不戴保護眼鏡，斷針時機針折斷部分可能會彈入眼睛造成傷害。
	發生下列情況時，請立即切斷電源。否則誤按下啟動開關時，會導致受傷。 1.機針穿線時 2.更換機針時 3.縫紉機不使用或人離開縫紉機時
	縫紉過程中，不要觸摸任何運動部件或將物件靠在運動部件上，因為這會導致人員受傷或縫紉機損壞。
	如果縫紉機操作中發生誤動作，或聽到異常的雜訊或聞到異常的氣味，應立即切斷電源。然後請與購買商店或受過培訓的技術人員聯繫。
	如果縫紉機出現故障，請與購買商店或受過培訓的技術人員聯繫。
維護和檢查	
	只有經過訓練的技術人員才能進行縫紉機的維修、保養和檢查。
	與電氣有關的維修、保養和檢查請及時與電控廠家的專業人員進行聯繫。
	發生下列情況時，請關閉電源並拔下電源插頭。否則誤按啟動開關時，會導致受傷。 1.檢查、調整和維修 2.更換彎針、切刀等易損零部件
	在檢查、調整和修理任何使用氣動設備之前，請先斷開氣源，並等壓力錶指標下降到“0”為止。
	在必須接上電源開關和氣源開關進行調整時，務必十分小心遵守所有的安全注意事項。
	未經授權而對縫紉機進行改裝而引起的縫紉機損壞不在保修範圍內。

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1 概要說明

概述

本工業縫紉機電腦控制系統，主軸電機採用具有世界先進水準的交流伺服控制技術驅動，具有力矩大、效率高、車速穩定和噪音低等特點。操作面板設計多樣化可滿足不同客戶的配套要求；系統採用德國式結構設計，安裝和維修方便快捷，系統控制軟體可通過遠端通訊升級，方便使用者不斷提高產品性能。

功能和指標參數

本系列數控交流伺服系統的功能及參數詳見表 1。

表 1: 功能及參數對照表

序號	機 型 項 目	LBHS-1790DQ
1	寬幅	5mm (分解能: 0.05mm)
2	切刀尺寸 (切刀長度)	6.4~31.8mm (1/4" ~1 1/4")
3	縫製長度 (最大)	41mm (選購配件最大可縫製 120mm)
4	縫製速度	標準3600rpm 最高4200rpm
5	速度控制方式	控制台輸入
6	使用機針	DP×5#11J~#14J
7	針杆行程	34.6mm
8	挑線杆	鏈式挑線杆
9	旋梭	DP型 全自動旋轉供油旋梭
10	壓腳上升量	14mm (可任意設定) 最大 17mm (逆轉抬機針能時)
11	抬壓腳驅動方式	脈衝馬達式 (1個踏板·2個踏板)
12	繞線功能	機頭內置式 (僅在機器驅動中可繞線)
13	送布驅動方式	脈衝馬達式
14	擺針驅動方式	脈衝馬達式
15	切刀驅動方式	雙向電磁鐵驅動
16	麵線張力機能	電磁鐵張力方式 通過控制台操作可對各部位進行資料設定 (平行部、套件部張力)
17	縫跡形狀	角型、放射型、圓型 (控制台選擇) 等 30種
18	記憶花樣數	500個花樣
19	資料記憶媒體	U盤
20	1/2重切換	每個花樣都可設定
21	馬達	小型 AC伺服馬達 400W 直接驅動方式
22	外形尺寸	機床寬度 200mm、高度 360mm、長度 570mm

23	機頭重量	70Kg
24	額定功率	600W
25	使用溫度範圍	0℃～45℃
26	使用濕度範圍	35%～85%
27	電源電壓	AC220V±10%；50/60Hz

壓腳規格：

	壓腳規格 1	壓腳規格 2	壓腳規格 3	壓腳規格 5
寬度	4mm	5mm	5mm	3-6mm(任意設定)
縫製長度（最大）	25mm	35mm	41mm	10-120mm（任意設定）

機種規格區分 S：標準 K：針織規格

※ 產品執行標準：QCYXDK0004—2022《工業縫紉機電腦控制系統》。

標準化

功能按鍵採用業界公認的圖形標識，圖形是國際化語言，各國使用者都可以識別。

安全使用注意事項

● 安裝

- 控制箱
 - ◆ 請遵照說明正確裝好
- 附件
 - ◆ 如要安裝其它附件時，請先關掉電源並拔掉電源插頭。
- 電源線
 - ◆ 請不要用重力去壓住電源線或過度的扭曲電源線。
 - ◆ 請不要將電源線靠近轉動的部位，最少要離開 25mm 以上。
 - ◆ 控制箱要接入電源前，請必再查看要接入的電源電壓是否與控制箱上標示的電壓相同及確定位置後，才可供應電源。如有接用電源變壓裝置的話，同樣的要檢查一下後才可供應電源。這時縫紉機上的按鈕式電源開關一定要放在 [OFF]。
- 接地
 - ◆ 為防止雜訊干擾及漏電而發生電擊事件，電源線上的接地線定要確實做好接地。
- 附屬裝置
 - ◆ 如要接用電氣方面的附屬裝置的話，請遵照指示的位置接好。
- 拆卸
 - ◆ 要卸下控制箱時，必須要先關掉電源並拔掉電源插頭。
 - ◆ 在拔離電源插頭時不可只拉電源線，必須用手拿住電源插頭拔出。
 - ◆ 控制箱裡面有危險的高壓電，所以要打開控制箱蓋的話，需要先關掉電源後等候 5 分鐘以上才可打開控制箱蓋。

● 保養、檢查和修理

- 修理和保養的作業，要請經過訓練的技術人員執行。

- 更換機針和梭子時，請務必關電。
- 請使用正廠的零件。

● 其它的安全對策

- 縫紉機運轉中請不要去觸摸會轉動和會移動的部位（特別是機針和皮帶附件）等，並注意頭髮不要靠近它們，以免發生危險。
- 控制裝置不可摔落地，更不可在空隙間塞入其它物品。
- 請不要在拆掉各護蓋的情形下運作。
- 如本控制裝置有損傷或無法正常運作時，必要請有經驗的技術人員調整，或檢查修理，在故障還沒排除前請不要再去運轉它。
- 敬請各客戶們不要自行改造或變更本控制裝置。

● 廢棄處理

- 請以一般產業廢棄物處理。

● 警告示意和危險示意

- 錯誤的行為可能會發生危險，其程度如後述的標示區別說明。

 警告	错误的行动可能会发生重伤或死亡。	 注意	错误的行动可能会发生伤害或房屋或财产的损害。
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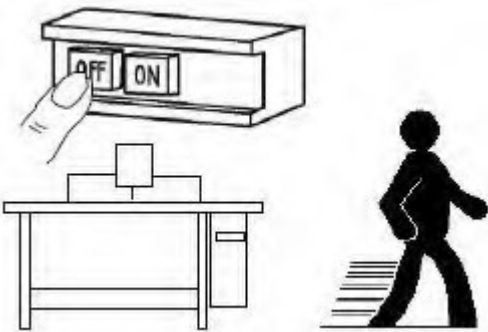
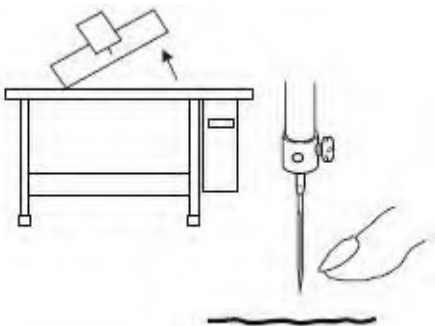
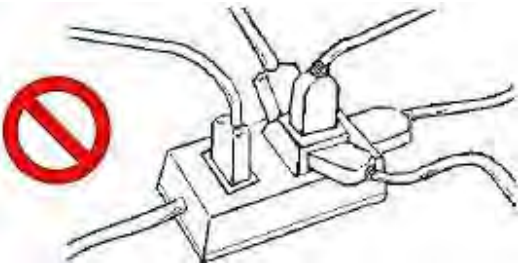
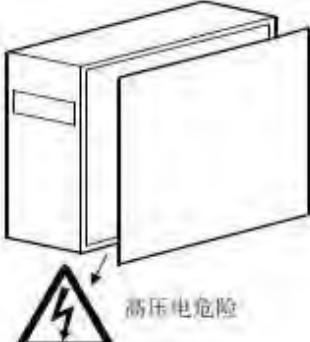
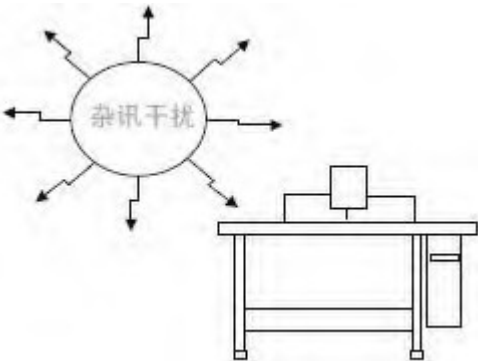
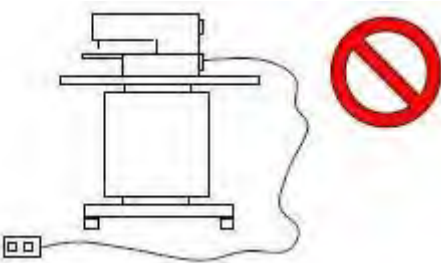
- 標示符號的表示如下說明。

	请遵照指示内容作业。		注意高压电（电击）的危险。
	注意高温。		务必接上接地线。
	绝对不要执行。		

使用上的預防措施



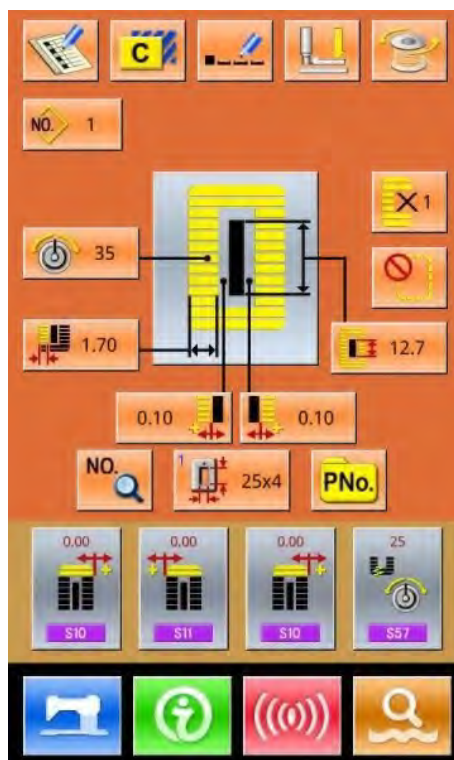
- 1、要离开工作岗位时，请务必关掉电源。

	
2、如要橫倒頭部或更換機針或穿麵線時，請務必關掉電源。 	3、接地線要做好接地。 
4、不要用家庭用多插孔式延長線。 	5、控制箱內部存有危險的高壓電，所以關掉電源後等候 5 分鐘才可打開控制箱蓋。 
6、請遠離會產生高周波雜訊干擾的機器。 	7、如利用外接信號插座接應用附屬裝置時，其連接線長度請儘量越短越好，長線可能會導致誤動作，連接線請用隔離線纜。 
8、如保險絲燒斷時，請先把原因排除後再換相同容量的保險絲。	

操作方式

操作面板採用了業界先進的觸摸操作技術，友好的介面以及便捷的操控都給用戶的日常使用帶來革新性的變化。使用者可以使用手指或者其他物體點觸螢幕，完成相應的操作。

功能鍵包括準備鍵，資訊鍵，模式鍵以及通信鍵等。具體操作方法後面章節的說明。



用戶在使用過程中應該注意避免使用尖銳的物體觸碰螢幕，以免對觸控式螢幕造成永久性損傷。

基本縫製形狀一覽

01方形 	02圓形 	03放射方形 	04放射形 	05放射直線固定型 
06放射錐形固定形 	07圓眼方形 	08圓眼放射形 	09圓眼直線加固形 	10圓眼錐形加固形 

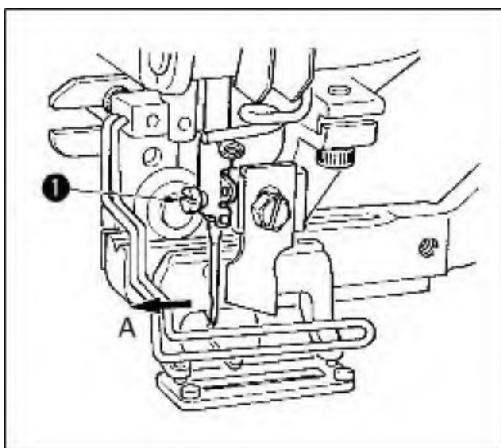
11半圓形 	12圓方形 	13半圓方形 	14半圓直線加固形 	15半圓錐形加固形 
16圓眼半圓形 	17圓眼圓形 	18方放射形 	19方半圓形 	20方圓形 
21方直線加固形 	22方錐形加固形 	23放射半圓形 	24放射圓形 	25半圓放射形 
26半圓圓形 	27加固縫 	28加固右切斷 	29加固左切斷 	30加固中央切斷 

2 縫製前準備

機針的安裝方法



为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



- 1) 轉動飛輪，把機針上升到最高位置。
- 2) 從縫紉機正面看，把機針凹部橫向轉到前側 A 向
- 3) 然後把機針插進針杆孔的深處
- 4) 旋緊機針固定螺絲①

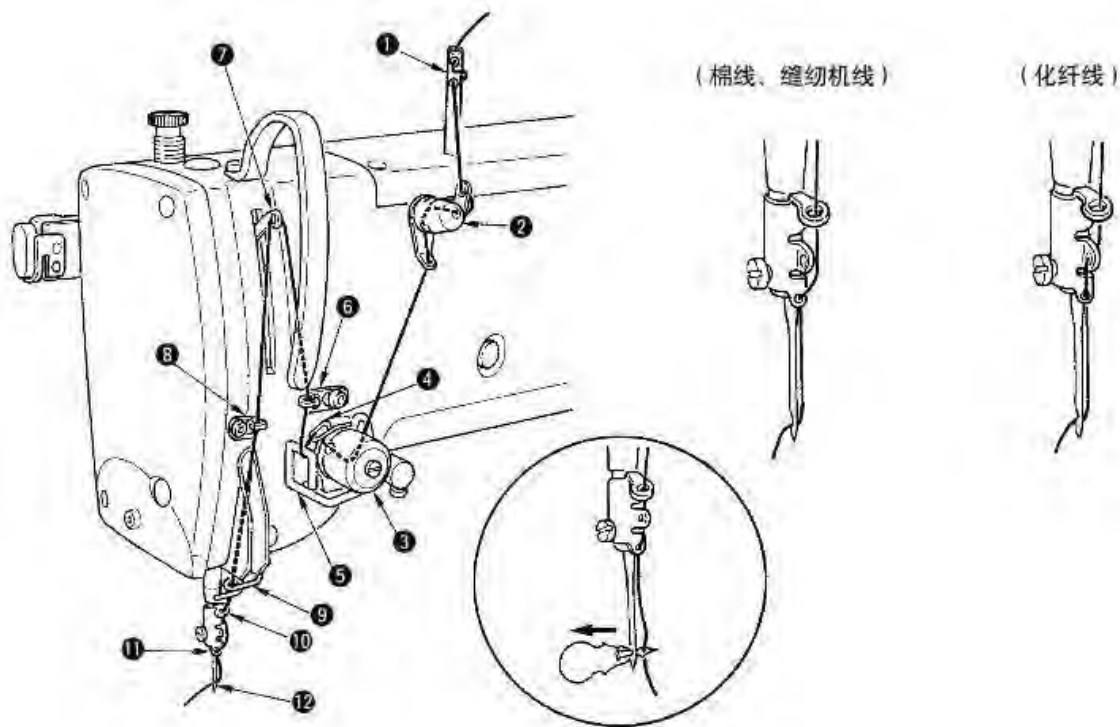
※ 機針選用 DP×5 # 11J # 14J

安裝機針時，請一定關掉電源

上線的穿線方法



为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



按上圖所示，從 1~12 順序進行即可

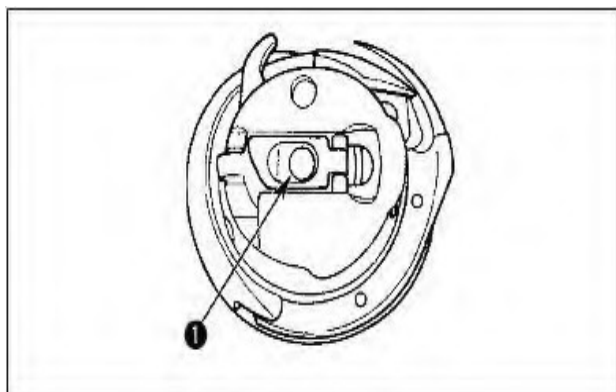
上線時，使用穿線器可幫助方便、快捷的上線。

梭殼的安裝方法



警告

为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



① 拔起梭殼抓手

② 插入中旋梭軸①，關閉抓手。梭殼被按到一定位置時會聽到嗒嗒的聲音。

※ 如果梭殼沒有在規定的位置，縫紉後梭芯會飛出來，上線繞到梭軸上

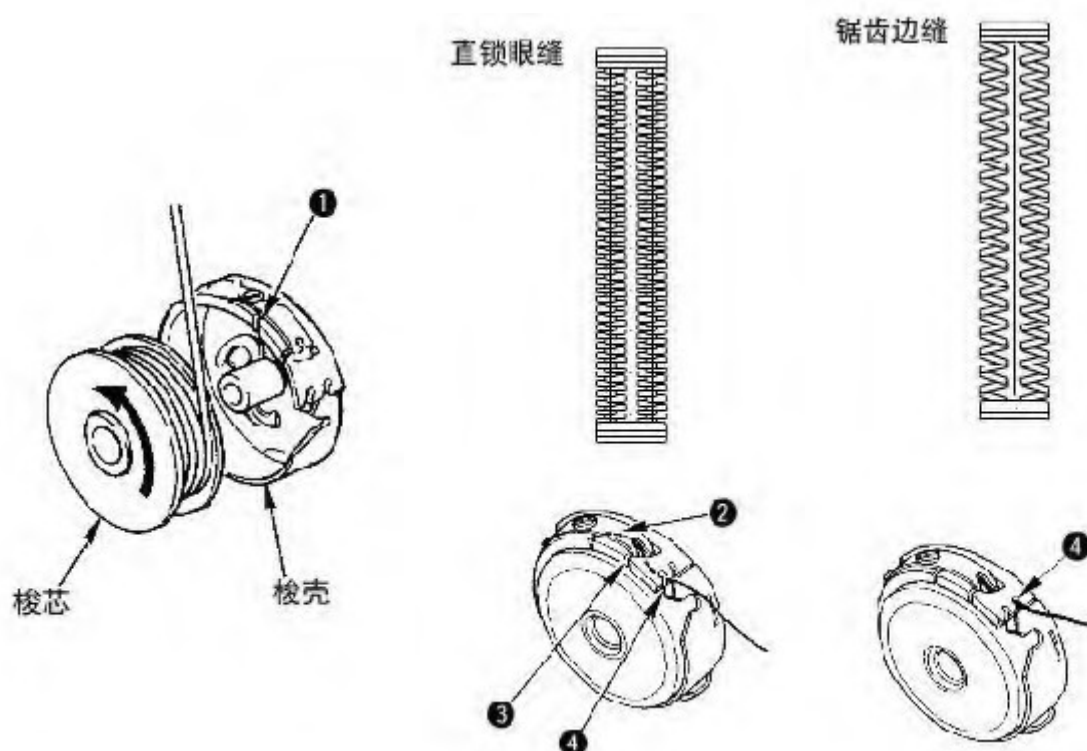
※ 標準旋梭和幹式旋梭的形狀不一樣，不能通用

梭殼的穿線方法



警告

为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



- 1) 按箭頭所示方向把梭芯插進梭殼；
- 2) 把機線穿過穿線口①，然後再從張力彈簧②的下面傳過去，再穿過穿線口③，從④中把線拉出

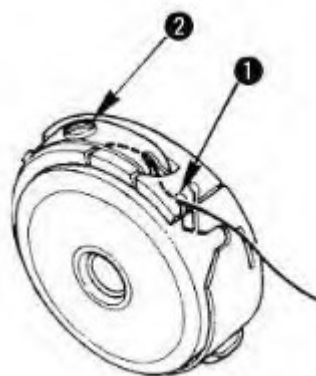
※ 注意直鎖眼縫和鋸齒邊縫時，④的穿線方法不同

底線張力的調整



警告

为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



當梭殼穿線口①在上方位置時，把底線向上拉出，按照下面的方法調整張力

直鎖眼縫	0.05~0.15N	手拿從梭殼出來的線頭，輕輕上下擺動時，梭殼就稍稍下降
鋸齒邊縫	0.15~0.3N	手拿從梭殼出來的線頭，用稍強的力量擺動時，梭殼才下降

把線張力螺絲②向右轉動，底線張力變強，向左轉動，底線張力變弱

※ 使用化纖機線時，張力稍稍減弱，棉線時稍稍加強

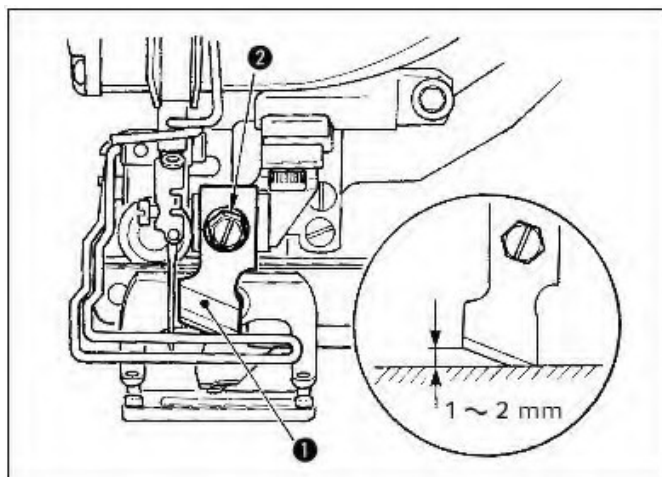
※ 調整底線張力後，請確認縫製參數中的上線張力的設定

切刀的安裝方法



警告

为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



- 1) 卸下切刀固定螺絲②，切刀①和墊片就可以卸下來了
- 2) 用手按下切刀後，如圖所示把切刀和針板上方的距離調整到 1~2mm，然後套上墊片，並擰緊固定螺絲。

如果切布刀的尺寸用英制表示時，可以參考下面的轉換表，來確定切布刀的長度。

英寸到公制轉換表

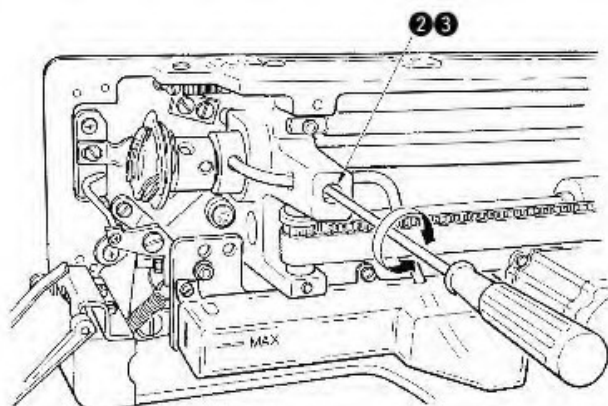
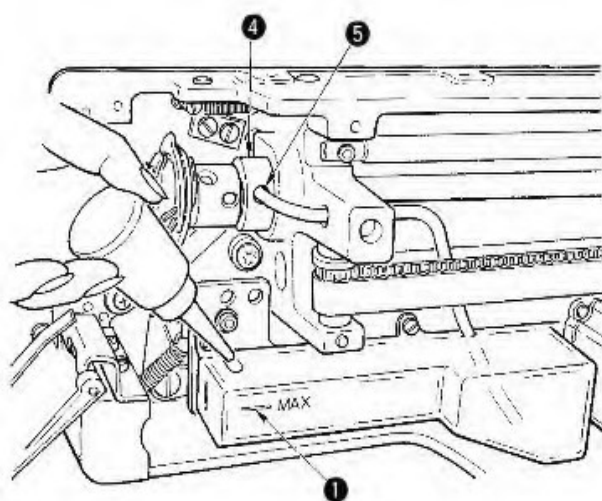
切刀尺寸（英寸）	切刀尺寸（公制）mm
1/4	6.40
3/8	9.50
7/16	11.10
1/2	12.70
9/16	14.30
5/8	15.90
11/16	17.50
3/4	19.10
13/16	20.60
7/8	22.20
1	25.40
1 1/8	28.60
1 1/4	31.80
1 3/8	34.90
1 1/2	38.10

機油加注方法

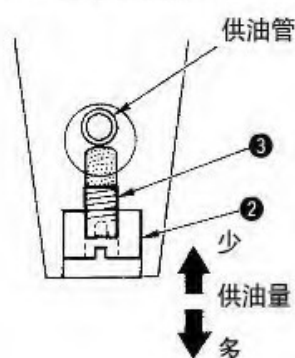


警告

为防止突然地起动造成人身事故，请关掉电源，确认马达完全停止后在进行操作。



油量调节部详细图



1) 向加油罐中加油

- 把機油加滿到①MAX標記的位置

2) 旋梭油量調整

- 擰松油量調節固定螺絲②，然後用油量調節螺絲③進行調整
- 調節旋梭油量時，擰緊油量調節螺絲③，則油量減少
- 油量調節後，請用固定螺絲②進行固定
- 新裝縫紉機或較長時間沒有用過的縫紉機，使用前請取下梭殼，在梭邊殼加 2~3 滴機油，另外向下軸前金屬部件④的加油孔⑤加幾滴機油，把油浸潤到裡面的毛氈裡。

3 操作說明

各部位的名稱和說明



① 觸摸盤晶顯示部

②  準備鍵→進行資料登錄介面和縫製介面的變換

③  資訊鍵→進行資料登錄介面和資訊介面的變換

④  通信鍵→進行資料登錄介面和通信介面的變換

⑤  模式鍵→進行資料登錄介面和各種詳細設定變換介面的變換

⑥ 電纜線

⑦ U盤插口

通用按鍵

各介面上進行通用操作的按鍵如下所示。

序號	圖示	功能	備註
1		取消按鍵 → 退出當前設定介面。資料變更介面時，取消變更中的資料。	
2		確定按鍵 → 確定變更了的資料。	
3		加鍵 → 向上增加數值按鍵。	
4		減鍵 → 向下減小數值按鍵。	
5		重定按鍵 → 解除異常。	
6		數位輸入按鍵 → 顯示數位鍵盤，可以進行數位的輸入。	

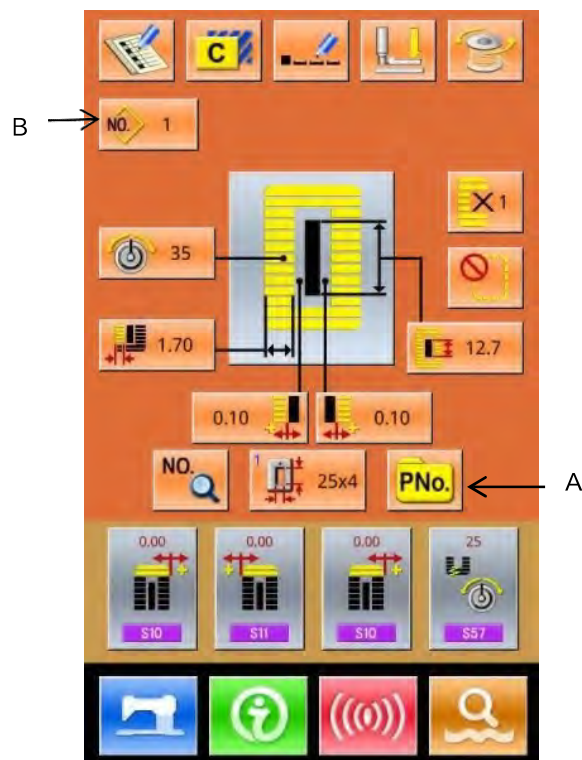
基本操作

① 打開電源開關

首先，請確認設定的壓腳類型（A）和安裝的壓腳類型是否相同。

② 選擇想縫製的圖案 No.

打開電源之後，顯示出資料登錄介面。在介面上部顯示出現在選擇的圖案No.，按鍵（B）之後可以選擇圖案No.。（沒有登記的圖案號不顯示。）

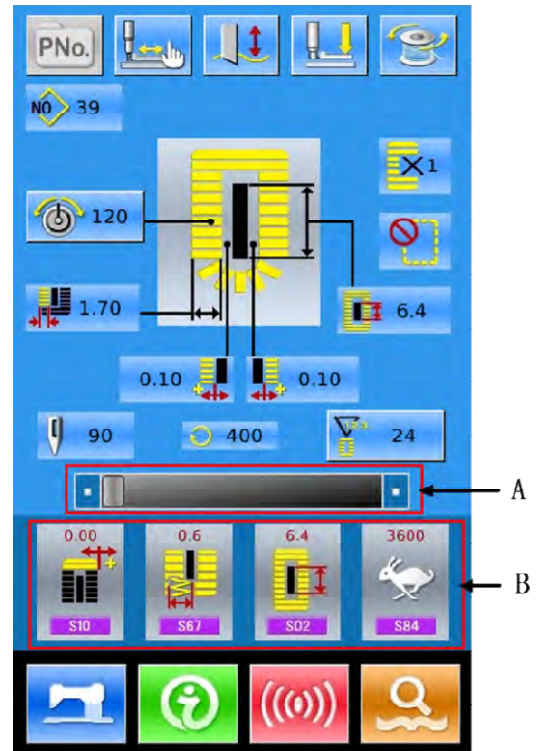


③ 設定成可以縫製的狀態

按準備鍵之後，液晶顯示的背景顏色變為藍色，變成可以縫製的狀態，右圖中的A處是速度設置，B處是使用者管理顯示。

④ 開始縫製

把縫製品放到壓腳部，踩踏板，縫紉機啟動，開始進行縫製。



普通花樣操作

普通花樣設置和縫製介面如右圖所示，各按鍵詳細功能說明請見“4.普通花樣縫製”的介紹。

普通縫製方式是系統預設的方式，系統出廠時是普通縫製方式。

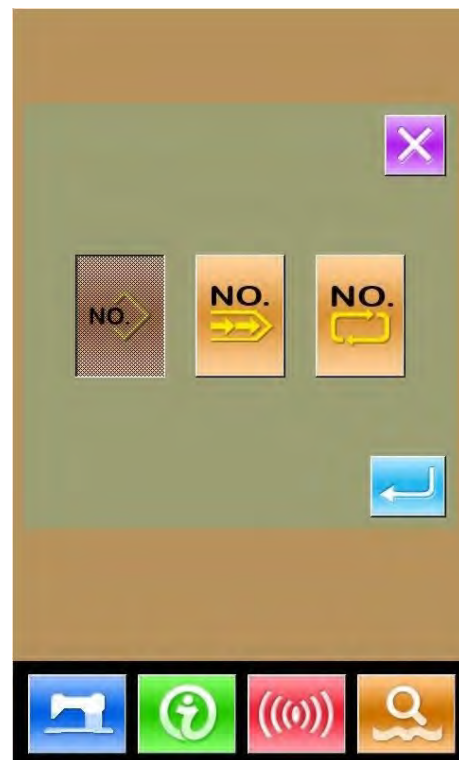
操作步驟：

- ① 按模式鍵進入模式設置



② 按縫製方式鍵  選擇普通縫方式 

③ 按確定鍵  ,再按模式鍵  顯示普通縫主介面

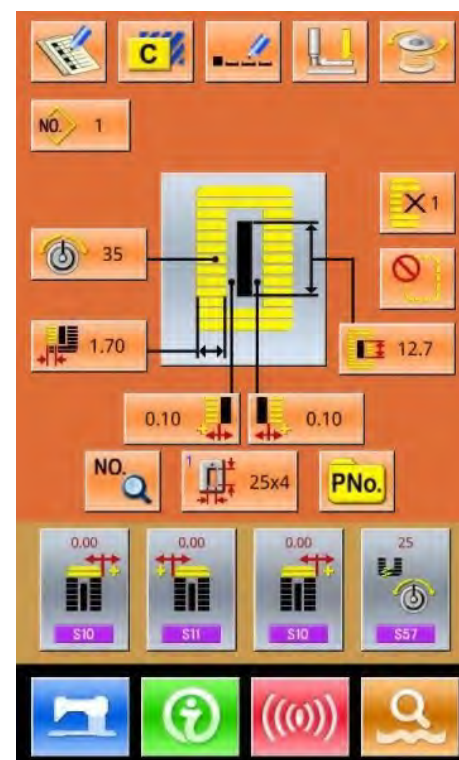


④ 選擇所用的縫製形狀

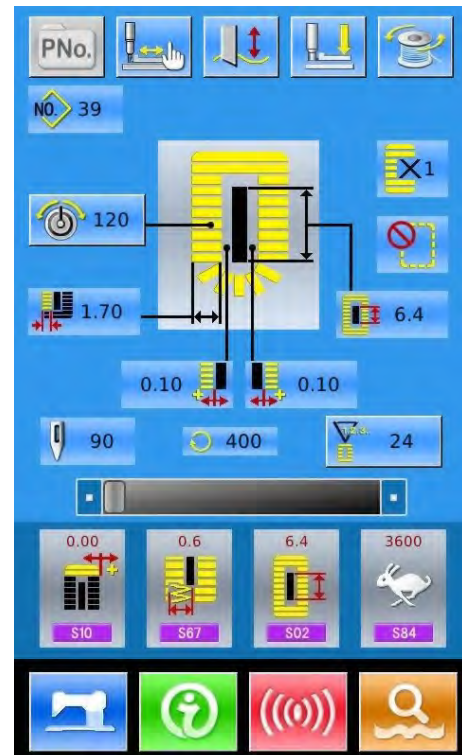
⑤ 設定必要的縫製參數

⑥ 選擇壓腳類型

⑦ 進行必要的編輯操作（登記、拷貝、A 命名等）



- ⑧ 按準備鍵進入縫製介面準備縫製
- ⑨ 在縫製介面進行切刀、速度等設置進
- ⑩ 行計數器設置
- ⑪ 必要時選擇試縫
- ⑫ 放下壓腳、踩動踏板，進行縫製



連續縫花樣操作

連續縫操作的各介面如右圖所示，介面的各按鈕的功能描述，參考“5.連續縫花樣縫製”

操作步驟：

- ① 按模式鍵進入模式設置



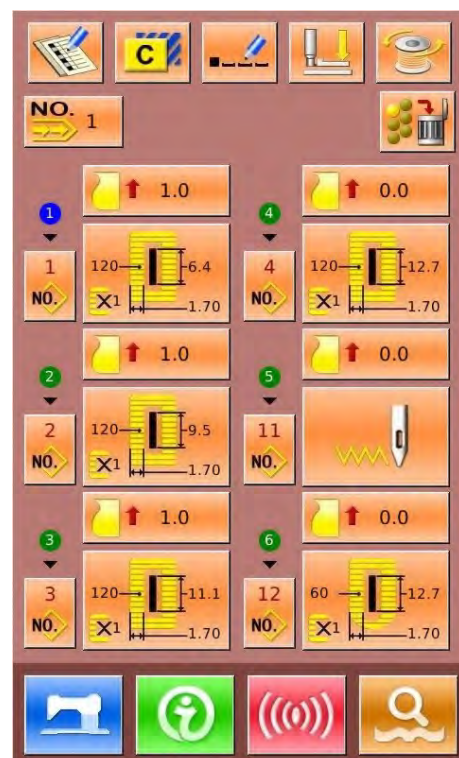
- ② 按縫製方式鍵  選擇連續縫方式 

- ③ 按確定鍵 ，再按模式鍵  顯示連續縫主介面

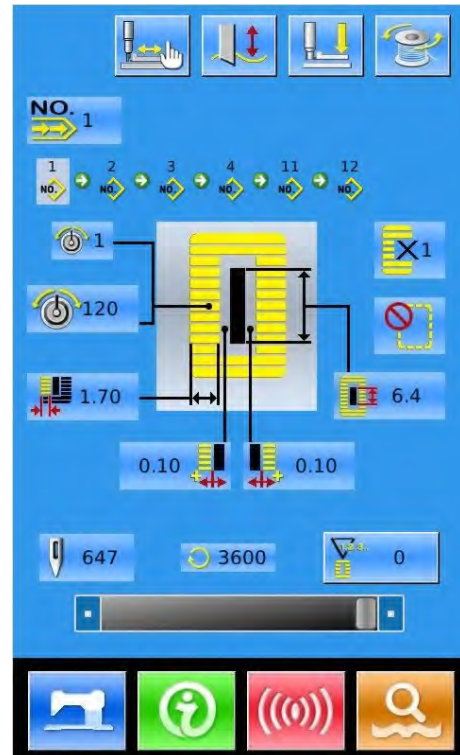


- ④ 在連續縫主介面下，添加連續縫使用的花樣和送布量

- ⑤ 進行必要的編輯操作（複製、命名、添加、刪除等）



- ⑥ 按準備鍵進入縫製介面準備縫製
- ⑦ 在普通縫製介面進行切刀、速度等設置
- ⑧ 進行計數器設置
- ⑨ 必要時選擇試縫
- ⑩ 放下壓腳、踩動踏板，進行縫製



迴圈縫花樣操作

迴圈縫操作的各介面如右圖所示，介面的各按鍵的功能描述，參考“6.迴圈縫花樣縫製”

操作步驟：

- ① 按模式鍵進入模式設置



② 按縫製方式鍵  選擇迴圈縫方式 

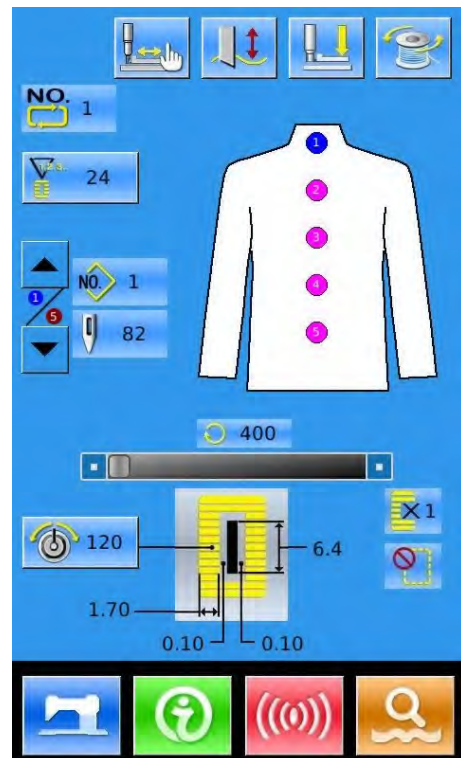
③ 按確定鍵 ，再按模式鍵  顯示迴圈縫主介面



- ④ 在迴圈縫主介面下，選擇縫製織物
- ⑤ 移動縫製位置，添加迴圈縫使用的花樣
- ⑥ 進行縫製花樣縫製參數設置
- ⑦ 進行必要的編輯操作（複製、命名、添加、刪除等）



-
- ⑧ 按準備鍵  進入縫製介面準備縫製
 - ⑨ 在普通縫製介面進行切刀、速度、張力等設置
 - ⑩ 進行計數器設置
 - ⑪ 必要時選擇試縫
 - ⑫ 放下壓腳、踩動踏板，進行縫製



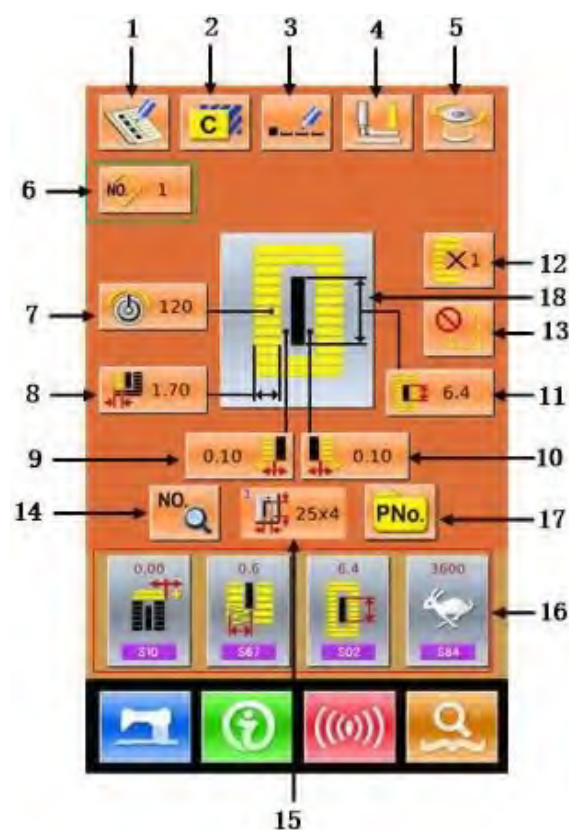
4 普通花樣縫製

系統出廠時，預設方式是普通花樣縫製方式，該方式的操作步驟在“3.操作說明”中進行了描述，本節對普通花樣縫製的各按鍵操作進行詳細說明。

介面功能鍵

(1) 縫製資料登錄介面

資料登錄介面如右圖所示，詳細功能說明請見功能鍵說明表。



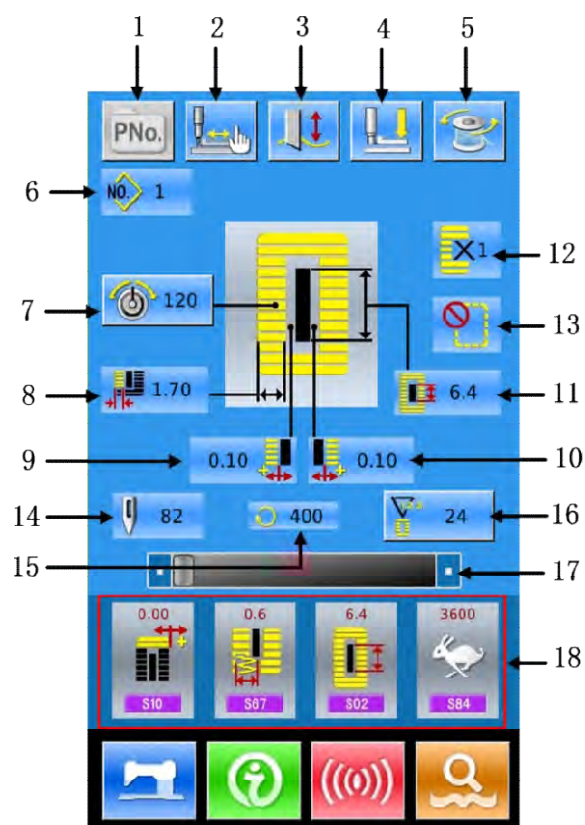
功能鍵說明表：

序號	圖示	功能	備註
1		花樣登記	
2		花樣複製	
3		花樣命名	
4		穿線（壓腳下降）	可以在該狀態下更換機針

序號	圖示	功能	備註
5		繞線	
6		花樣選擇	按此鍵可進入花樣選擇介面
7		上線張力設定 (S51 , S52 , S55 , S56)	S52 和 S56 受縫製資料開關影響
8		左包邊寬度設定/返回寬度	1~26 號形狀為左包邊寬度設置，27~30 號形狀為返回寬度設定
9		切刀槽左寬度設定	27 , 29 號形狀不支持
10		切刀槽右寬度設定	27 , 28 號形狀不支持
11		切布長度	
12		雙重縫/單次縫設置	27 , 28 , 29 號形狀不支持
13		下縫次數設置	30 號形狀不支持
14		縫製數據設置	
15		壓腳類型選擇	
16		用戶管理	可把使用頻率高的 4 個縫製資料設為快速鍵放在主介面
17		直接選擇鍵	
18		縫製形狀選擇	

(2) 縫製介面

按下  進入縫製介面如右圖所示。詳細功能說明請見功能鍵說明表。



功能鍵說明：

序號	圖示	功能	備註
1		P花樣選擇按鍵	受k18參數控制
2		試縫	
3		 ：切刀使能  ：切刀禁止	切換切刀使能
4		穿線（壓腳下降）	
5		繞線	
6		花樣號碼顯示	
7		上線張力張力設定	
8		左包邊寬度顯示	

序號	圖示	功能	備註
9		切刀槽左寬度顯示	
10		切刀槽右寬度顯示	
11		切布長度顯示	
12		單次縫/雙重縫顯示	
13		下縫次數顯示	
14		總針數顯示	
15		當前縫製速度顯示	
16		計數器值顯示  : 縫製計數器  : 計件計數器	
17		速度設置	受k07參數影響
18		使用者管理顯示	

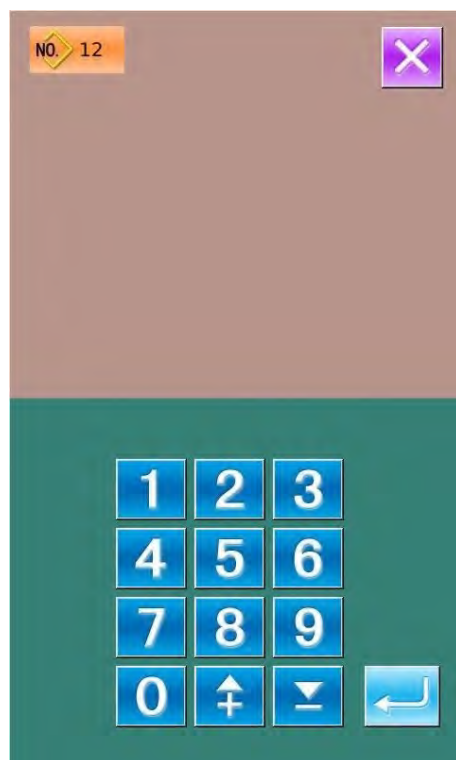
花樣登記

最多可以登記普通花樣500個。按下進入花樣登記介面（如右圖所示）：

① 輸入花樣號

通過數位鍵可以選擇想要輸入的花樣號碼，如果輸入了已經存在的花樣號碼，介面上方會顯示出被登記的縫製形狀及相關資料，已經登記的花樣

號碼不能重複登記。通過鍵可以檢索未登記的花樣號碼。



② 選擇第一固定縫形狀

確定花樣號碼後按下，則進入第一固定縫形狀選擇介面（如右圖所示）。

按逸出鍵直接退出選擇。

注：縫製形狀數量受參數K04影響，參閱第4.9節縫製形狀選擇部分。



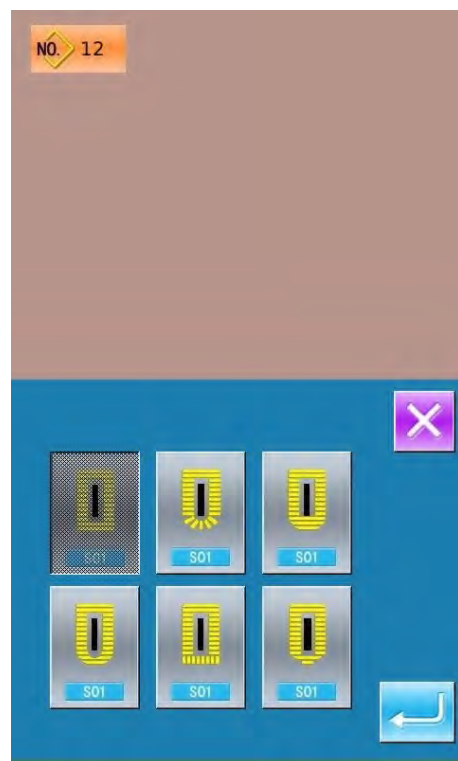
③ 結束縫製形狀選擇

選擇好第一固定縫形狀後則進入結束形狀的選擇介面（如右圖所示）。

按下則完成了新花樣的登記並返回主界面，根據選擇的縫製形狀，設置縫製資料初始值。

按逸出鍵直接退出選擇。

注：縫製形狀數量受參數 K04 影響，參閱第 4.9 節縫製形狀選擇部分。



花樣複製

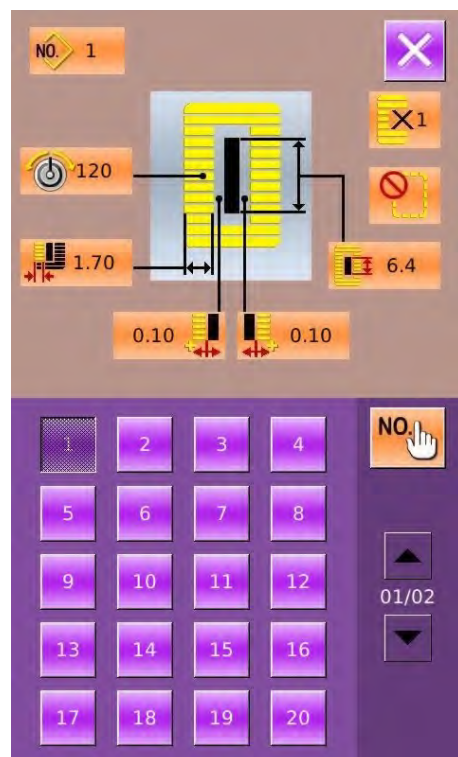
① 選擇被複製花樣

按下進入花樣複製介面（如右圖所示）。

A、在已登記的花樣中選擇被複製花樣號碼並按

下，進入登記號碼輸入介面。

B、按逸出鍵直接退出花樣複製

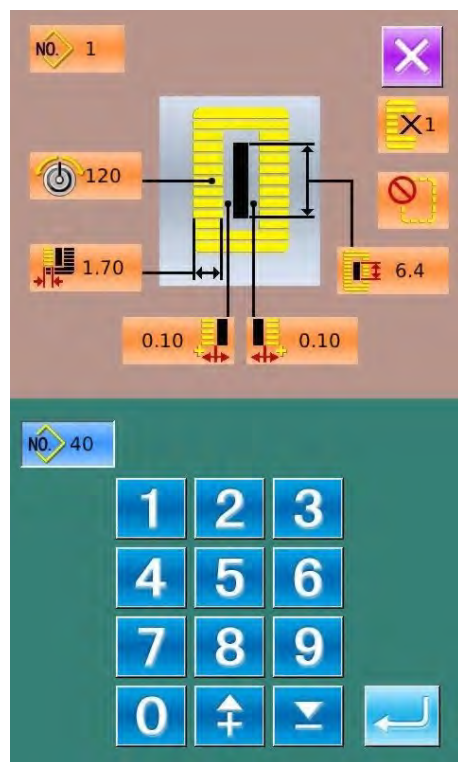


② 輸入新登記的花樣號碼

介面上方顯示為被複製花樣縫製形狀和相關縫制資料，通過數位鍵選擇未登記的花樣號碼，已經登記的花樣號碼不能重複登記。

A、按下  則完成花樣複製操作，並返回花樣複製介面。

B、按逸出鍵  直接退出號碼輸入介面



花樣命名

按下  進入花樣命名介面（如右圖所示），最多可以輸入 12 個字元。

 : 游標右移鍵

 : 游標左移鍵

 : 字母大小寫切換鍵

 : 清除鍵

A、選擇想要輸入的字元，按下  結束花樣命名操作。

B、通過移動游標可以確定該字元位置，消除鍵可以消除該位置字元。

C、按下逸出鍵  直接退出。



穿線

按下  進入穿線介面，此時壓腳下降，按下穿線介面下的壓腳上升鍵則壓腳上升並返回主介面。



：壓腳下降



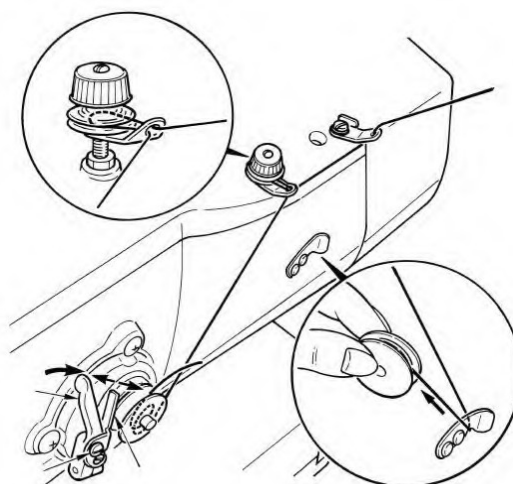
：壓腳上升



繞線

① 安裝梭芯

把梭芯插進繞線軸。然後，請朝箭頭方向按梭芯導向器（如右圖所示）。



② 顯示底線繞線介面

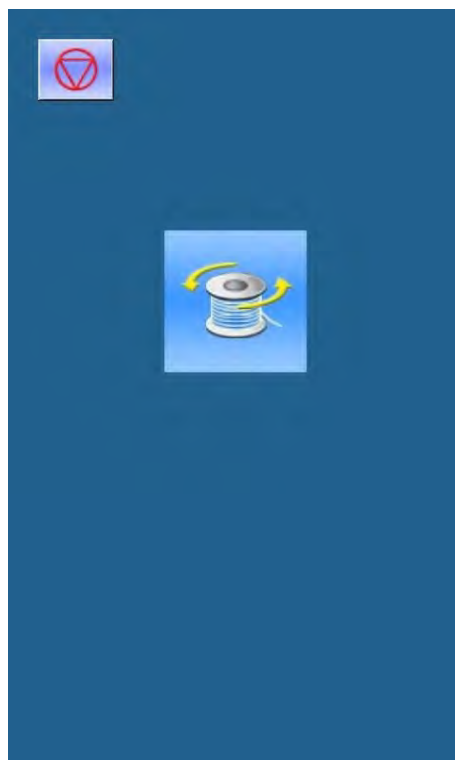
在資料登錄介面(橙色)或縫製介面(藍色)上，按了繞線按鍵之後，繞線介面被顯示出來（如右圖所示）。

③ 開始繞線

踩踏啟動踏板之後，縫紉機轉動，開始捲繞底線。

④ 停止縫紉機

按了停止按鍵之後，縫紉機停止轉動，返回通常模式。另外，在捲繞底中，再次踩踏踏板之後，縫紉機在繞線模式下停止縫紉機，因此再次踩踏啟動踏板，可以繼續捲繞底，在捲繞數個梭芯時可以利用此功能。



選擇壓腳類型

① 顯示資料登錄介面

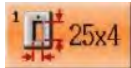
僅資料登錄介面(橙色)可以變更設定內容。如果顯示的是縫製介面(藍色)時，請按準備鍵，就會顯示出資料登錄介面。

② 調出壓腳類型選擇介面

按了壓腳類型選擇按鍵 (A) 之後，顯示出壓腳類型選擇介面 (如右圖所示)。

③ 選擇壓腳類型

請按安裝在縫紉機上的壓腳類型的按鍵(B)。被按的按鍵翻轉顯示。關於壓腳類型，請參考下表進行設定。

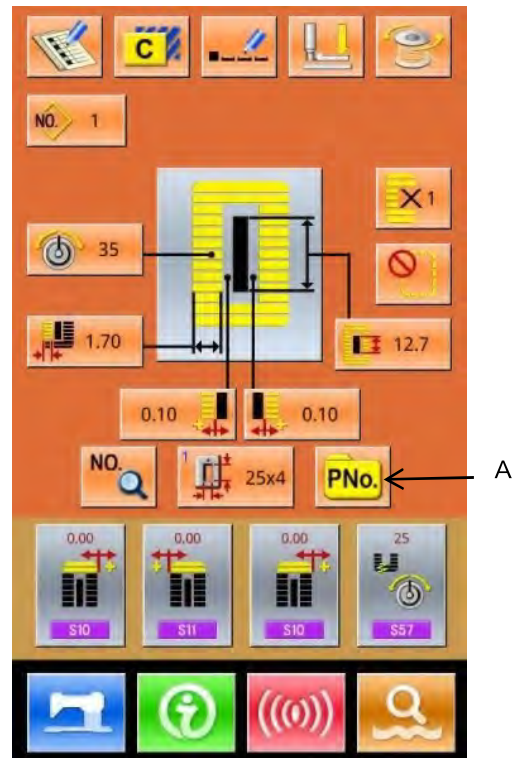
	類型	壓腳型號
	1 型	
	2 型	
	3 型	
	5 型	

※ 使用 1 ~ 3 型以外的壓腳頭時，請設定為5型。
請根據使用的參數U15壓腳和寬度參數U16壓腳長度，變更記憶體開關(1級)。使用5 型壓腳擺動寬度最大可達6mm，長度在41mm 以上時，需要變更壓腳曲柄、送布板等零件。

④ 確定壓腳類型

按確定按鍵之後，退出壓腳類型變更介

面，變更完成。按退出鍵直接退出



花樣選擇

按下  進入花樣選擇介面（如右圖所示），上方為當前選擇花樣的縫製形狀和相關資料，下方為已登記的花樣號碼。

：輸入號碼查詢花樣

：花樣刪除

① 選擇花樣

每頁可以顯示20個花樣號碼，超過一頁時通過【上/下翻頁鍵】進行翻頁。選中已登記的花樣號碼時，上方會顯示已選擇花樣內容。

按下  完成花樣選擇操作。

按逸出鍵  直接退出花樣選擇。

② 花樣查詢

按下  會彈出花樣查詢介面，通過數位鍵可以直接輸入花樣號碼，如圖2所示。

③ 花樣刪除

選中已登記的花樣，按下  就會刪除掉該花樣，但是以下三種情況下的花樣是不能被刪除的。

A：連續縫中被包含的花

樣 B：迴圈縫中被包含的花樣

C：被登記到 P 的花樣也不能被刪除

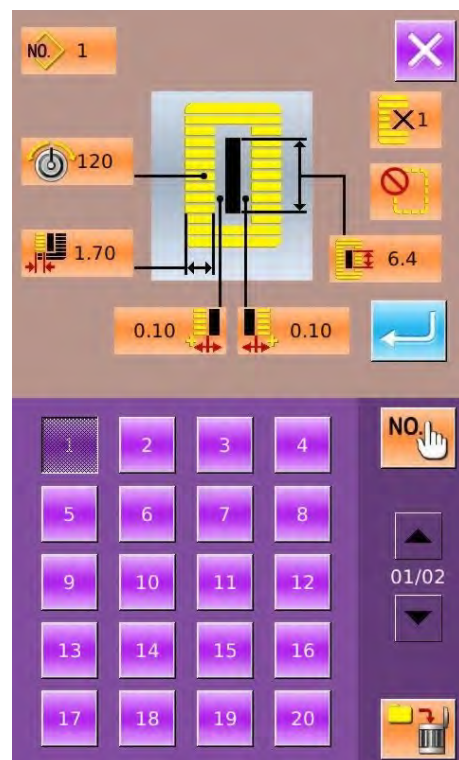


圖1

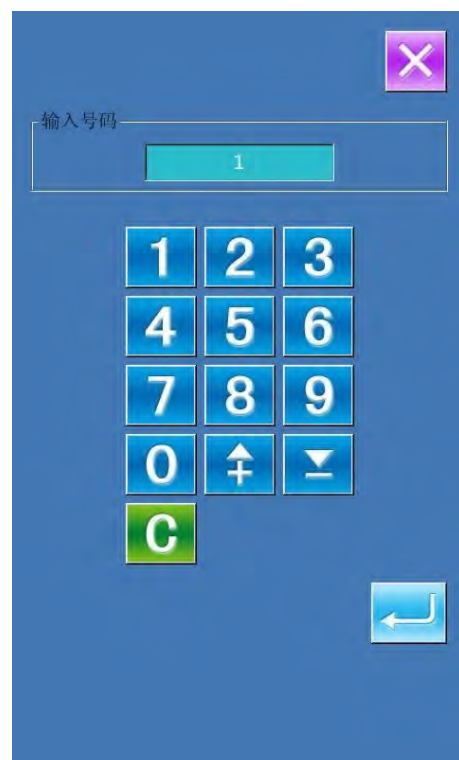


圖 2

縫製形狀選擇

按下 進入縫製形狀選擇介面。

① 選擇第一固定縫形狀

常用的5種第一固定縫形狀分別代表方型、放射型、圓眼型、半圓型、圓型，當參數K04設置為30種縫製形狀時，還可以選擇加固縫、加固左切斷、加固右切斷、加固中央切斷4種類型。選擇第一固定縫形狀進入縫製形狀選擇，其中27~30

號形狀可以按下 結束選擇。

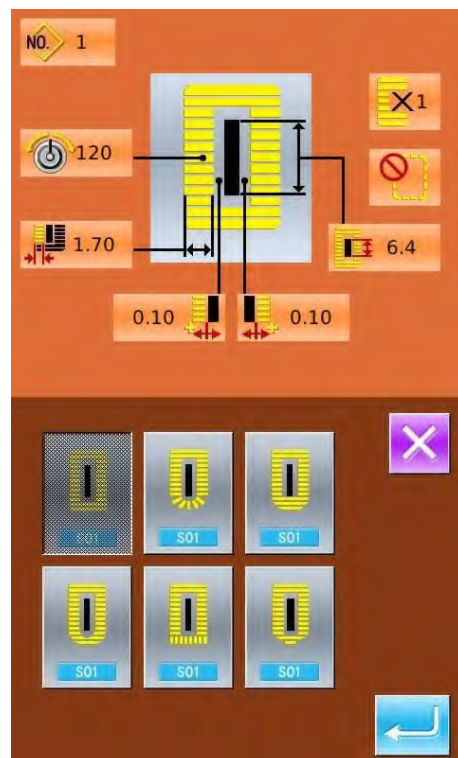
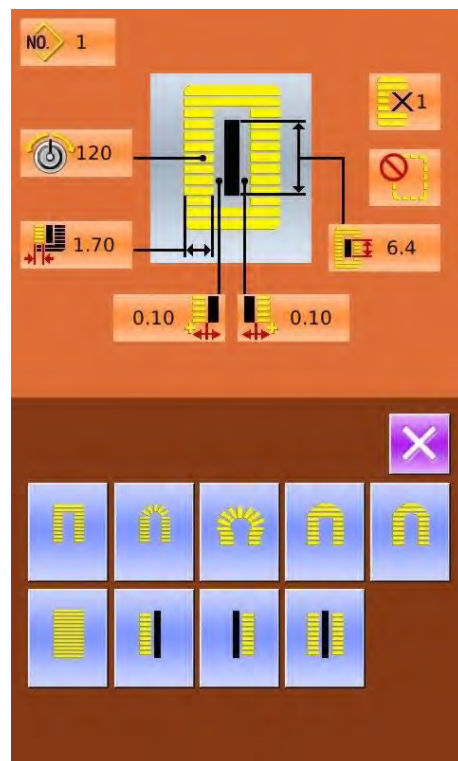
按逸出鍵 直接退出。

- 注：
1. 第一固定縫形狀的顯示受K04參數的影響；
 2. 改變第一固定縫形狀時，請注意修改對應該形狀的縫製參數，否則有可能影響打板資料生成或縫製效果；
 3. 形狀的初始參數數值，請參考附錄1的10.4節“縫製初始值數據一覽表”

② 結束縫製形狀選擇

選擇結束縫製形狀，按下 返回主介面。

按逸出鍵 直接退出，不改變形狀號。



③參數 K04影響

	K04 = 12個形狀	K04 = 20個形狀	K04 = 30個形狀
方型	1	1, 18, 19, 20	1, 18, 19, 20, 21, 22
放射型	3, 4, 5, 6	3, 4, 5, 6	3, 4, 23, 24, 5, 6
圓眼型	7, 8, 9, 10	7, 8, 16, 17, 9, 10	7, 8, 16, 17, 9, 10
半圓型	11	13, 11, 14, 15	13, 25, 11, 26, 14, 15
圓型	12, 2	12, 2	12, 2
加固型			27, 28, 29, 30

注1：表中數字代表形狀號碼。

注2：縫製形狀 27, 28, 29, 30只有在 K04設置為 30個形狀時才可以被使用。

④縫製形狀一覽

01方型 	02圓形 	03放射方形 	04放射形 	05放射直線固定型 
06放射錐形固定形 	07圓眼方形 	08圓眼放射形 	09圓眼直線加固形 	10圓眼錐形加固形 
11半圓形 	12圓方形 	13半圓方形 	14半圓直線加固形 	15半圓錐形加固形 
16圓眼半圓形 	17圓眼圓形 	18方放射形 	19方半圓形 	20方圓形 
21方直線加固形 	22方錐形加固形 	23放射半圓形 	24放射圓形 	25半圓放射形 
26半圓圓形 	27加固縫 	28加固右切斷 	29加固左切斷 	30加固中央切斷 

縫製數據設置

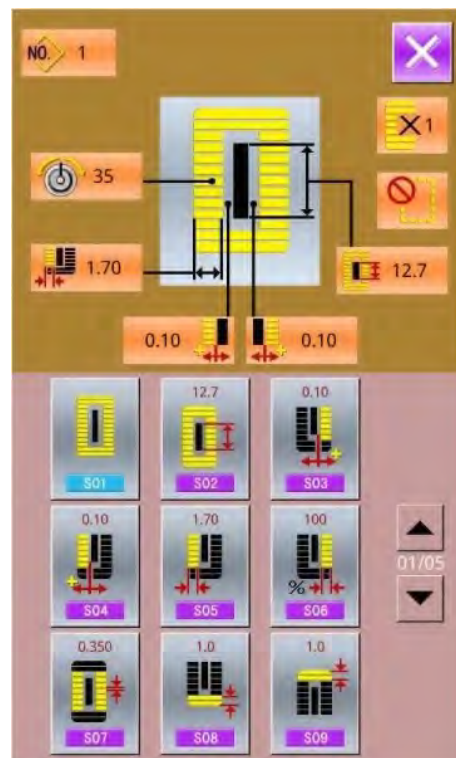
① 變更縫製數據

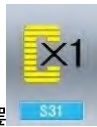
按下  進入縫製設置介面（如右圖所示）。
選擇想要修改的縫製資料後進入設置狀態，參數號底色為紫色的縫製資料是資料登錄類型，參數號底色為藍色的縫製資料是圖示選擇類型。

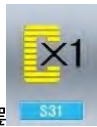
按下  退出縫製數據設置。

舉例如下：

選擇 ，進入介面（如右圖所示）





選擇 ，進入介面（如右圖所示）

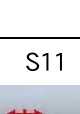
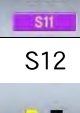
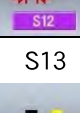


② 縫製資料表

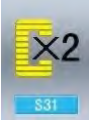
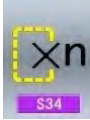
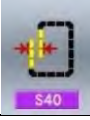
縫製資料與選擇的縫製形狀是有關係的，形狀不同可設置的縫製資料不同，並且縫製資料初始值也可能不同。

模式狀態下可以編輯部分縫製資料是否打開。另外還有部分縫製資料是受其它縫製資料影響的。

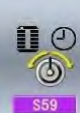
號碼	項目	設定範圍	編輯單位	備註
S01 	縫製形狀 參照第 2.12節縫製形狀選擇。	1~30	1	注5
S02 	切布長度 設定切布刀切斷縫製品的長度。縫製形狀為 27、28、29、30 時為設定縫製長度。 把參數 U19（切布刀數次動作）設定為有效，然後按照 U18（切布刀尺寸）設定的切刀尺寸數次地切斷縫製品。	3.0~120.0	0.1mm	
S03 	切刀槽右寬度 設定切刀和右平行部的間隙。	-2.00~2.00	0.05mm	
S04	切刀槽左寬度 設定切刀和左平行部的間隙。	-2.00~2.00	0.05mm	

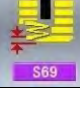
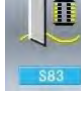
號碼	項目	設定範圍	編輯單位	備註
 S04				
S05  S05	左包邊寬度 設定左平行部的包邊寬度。	0.10~5.00	0.05mm	
S06  S06	左右形狀比率 設定以切刀位置為中心的右側形狀擴大縮小率。	50~150	1%	
S07  S07	平行部間距 設定左右平行部的縫製間距。	0.200~2.500	0.025mm	
S08  S08	第2加固縫長度 設定前側加固縫部的長度。 方形下  直線加固下  錐形下 	0.2~5.0	0.1mm	
S09  S09	第1加固縫長度 設定裡側加固縫部的長度。 方形上 	0.2~5.0	0.1mm	
S10  S10	右加固寬度修正 對加固部的右側外形包邊縫部進行調整。 第1，第2加固均被修正。 方形上  方形下  直線加固下 	-1.00~1.00	0.05mm	
S11  S11	左加固寬度修正 對加固部的左側外形包邊縫部進行調整。	-1.00~1.00	0.05mm	
S12  S12	左錐形加固對稱 設定形成錐形加固形狀的加固部長度。	0.00~3.00	0.05mm	注1
S13  S13	右錐形加固對稱 設定形成錐形加固形狀的加固部長度。	0.00~3.00	0.05mm	注1
S14	圓眼形狀長度 設定圓眼形狀的圓眼孔中心到上側的長度。	1.0~10.0	0.1mm	注1

號碼	項目	設定範圍	編輯單位	備註
				
S15 	圓眼形狀針數 設定圓眼形狀的上部 90度中的縫製針數。	1~8	1	注1
S16 	圓眼寬度 設定圓眼形狀的內側的橫尺寸。 實際的落針點是加上 S04左切刀槽寬度後的尺寸。	1.0~10.0	0.1mm	注1
S17 	圓眼長度： 設定圓眼形狀的內側的縱尺寸。	1.0~10.0	0.1mm	注1
S18 	圓型形狀長度：設定圓型形狀中心到上側的長度。 圓形上  放射上  半圓上  圓形下  放射下  半圓下 	1.0~5.0	0.1mm	注1
S19 	放射形狀針數 設定放射形狀的上部 90度中的縫製針數。	1~8	1	注1
S20 	放射形狀加固：設定有/無放射形狀加固  : 無  : 有			注1 注2
S21 	加固部間距：設定加固部的縫製間距。 方形上  圓形上  半圓上  方形下  圓形下  半圓下  直線加固下  錐形下 	0.200~2.500	0.025	
S22 	第1間隙 設定第 1加固和切刀槽間隙。適用於全形狀。	0.0~4.0	0.1mm	
S23 	第2間隙 設定第 2加固和切刀槽間隙。適用於全形狀。	0.0~4.0	0.1mm	

號碼	項目	設定範圍	編輯單位	備註
S31	單縫製/雙重縫製  : 單縫製  : 雙重縫製			
S32	選擇雙重縫製交叉 設定雙重縫製時，選擇重疊縫製平行部落針或交叉縫製。  : 雙重縫製  : 交叉縫製			注3
S33	 修正雙重縫製寬度 設定雙重縫製時，設定縮小第1圈的包邊寬度量。	0.0~2.0	0.1mm	注3
S34	下縫次數：設定下縫次數。  : 無下縫  : 1~9次	0~9	1次	
S35	 下縫間距 設定下縫時的縫製間距。	1.0~5.0	0.1mm	注3
S36	 下縫捲入長度 設定進行下縫時的上線捲入縫製長度。	2.0~20.0	0.1mm	注3
S37	 下縫捲入間距 設定進行下縫時的上線捲入縫製間距。	0.2~5.0	0.1mm	注3
S38	 下縫捲入寬度 設定進行下縫時的上線捲入縫製寬度。	0.0~4.0	0.1mm	注3
S39	 下縫落針前後修正 進行2圈以上的縫製時，設定落針點的前後修正量。	0.0~2.5	0.1mm	注2 注3
S40	 下縫落針左右修正 進行2圈以上的下縫時，設定落針點的左右修正量。	0.0~1.0	0.1mm	注3

號碼	項目	設定範圍	編輯單位	備註
S41 	下縫左側位置修正 設定從左包邊中心左右修正下縫的縫製基準位置的修正量。	-2.0~2.0	0.1mm	注2 注3
S42 	下縫右側位置修正 設定從右包邊中心左右修正下縫的縫製基準位置的修正量。	-2.0~2.0	0.1mm	注2 注3
S44 	下縫速度的設定 設定下縫速度。	400~4200	100rpm	注3 注4
S45  : 有對縫  : 無對縫	對縫功能：選擇最初進行縫製。 選擇了有對縫後，按照對縫->下縫->通常縫製的順序進行縫製。			
S46 	對縫寬度 設定進行對縫時的縫製寬度。	1.0~10.0	0.1mm	注2 注3
S47 	對縫間距 設定進行對縫時的縫製間距。	0.2~5.0	0.1mm	注2 注3
S51 	左平行部張力 設定左平行部的上線張力。	0~200	1	
S52 	右平行部張力 設定右平行部的上線張力。	0~200	1	注2
S53 	左平行部張力（雙重縫的第1圈） 雙重縫時，設定第1圈的左平行部上線張力。	0~200	1	注2 注3
S54 	右平行部張力（雙重縫的第1圈） 雙重縫時，設定第1圈的右平行部張力。	0~200	1	注2 注3
S55	第1加固部張力	0~200	1	

號碼	項目	設定範圍	編輯單位	備註
 S55	設定第 1 加固部的上線張力。			
 S56	第 2 加固部張力 設定第 2 加固部的上線張力。	0~200	1	注 2
 S57	設定縫製開始的上線張力 設定縫製開始時加固縫的上線張力。	0~200	1	
 S58	設定下縫的上線張力 設定下縫的上線張力。	0~200	1	注 3
 S59	第 1 加固開始，ACT 同步調整 調整第 1 加固部的上線張力輸出開始同步。	-5~5	1 針	注 2
 S60	右包邊開始，ACT 同步調整 調整包邊縫製部的上線張力輸出開始同步。	-5~5	1 針	注 2
 S61	第 2 加固開始，ACT 同步調整 調整第 2 加固部的上線張力輸出開始同步。	-5~5	1 針	注 2
 S62	縫製開始固定縫製針數 設定縫製開始加固縫製的針數。	0~8	1 針	
 S63	縫製開始固定縫製間距 設定縫製開始加固縫製的縫製間距。	0.00~0.70	0.05mm	注 2
 S64	縫製開始加固縫製寬度 設定縫製開始加固縫製的寬度	0.0~3.0	0.1mm	
 S65	縫製開始加固縫製的縱修正 設定縫製開始加固縫製的總方向開始位置。	0.0~5.0	0.1mm	注 2
S66	縫製開始加固縫製的橫修正	0.0~2.0	0.1mm	注 2

號碼	項目	設定範圍	編輯單位	備註
 S66	設定縫製開始加固縫製的橫方向開始位置。			
 S67	縫製結束加固縫製寬度 設定縫製結束加固縫製的寬度。	0.1~1.5	0.1mm	
 S68	縫製結束加固縫製針數 設定縫製結束加固縫製的針數。	0~8	1針	
 S69	縫製結束加固縫製縱修正 設定縫製結束加固縫製的縱方向開始位置。	0.0~5.0	0.1mm	注2
 S70	縫製結束加固縫製橫方向修正 設定縫製結束加固縫製的橫方向開始位置。	0.0~2.0	0.1mm	注2
 S81	切刀動作：設定通常的切布刀有/無動作。 ：通常切刀動作關閉			
 S81	：通常切刀動作打開			
 S83	雙重縫製的第1圈切刀 雙重縫時，設定第1圈的切布刀有/無動作。 ：通常切刀動作關閉			注2 注3
 S83	：通常切刀動作打開			

號碼	項目	設定範圍	編輯單位	備註
S84 	最高速度限制 設定縫製機的最高轉速。 受參數 K07 (最高轉速限制設定) 限制。	400~4200	100rpm	注4
S86 	前進間距 設定條形 (S01的形狀 NO.27, 28, 29, 30) 前進側的縫製間距。	0.200~2.500	0.025	注1
S87 	前進寬度 設定條形 (S01的形狀 NO.27, 28, 29, 30) 前進側的縫製寬度。	0.10~3.00	0.05mm	注1
S88 	返回間距 設定條形 (S01的形狀 NO.27, 28, 29, 30) 返回側的縫製間距。	0.200~2.500	0.025mm	注1
S89 	返回寬度 設定條形 (S01的形狀 NO.27, 28, 29, 30) 返回側的縫製寬度。	0.10~3.00	0.05mm	注1
S91 	切布上位置調整	0~10		
S92 	切布下位置調整	0~10		
S93  : 密集針關閉  : 密集針打開	密集點調整：			
S101 	加固部速度設置	400~4200	100rpm	

號碼	項目	設定範圍	編輯單位	備註
S102 	第一加固張力提前插入針數	0~5	1針	
S103 	右平行部張力提前插入針數	0~5	1針	
S104 	第二加固張力提前插入針	0~5	1針	

注1：形狀不同顯示也不同。

注2：編輯下設定為打開後顯示。

注3：選擇了功能之後顯示

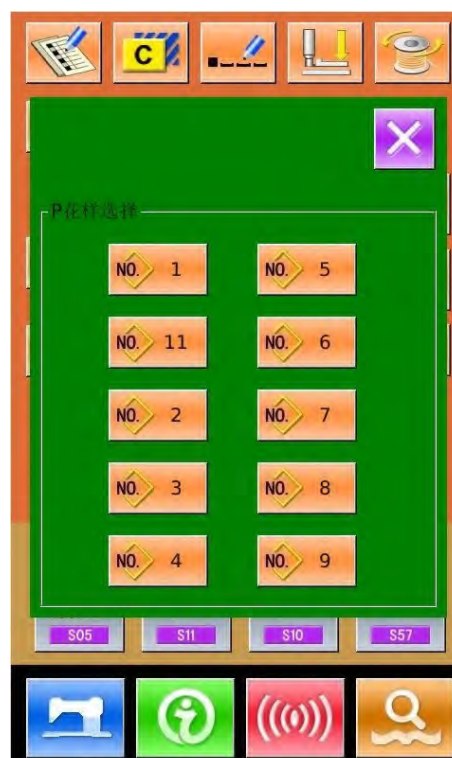
注4：受參數 K07（最高轉速限制設定）限制

注5：改變第一固定縫形狀時，請注意修改對應該形狀的縫製參數，否則有可能影響打板資料生成或縫製效果

直接選擇花樣

可以登記 10 個常使用的花樣到直接選擇按鍵上，按

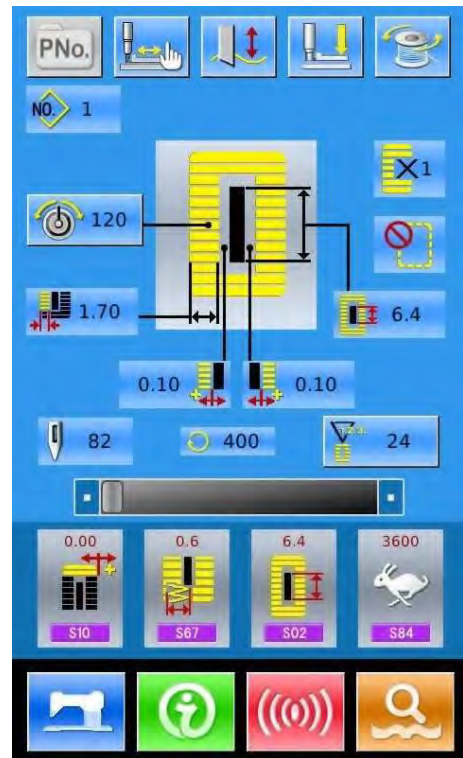
下  進入選擇介面。



試縫操作

(1) 顯示縫製介面

在資料登錄介面，按準備鍵之後，液晶顯示的背景顏色變為藍色，此時進入縫製介面。



(2) 顯示試縫介面

在縫製介面下，按下鍵後進入試縫介面（如右圖所示）：

- ：返回原點
- ：後退
- ：前進 ：

落針點張力

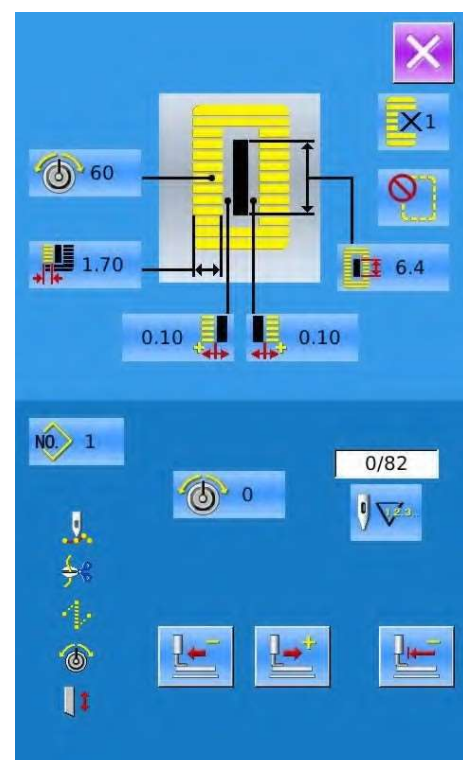
：當前針數/總針數

：縫製指令

：切線指令

：空送指令

：線張力指令



 : 切刀驅動指令

(3) 開始試縫

A、通過點按  返回原點鍵、 後退鍵和  前進鍵三個鍵開始單步試縫。此模式時，腳踩腳踏板開關，縫紉機起動縫完剩餘的針數。

B、長按  、 時，此時將試縫整個花樣。

C、試縫執行時，根據縫製資料，左側的相應指令標誌會加灰顯示。

例如：當縫製資料是剪線時，圖示變為 

(4) 結束試縫

按了取消鍵  退出試縫介面之後，返回縫製介面。

上線張力設置

變更線張力值時

① 顯示資料登錄介面

在資料登錄介面（橙色）或縫製介面（藍色）上，可以變更上線張力。如果是在縫製介面（藍色）時，請按準備鍵，顯示出資料登錄介面（橙色）。

② 叫出上線張力變更介面

按了上線張力按鍵  之後，上線張力變更介面被顯示出來（如右圖所示）。

③ 變更上線張力

在上線張力變更介面上，可以變更平行部上線張

力和加固部上線張力。通過選擇   ，



可以分別設定S51，S52，S55，S56，其中S52，S56是可以在模式狀態下編輯縫製資料中被關閉的。

點按【線張力1】【線張力2】可在兩組張力值間切換。

④ 結束上線張力的變更

按了取消按鈕之後，關閉上線張力變更介面，結束變更。



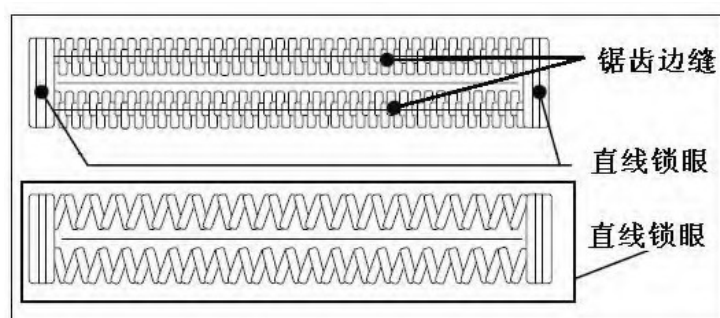
※ 平行部和加固部以外的張力變更。

① 平行部張力，②加固部張力的設定值

		操作盤設定值		
		+	初期值	-
鋸齒邊縫	①平行部張力	下降鋸齒高度	1 2 0	提高鋸齒高度
	②加固部張力	下張力	3 5	上線張力
直線鎖眼	①平行部張力	下張力	6 0	上線張力
	②加固部張力	下張力	6 0	上線張力

放射圓眼形狀時，把加固張力最初設定為120左右，請平衡縫跡。

關於鋸齒邊縫和直線鎖眼



鋸齒邊縫

增強上線張力，在上線縫跡中心直線通過的左右縫製鋸齒邊縫跡。

直線鎖眼

在布表面僅縫上線，布背面僅縫下線的往返縫跡。

計數器操作

(1) 計數器的設定方法

① 顯示計數器介面

在縫製介面中，按了  () 鍵之後，計數器設定介面被顯示出來。



：縫製計數器類型



：計件計數器類型



通過選擇  和  可以設置計數器類型，並且設置其當前計數值。

A、按下  設置生效，並返回主介面。

B、按下  取消操作，並返回主介面。



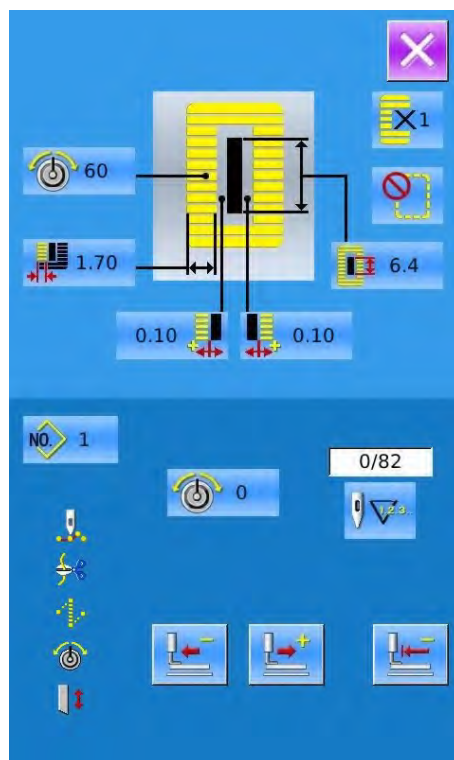
急停

縫製過程中，按下停止開關後，縫紉機中斷縫製，停止轉動。此時顯示介面如右圖所示：



按下  解除異常，彈出單步動作介面（如右圖所示）。

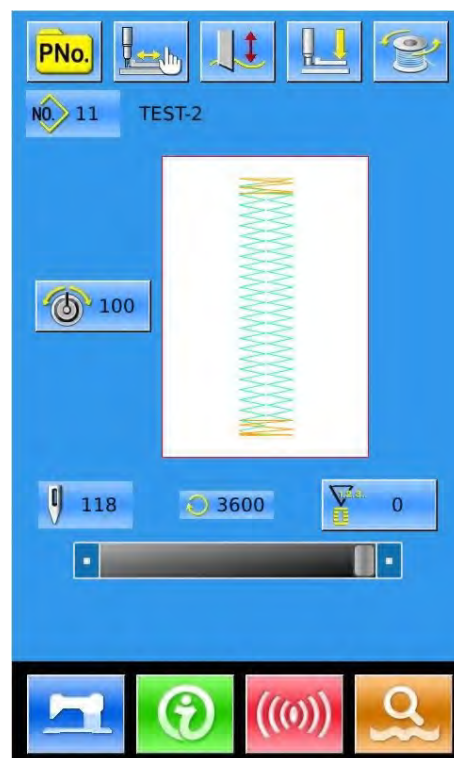
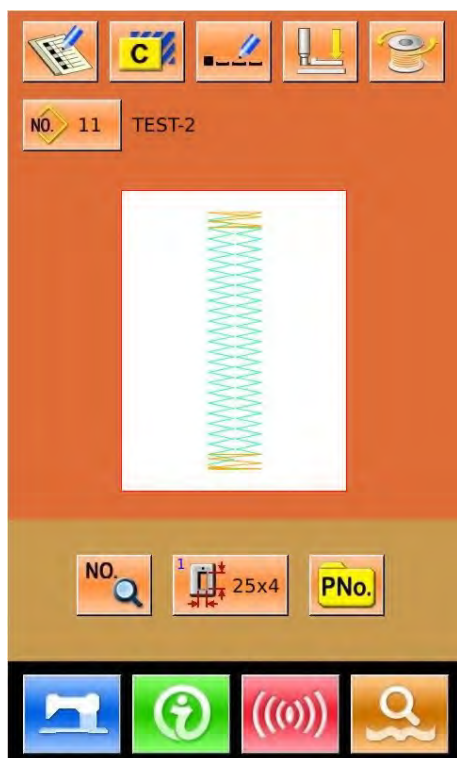
操作設置同試縫狀態。踩踏板後可以繼續縫紉。



VDT 花樣操作

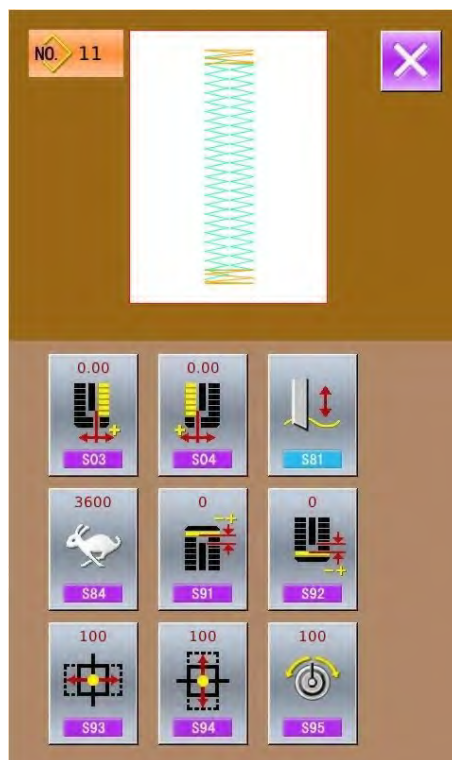
VDT 花樣顯示與操作

可以利用打版軟體生成 VDT 類型花樣，通過 U 盤導入到記憶體中後，其資料登錄介面和縫製介面如下：



按下  進入縫製資料設置介面，如右圖所示：

按下  取消操作，並返回主介面。



VDT 花樣縫製資料表

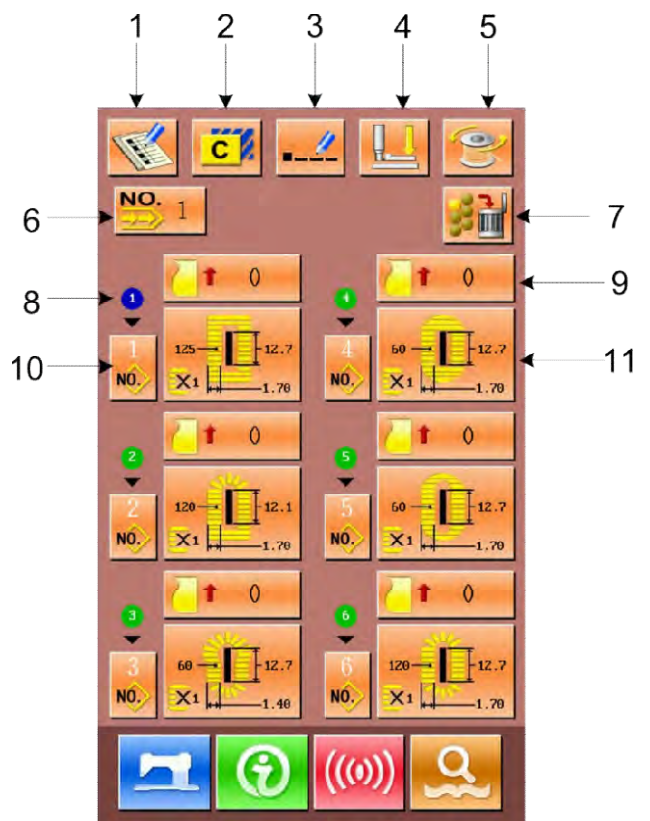
VDT類型花樣縫製資料表：

號碼	項目	設定範圍	編輯單位	初始值
S03 	切刀槽右寬度 設定切刀和右平行部的間隙。	-2.00~2.00	0.05mm	0
S04 	切刀槽左寬度 設定切刀和左平行部的間隙。	-2.00~2.00	0.05mm	0
S81  	切刀動作：設定通常的切布刀有/無動作。 ：  ：通常切刀動作關閉 ：  ：通常切刀動作打開			通常切刀動作打開
S84	最高速度限制 設定縫製機的最高轉速。 受參數 K07（最高轉速限制設定）限制。	400~4200	100rpm	參數 K07

號碼	項目	設定範圍	編輯單位	初始值
 S84				
S91  S91	第1間隙修正	-9~9	1針	0
S92  S92	第2間隙修正	-9~9	1針	0
S93  S93	放大縮小率（X方向）	20~200	1%	100
S94  S94	放大縮小率（Y方向）	20~200	1%	100
S95  S09	張力基準值	0~200	1	100

5 連續縫花樣縫製

這種縫製類型不提升壓腳連續縫製最多 6 種形狀。
最多可以登記 50 個連續縫花樣。



功能說明

序號	圖示	功能	備註
1		新花樣登記	
2		花樣複製	
3		花樣命名	
4		穿線	
5		繞線	
6		連續縫花樣選擇	
7		全部消除鍵	消除當前連續縫花樣的全部子花樣資料
8		縫製順序	

序號	圖示	功能	備註
9		送布量輸入鍵	
10		子花樣選擇鍵	
11		縫製資料編輯	

連續縫編輯

連續縫花樣選擇

按下  可以進入花樣選擇介面（如右圖所示）。
通過下面的方式進行操作：

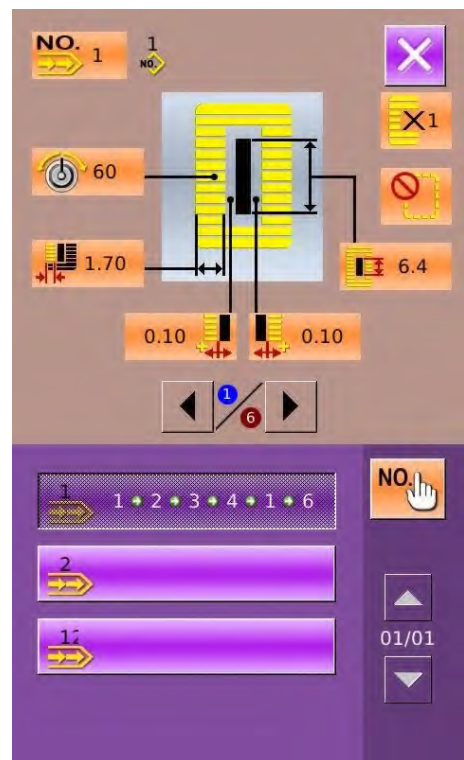
A、可以通過 ， 查看連續縫製資料裡登記的花樣資訊。

B、按直接選擇鍵 ，通過輸入號碼進行選擇

C、按刪除鍵  可以刪除選中的花樣

D、選擇合適的花樣，按下  結束選擇，並返回主介面。

E、按下  取消選擇操作，並返回主介面。



連續縫花樣編輯

① 送布量設置

按下圖1中的  鍵進入送布量設置介面（如圖2所示）。

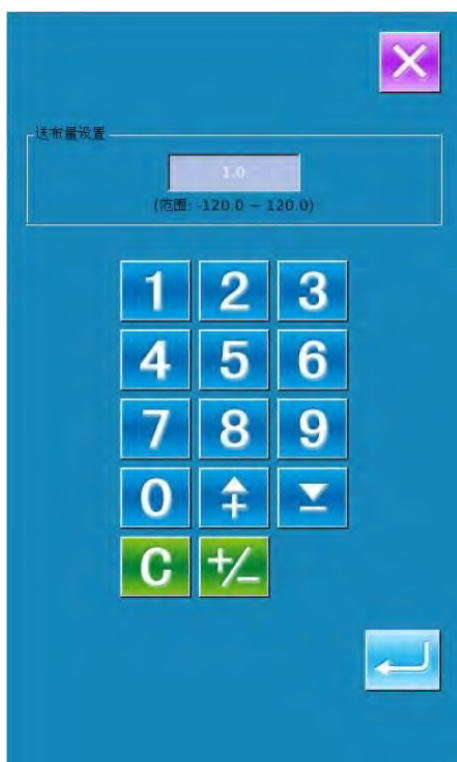


圖2

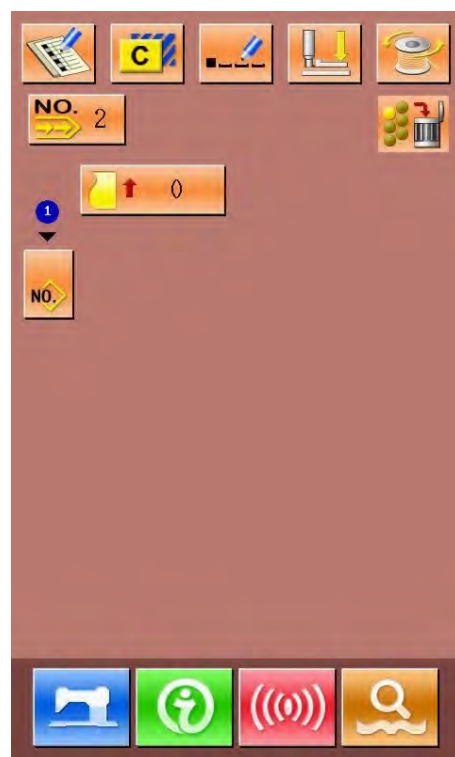


圖1

② 選擇花樣

按下  進入花樣選擇介面（如右圖所示）。

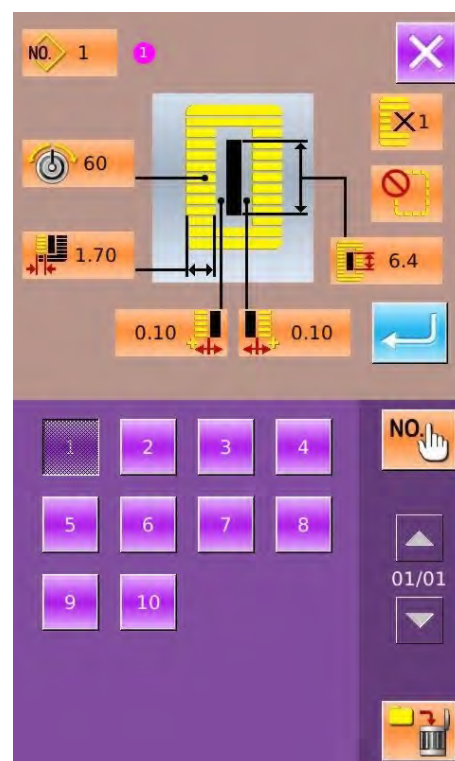
A、在此介面下，可有兩種方法選擇花樣：

- 按下  可輸入花樣號選擇花樣
- 直接按花樣號鍵選擇

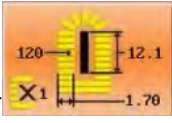
B、按下  可消除當前選中的花樣。

C、按下  取消選擇操作。

D、選擇合適的花樣，按下  確定選擇，



③ 縫製資料更改

按下  進入縫製資料設置介面（如右圖 2 所示）。

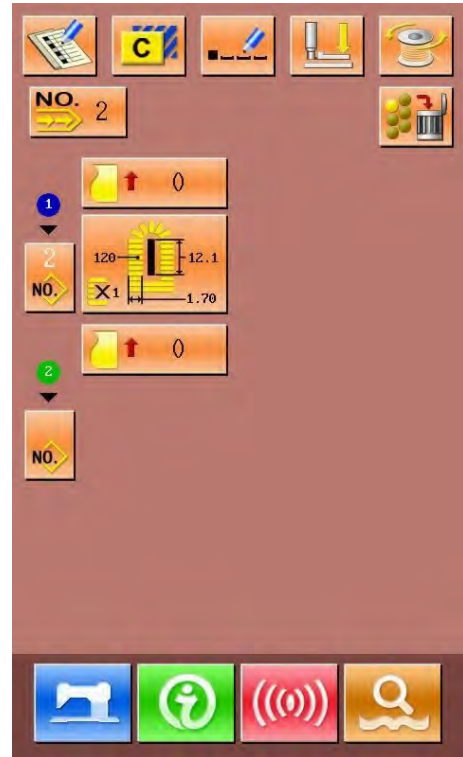


圖 1

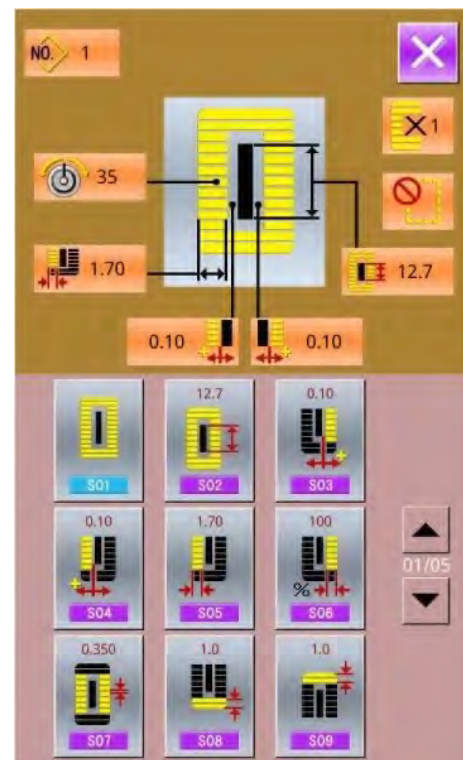


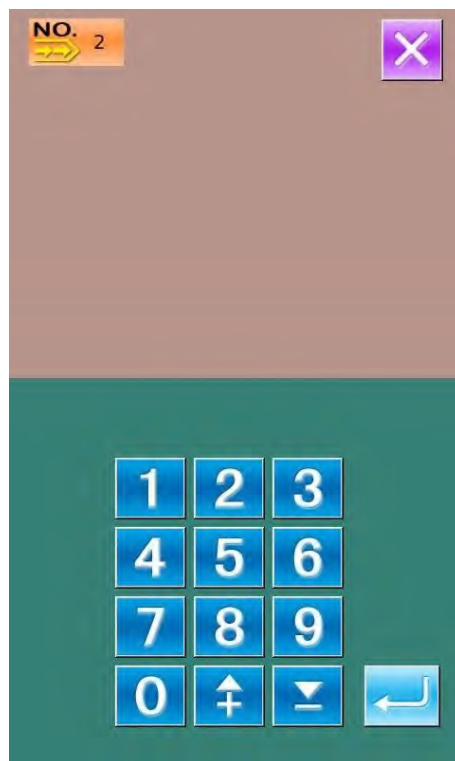
圖 2

連續縫花樣登記

最大可登記50個連續縫花樣，按下進入連續縫花樣登記介面（如右圖所示）：

① 輸入花樣號

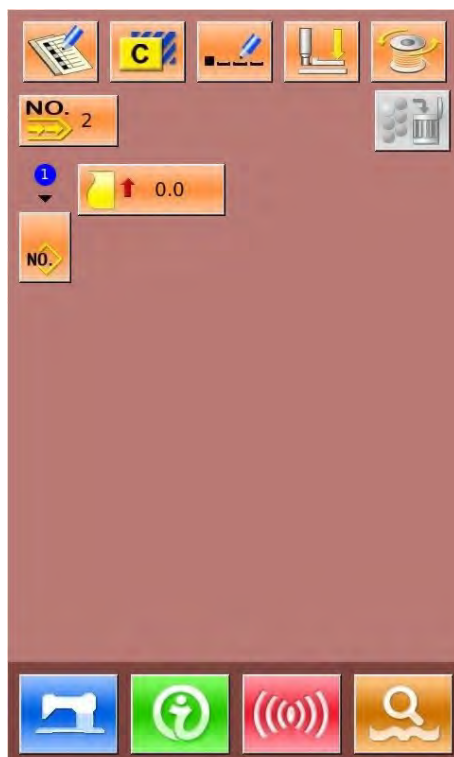
通過數位鍵可以選擇想要輸入的花樣號碼，已經登記的花樣號碼不能重複登記。通過、鍵可以檢索未登記的花樣號碼。



② 連續縫編輯

確定花樣號碼後按下，則進入連續縫編輯介面（如右圖所示）。

後續的操作參考“5.2.2”節



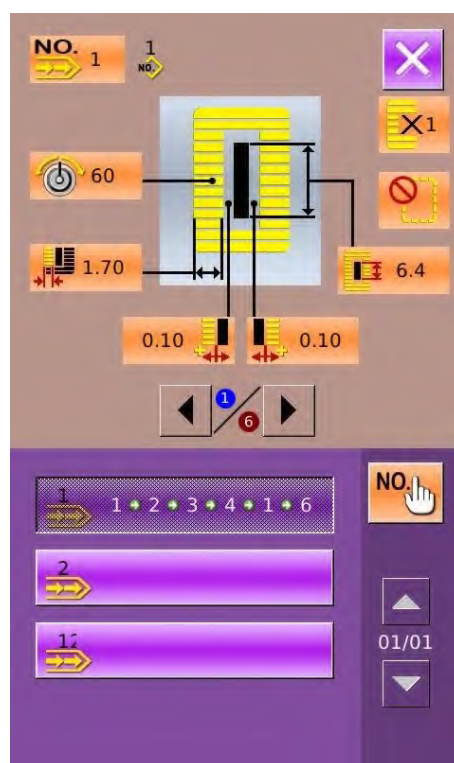
連續縫花樣複製

① 選擇被複製花樣

按下  進入花樣複製介面（如右圖所示）。
在已登記的花樣中選擇被複製花樣號碼並按下 。

按  和  可以查看連續縫中包含的花樣形狀。

按下  取消複製操作。



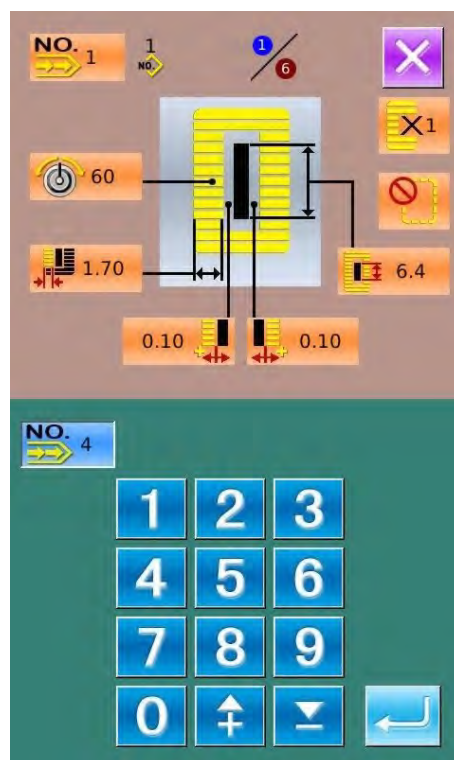
② 輸入新登記的花樣號碼

介面上方顯示為被複製花樣縫製形狀和相關縫製資料，通過數位鍵選擇未登記的花樣號碼。

按下  則完成花樣複製操作。

按下  取消操作，並返回上一介面。

※ 已經登記的花樣號碼不能重複登記

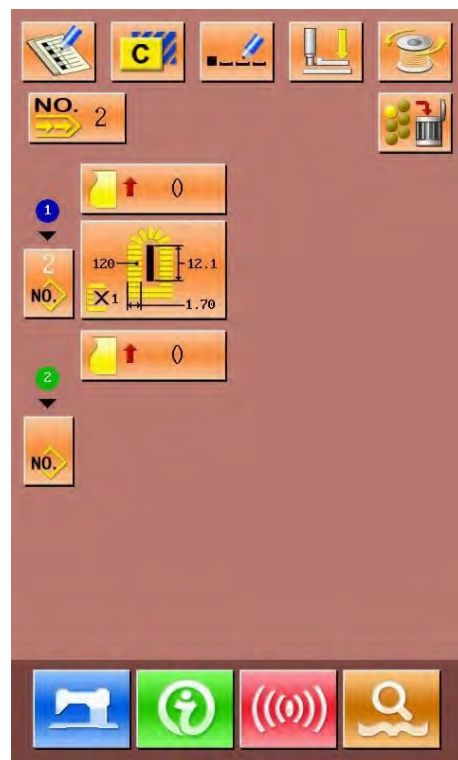


連續縫花樣的刪除

① 選擇要刪除的花樣

按下  選擇花樣，按  後返回主介面，如右圖所示

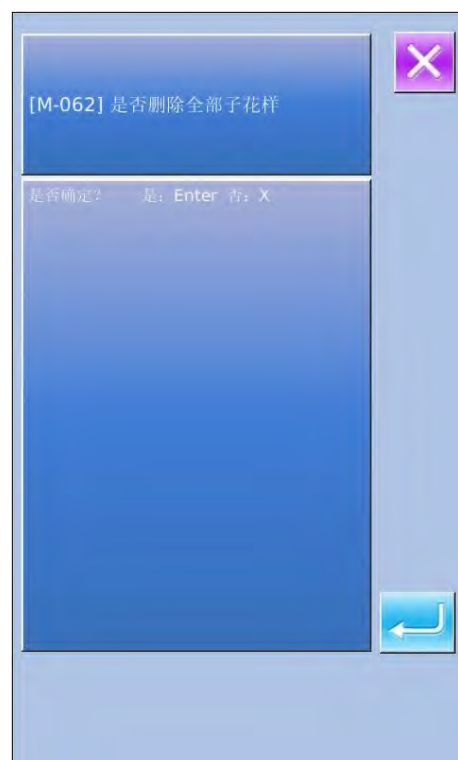
按下  進行連續縫花樣的刪除



② 確認是否刪除

按下  完成花樣刪除操作。

按下  取消刪除操作。



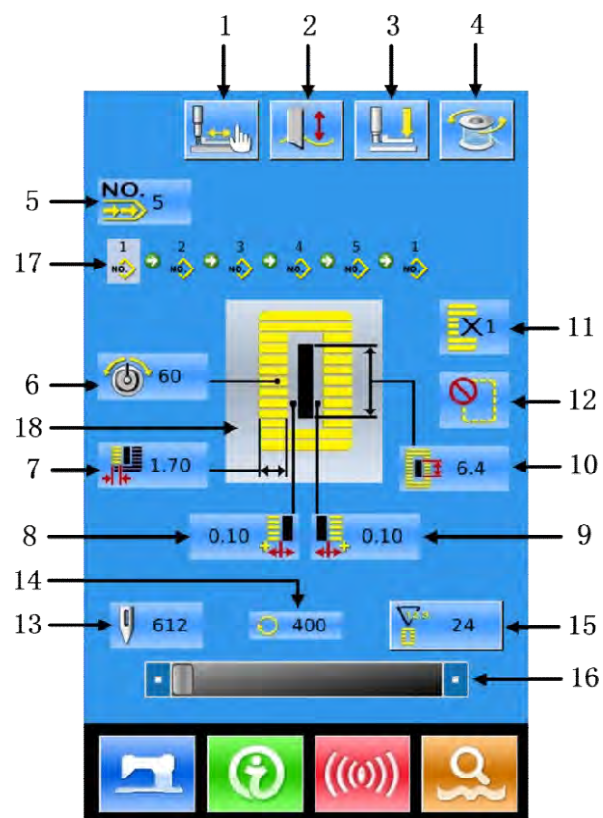
③ 完成刪除

連續縫花樣刪除後，返回連續縫主介面，可以進行花樣的重新編輯



連續縫製介面

按下  進入縫製介面（如右圖所示）。



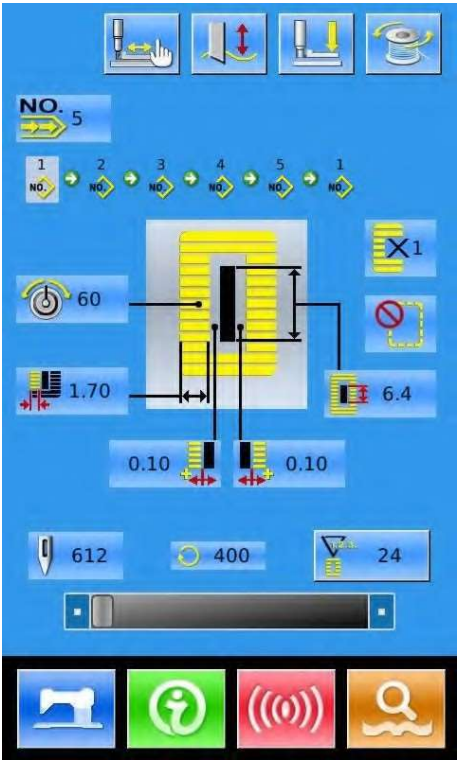
功能說明

序號	圖示	功能	備註
1		試縫	
2		切刀使能	切換切刀使能
3		穿線（壓腳下降）	
4		繞線	
5		花樣號碼顯示	
6		上張力設定	
7		左包邊寬度顯示	
8		切刀槽左寬度顯示	
9		切刀槽右寬度顯示	
10		切布長度顯示	
11		單次縫/雙重縫顯示	
12		下縫次數顯示	
13		針數顯示	
14		當前縫製速度顯示	
15		計數器值顯示  ：縫製計數器  ：計件計數器	
16		速度設置	
17		連續縫資料中輸入的花樣號碼	
18		縫製形狀顯示	

連續縫試縫

(1) 顯示縫製介面

在資料登錄介面，按準備鍵之後，液晶顯示的背景顏色變為藍色，此時進入縫製介面。



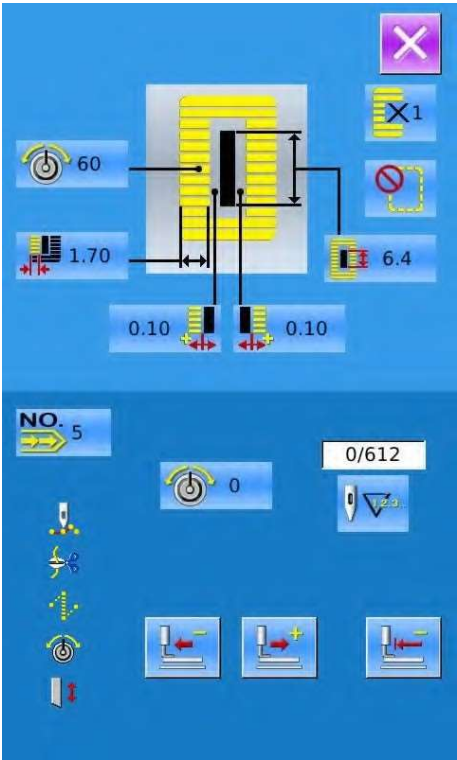
(2) 顯示試縫介面

在縫製介面下，按下鍵後進入試縫介面（如右圖所示）：

- ：返回原點
- ：後退
- ：前進
- ：

落針點張力

- ：當前針數/總針數
- ：縫製指令
- ：切線指令
- ：空送指令
- ：線張力指令



 : 切刀驅動指令

(3) 開始試縫

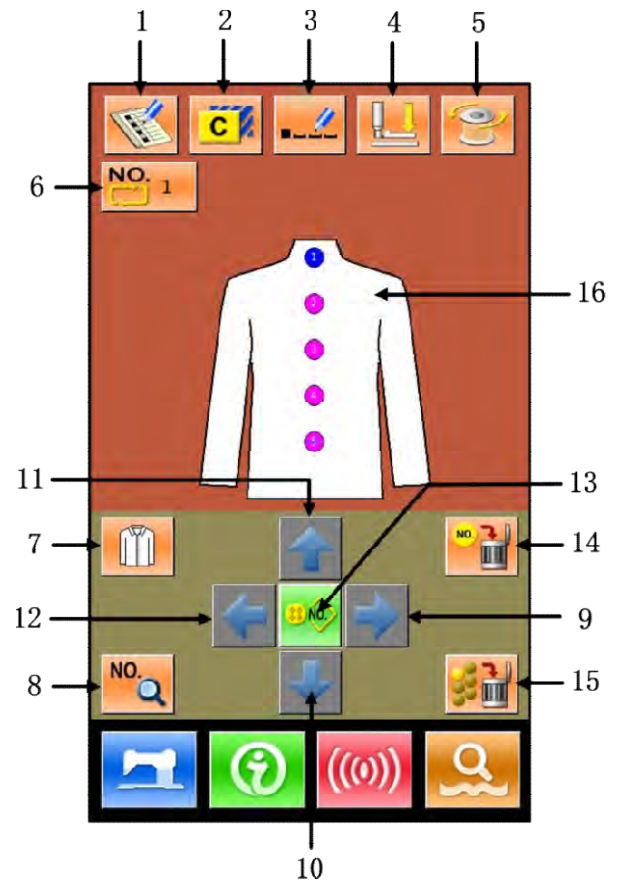
通過  返回原點鍵、 後退鍵和  前進鍵三個鍵開始試縫。此模式時，腳踩腳踏板開關，縫紉機起動縫完剩餘的針數。

(4) 結束試縫

按了取消鍵  退出試縫介面之後，返回縫製介面。

6 迴圈縫花樣縫製

該功能用於迴圈順序地縫製多個花樣資料。一個迴圈縫花樣最多可以輸入 30 種圖案，最多可以登記 50 個迴圈花樣。



功能說明

序號	圖示	功能	備註
1		新花樣登記	
2		花樣複製	
3		花樣命名	
4		穿線	
5		繞線	
6		迴圈縫花樣選擇	

序號	圖示	功能	備註
7		縫製衣物選擇	
8		縫製資料修改	
9~12		游標移動鍵	
13		花樣選擇鍵	
14		子花樣消除鍵	可以消除游標選擇位置的子花樣
15		全部子花樣消除鍵	可以消除當前迴圈縫製資料裡輸入的全部子花樣
16		縫製順序	

迴圈縫編輯

花樣登記

通過數位鍵盤輸入花樣號碼。

按下  鍵結束選擇。

按下  鍵退出選擇。



花樣複製

① 選擇被複製花樣

按下  進入花樣複製介面（如右圖所示）。在已登記的花樣中選擇被複製花樣號碼並按下



按下  退出複製操作。

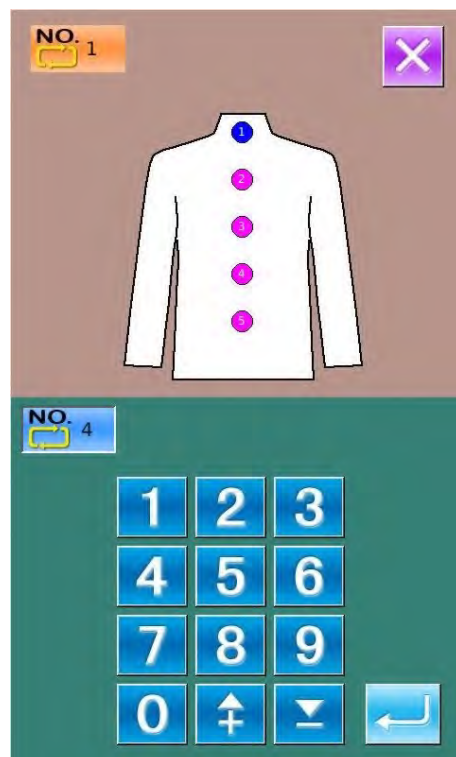


② 輸入新登記的花樣號碼

介面上方顯示為被複製花樣，通過數字鍵選擇未登記的花樣號碼，已經登記的花樣號碼不能重複登記。

按下  則完成花樣複製操作。

按下  退出號碼輸入。

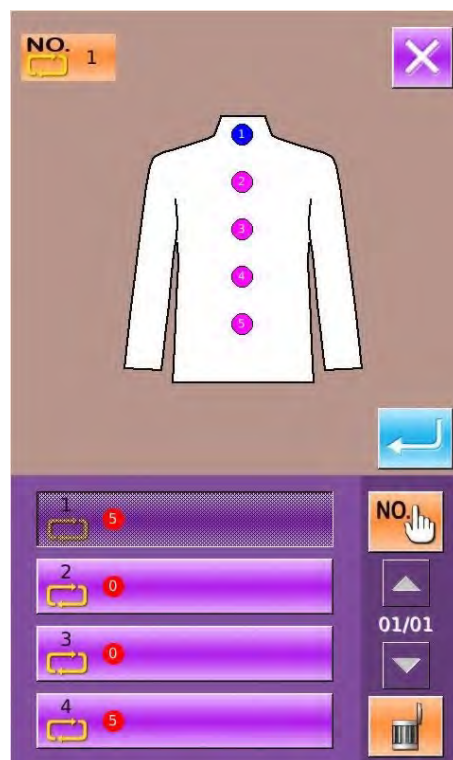


迴圈縫花樣選擇

按下  進入迴圈縫花樣選擇介面（如右圖所示）。

操作同普通花樣選擇。

按下  退出花樣選擇。



迴圈縫花樣編輯

① 開始編輯

通過方向  選擇希望的位置，按下  進入花樣選擇介面（如右圖所示）。



② 花樣選擇



：輸入號碼查詢花樣



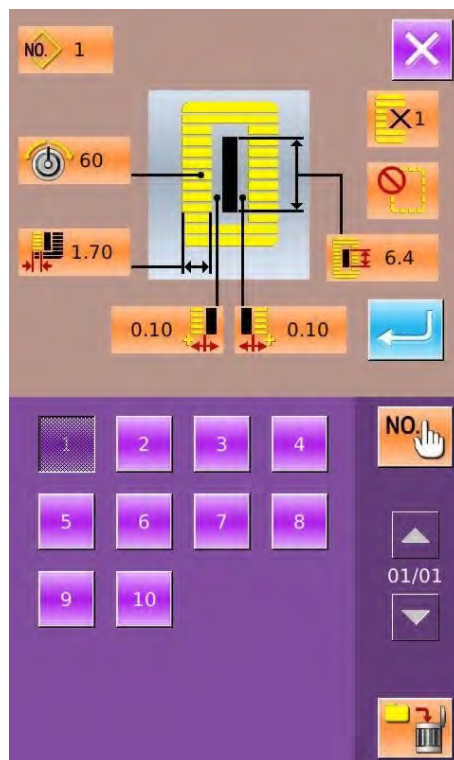
：花樣刪除



：切換到連續縫花樣選擇

選擇合適的花樣，按下結束選擇。

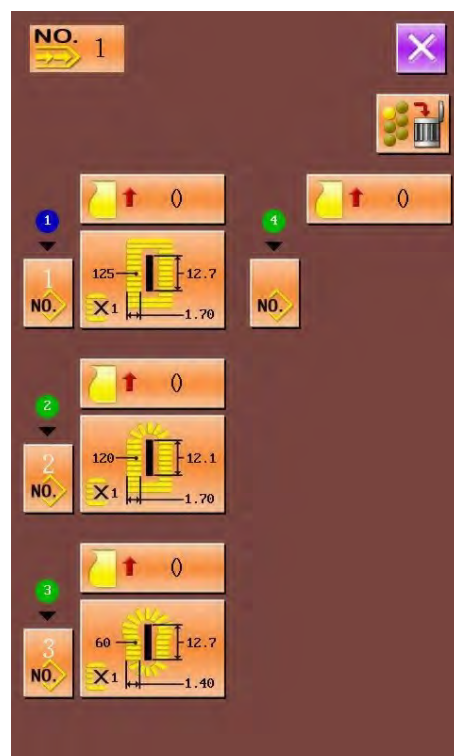
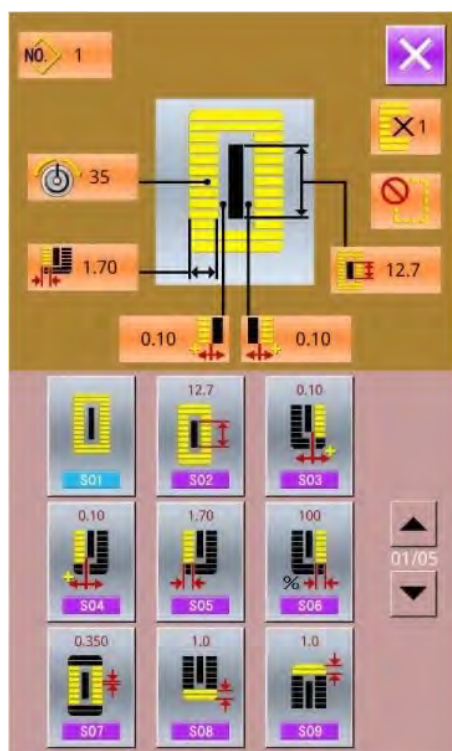
按下不選擇直接退出。



③ 縫製數據變更

移動游標到想要修改的花樣位置上，按下進入縫製資料設置介面（如下圖所示）。

按鍵退出相應的縫製資料變更介面



變更縫製衣物

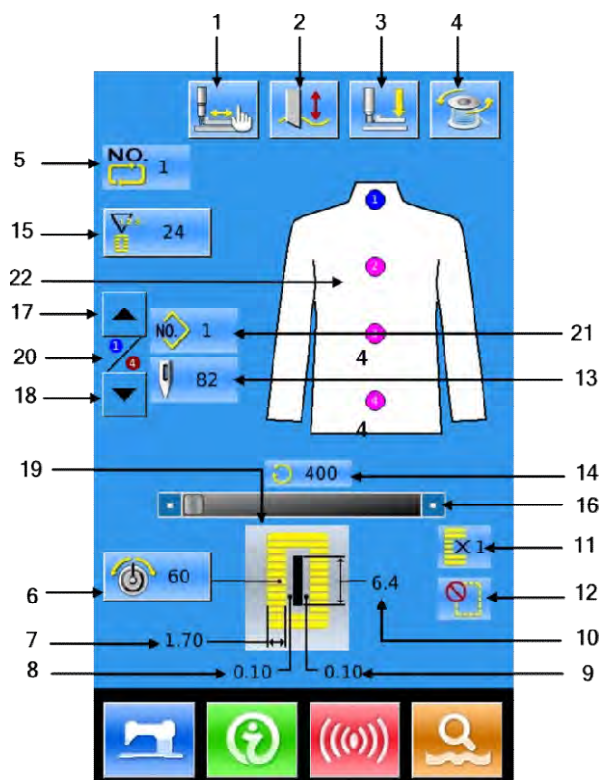
按下  可以進入縫製衣物選擇介面（如右圖所示），用於改變縫製資料登錄介面的參照圖。

按  鍵退出，按  選擇生效。



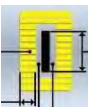
迴圈縫製介面

按下  進入縫製介面（如右圖所示）。



功能說明

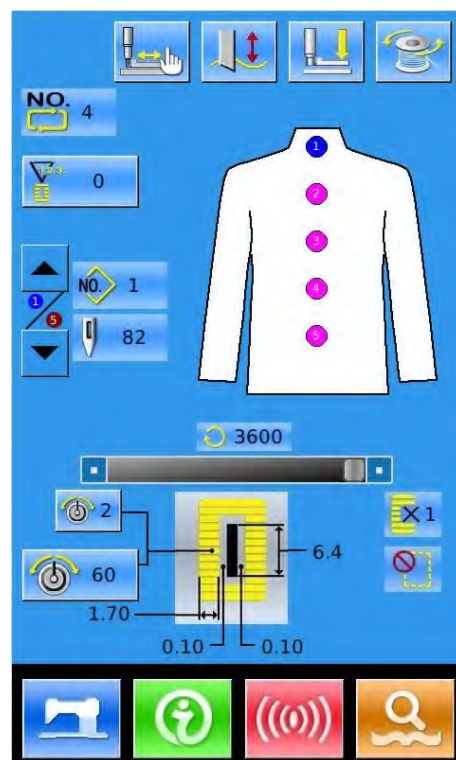
序號	圖示	功能	備註
1		試縫	
2		切刀使能	切換切刀使能
3		穿線（壓腳下降）	
4		繞線	
5		花樣號碼顯示	
6		上張力設定	
7		左包邊寬度顯示	
8		切刀槽左寬度顯示	
9		切刀槽右寬度顯示	
10		切布長度顯示	
11		單次縫/雙重縫顯示	
12		下縫次數顯示	
13		針數顯示	
14		當前縫製速度顯示	
15		計數器值顯示  ：縫製計數器  ：計件計數器	
16		速度設置	
17		縫製順序減操作	倒回前一個縫製的縫製順序
18		縫製順序加操作	進入下一個縫製的縫製順序

序號	圖示	功能	備註
19		縫製形狀顯示	
20		縫製中的縫製順序	
21		當前縫製的序列花樣號	
22		縫製順序	

迴圈縫試縫

(1) 顯示縫製介面

在資料登錄介面，按準備鍵之後，液晶顯示的背景顏色變為藍色，此時進入縫製介面。



(2) 顯示試縫介面

在縫製介面下，按下鍵後進入試縫介面（如右圖所示）：



：返回原點



：後退



：前進



落針點張力



：當前針數/總針數



：縫製指令



：切線指令



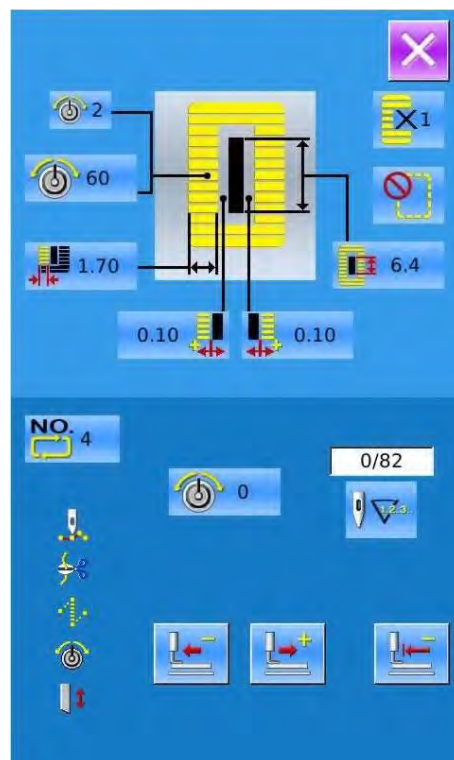
：空送指令



：線張力指令



：切刀驅動指令



(3) 開始試縫

通過返回原點鍵、後退鍵和前進鍵三個鍵開始試縫。此模式時，腳踩腳踏板開關，縫紉機起動縫完剩餘的針數。

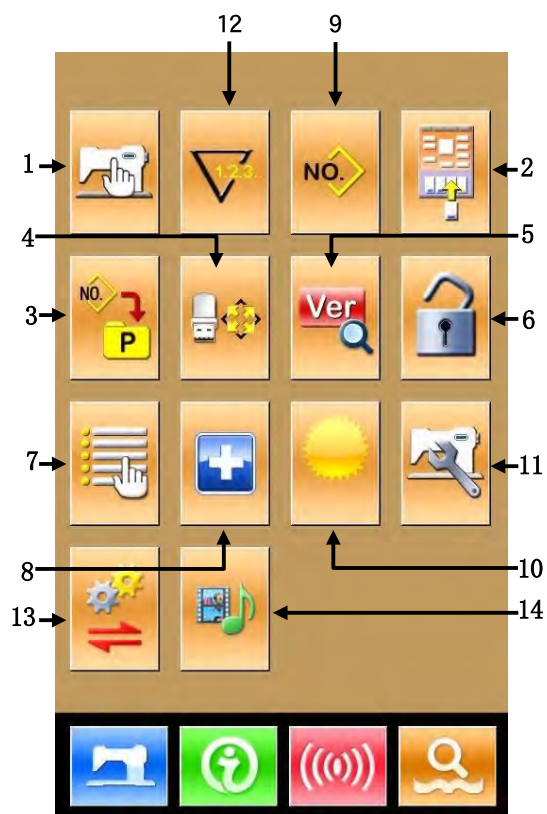
(4) 結束試縫

按了取消鍵退出試縫介面之後，返回縫製介面。

7 模式設置

按下  可以切換資料登錄介面和模式介面（如右圖所示），在該介面下可以進行一些詳細的設置和編輯操作。

注：部分圖示需要長按  鍵打開。



功能說明

序號	圖示	功能	備註
1		一級參數設置	
2		縫製資料編輯	
3		P花樣設置	
4		格式化	
5		軟體版本查詢	
6		鎖鍵盤	
7		用戶管理項設置	
8		檢測模式	
9		縫製類型設置	
10		亮度調節	
11		二級參數設置	
12		計數器設置	
13		參數備份還原	
14		視頻播放	可播放視頻檔

一級參數設置

① 參數設置操作



選擇進入一級參數設置介面（如右圖所示）。



按鍵退出參數設置介面。

當有參數修改時，在參數設置介面顯示【已修改】
按鍵，

選擇想要修改的參數後進入設置狀態，參數設置
分為資料登錄類型和選擇類型。舉例如下：

選擇U01，進入介面

U01 压脚提升最高位置

6.0 mm

范围: 0.0 - 17.0 步长: 0.1

设定踏板动作的最高位置高度

1 2 3
4 5 6
7 8 9
0 ↑ ↓
C

X back

01/04 加密 X

U01	压脚提升最高位置	6.0
U02	压脚提升中间位置	6.0
U03	压脚提升布安放位置	0
U04	双踏板的踩踏位置	80
U05	双踏板的压脚提升位置	50
U06	缝制结束上线张力设定	35
U07	切线时的上线张力设定	35
U08	设定调整下缝的上线张力设定	60
U09	设定软启动速度(第1针)	800

已修改 ◀ ▶

sewing help wireless user

選擇U19，進入介面

U19 切布刀数次动作功能 01/01

OFF 无效

ON 有效

X back

② 參數加密

A、按  鍵後，進入密碼輸入介面。

按  全部清除輸入內容

按  每按一次刪除一個字元

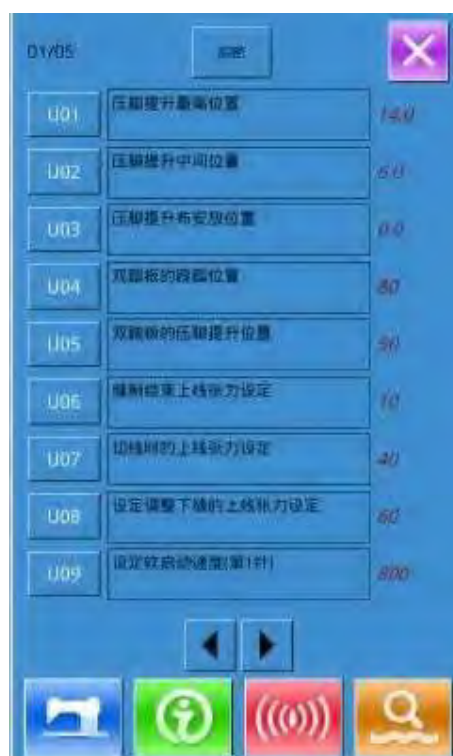
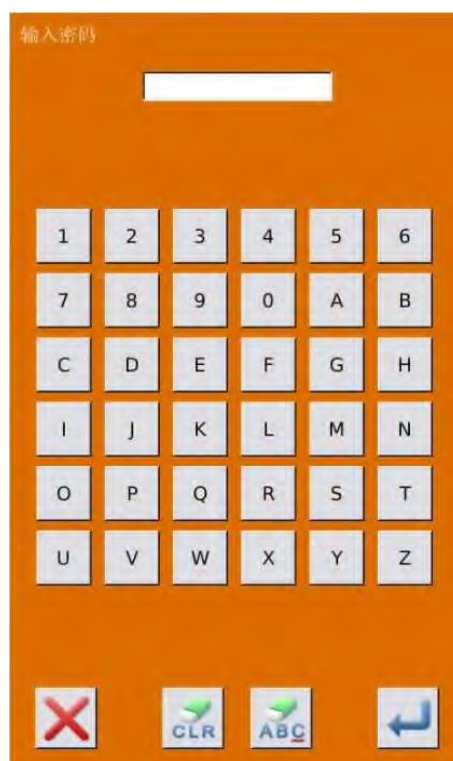
B、輸入正確的密碼後，進入參數加密介面
選擇要加密的參數

按【全選】，全部參數加密

按【反選】，反向選擇參數加密

按【改密】，修改加密密碼，預設是廠家 ID

按退出鍵  退出加密功能



③ 查詢已修改參數

A、當有參數修改時，在參數設置介面顯示【已修改】按鍵

B、在參數設置介面，按下【已修改】按鍵，可以查詢已修改過的參數。

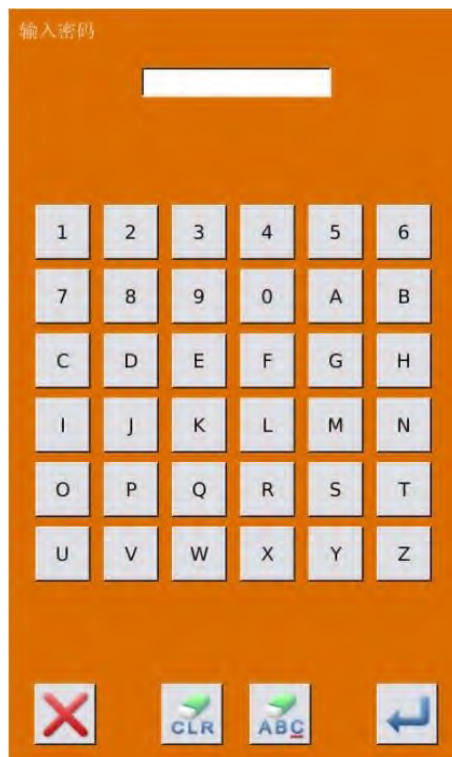
首先要輸入密碼，輸入密碼介面的操作參考②的 A項，輸入正確的密碼後進入到已修改參數查詢介面

C、在已修改參數查詢介面下，可以查詢到所有修改過的參數列表，在該清單中顯示修改的當前值和復位值。

在該介面下：

- 按【還原所有】按鍵，將修改的參數恢復為復位值
- 點按參數名稱鍵，例如【壓腳類型】，再點按【選擇還原】將選中的參數恢復為復位值。參數鍵可以多選。
- 按參數號碼鍵，例如【U14】，能夠進入參數設置介面，可以重新設置參數數值。
- 存在多於 1個頁面時，通過箭頭按鍵可以翻頁操作。

- 點按，退出該介面



一級參數表

序號	項目	設定範圍	編輯單位	出廠設置
U01	壓腳提升最高位置 設定踏板動作的最高位置高度。	0~17.0	0.1mm	14.mm
U02	壓腳提升中間位置 設定踏板動作的中間位置高度。	0~14.0	0.1mm	6.0mm
U03	壓腳提升布安放位置 設定踏板動作的布安放位置高度。	0~14.0	0.1mm	0
U04	雙踏板的踩踏位置 設定雙踏板時的動作。	5~95	1%	80%
U05	雙踏板的壓腳提升位置 設定雙踏板時的動作。 	5~95	1%	50%
U06	縫製結束上線張力設定	0~200	1	10
U07	切線時的上線張力設定	0~200	1	40
U08	設定調整下縫的上線張力設定	0~200	1	60
U09	設定軟起動速度（第1針）	400~4200	100rpm	800rpm
U10	設定軟起動速度（第2針）	400~4200	100rpm	800rpm
U11	設定軟起動速度（第3針）	400~4200	100rpm	2000rpm
U12	設定軟起動速度（第4針）	400~4200	100rpm	3000rpm
U13	設定軟起動速度（第5針）	400~4200	100rpm	4000rpm
U14	壓腳類型 1型：25x4 2型：35x5 3型：41x5 5型：自訂	1，2，3，5		1型
U15	壓腳寬度（5型） U14設定為5型之後，該參數被打開。	3.0~10.0	0.1mm	3.0mm
U16	壓腳長度（5型） U14設定為5型之後，該參數被打開。	10.0~120.0	0.5mm	10.0mm
U17	縫製開始位置 設定對於壓腳的縫製開始位置。由於有高有低，想移動開始位置時進行設定。	2.5~110.0	0.1mm	2.5mm
U18	切布刀尺寸	3.0~32.0	0.1mm	12.7mm
U19	切布刀數次動作功能 ON:有效OFF:無效 ON1:打底縫時切刀 OFF：僅打底縫時切刀	ON、OFF、 ON1、OFF1		ON
U20	斷線檢測功能	ON、OFF		ON
U21	選擇準備鍵 ON時壓腳位置 設定按了準備鍵後壓腳的位置	UP、DN		UP

序號	項目	設定範圍	編輯單位	出廠設置
	UP：上升 DN：下降			
U22	選擇縫製結束時的壓腳位置 設定結束後的壓腳位置。 (僅單踏板時有效) UP：上升 DN：下降	UP、DN		UP
U23	上線切線打開動作開始距離 輸入開始縫製之後上線切線馬達開始開放剪刀動作的距離。	0~15.0	0.1mm	1.5mm
U24	切底線打開動作開始距離 設定縫製開始之後到底線切線馬達開始開放剪刀動作的距離。	0~15.0	0.1mm	1.5mm
U25	計數器更新單位 設定更新縫製計數器的單位。	1~30	1	1
U26	禁止計數器被修改	ON、OFF		OFF
U27	計數器到達設定值時縫紉機的操作	ON、OFF		OFF
U49	照明燈亮度調節	0-5	1	0
U50	蜂鳴器聲音設定 OFF：禁止蜂鳴器 PAN：操作盤聲音 ALL：操作盤加報警	OFF、PAN、ALL		ALL
U100	背光自動關閉 OFF：不自動關閉 ON：自動關閉	ON、OFF		OFF
U101	背光自動關閉等待時間	1~9	1	3m
U102	音量大小	30-63	1	50
U200	語言選擇	中文、英文、土耳其文、越南文、西班牙文、韓文		中文
U201	開機是否進入語言選擇	ON、OFF		OFF
U210	壓料汽缸動作時間	0~30	1	0
U211	送料汽缸動作時間	0~200	1	0
U220	張力控制方式	0~3	1	1
U221	起縫張力調整	0~200	1	0
U222	AT同步調整	0~200	1	0
U223	壓腳下降踏板行程調整	-100~100	1	0
U224	壓腳運行踏板形成調整	-100~100	1	0
U298	DIP1	-100~100	1	0
U299	DIP2	-100~100	1	0

二級參數設置

① 參數設置操作

在設置模式等級3下，選擇進入二級參數設置介面（如右圖所示）。操作方法參照“7.2 一級參數設置”。

當有參數修改時，在參數設置介面顯示【已修改】按鍵，

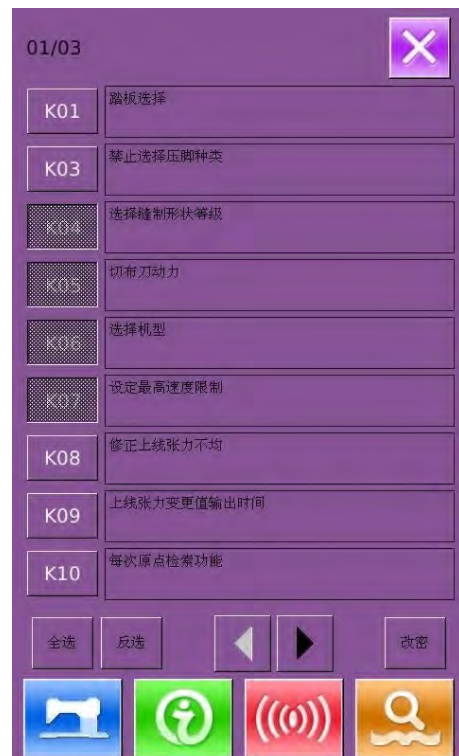
按鍵退出參數設置介面



② 參數加密

參數加密的操作步驟，請參考“7.2一級參數設置”

按鍵退出參數加密介面



③ 已修改參數查詢

當有參數修改時，在參數設置介面顯示【已修改】按鍵，

點按【已修改】按鍵可以查詢已修改過的參數，並且可以進行參數的復位。

具體操作可參考“7.2一級參數設置”



二級參數表

序號	項目	設定範圍	編輯單位	出廠設置
K01	選擇踏板 D：雙踏板 S-1：單踏板（無中間位置） S-2：單踏板（有中間位置） S-3：模擬單踏板（無中間位置） S-4：模擬單踏板（有中間位置） S-5：模擬單踏板（有返回踩踏） S-6：數字雙踏板 S-7：模擬單踏板（有反踩急停）	D、 S-1、 S-2 S-3 S-4 S-5 S-6 S-7		S-3
K03	禁止選擇壓腳種類 OFF：禁止變更 ON：允許變更	ON、OFF		ON
K04	選擇縫製形狀等級（12/20/30/31）	12/20/30/31		12
K05	切布刀動力 設定切刀的輸出動力。	0~10	1	1
K06	選擇機種（0-標準型，1-幹式）	0~1	1	0
K07	設定最高速度限制 K06為幹式時，最高速度自動限制在 3300rpm。 ※ 受密碼保護	400~4200	100rpm	3600rpm
K08	修正上線張力不均 修正全體平衡的上線張力的輸出值。	-30~30	1	0
K09	送布動力	0~5	1s	0

序號	項目	設定範圍	編輯單位	出廠設置
K10	每次原點檢索功能 縫製結束後進行原點檢索。 OFF：無 1：縫製結束後 2：迴圈縫結束後 3：底剪找原點	OFF、1、2、3		OFF
K11	逆轉提升機針 U01壓腳提升最高為止設定為 14.0mm以上後，自動地逆轉提升機針，停止縫紉機。 其動作可以設定為禁止。 OFF：禁止逆轉提升 ON：允許逆轉提升	ON、OFF		ON
K12	設定切刀時間	13~30	1ms	20ms
K15	Y送步馬達原點修正	-120~400	1	0
K16	機針擺動馬達原點修正	-50~50	1	0
K17	壓腳提升馬達 原點修正	-100~10	1	0
K18	直接選擇按鍵使用 OFF：不顯示 ON：顯示	ON、OFF		OFF
K19	連續縫製中途切線 禁止時，空送設為無效，登記的花樣被縫製到相同位置，變為重疊縫製。 OFF：禁止 ON：允許	ON、OFF		ON
K20	擺針動力	0~3	1	0
K21	壓腳動力	0~8	1	0
K22	壓腳提升速度的選擇	1~3	1	2
K24	剪線動力	0~10	1	0
K25	切刀原點微調	-100-100	1	25
K28	傳送速度設置	1-5	1	3
K29	麵線剪線速度選擇	0-4	1	1
K30	壓腳異常檢測位置	0~10	1	7.5
K32	底線剪線速度選擇	0~3	1	1
K150	安全開關	0-1	0	0
K189	斷線檢測靈敏度調整	1~10	1	3
K200	恢復出廠參數 ※ 受密碼保護			
K202	機型設置	0~4 1：1796	1	0
K227	主軸電機類型 0：0830-F11	0、1、2		2

序號	項目	設定範圍	編輯單位	出廠設置
	1 : 0830-F01 2 : 0830-F21			
K228	步進電機類型 0 : 400 1 : 1000	0、1		1

計數器設置

按下  進入計數器設置介面（如右圖所示）。
操作步驟：

① 縫製計數器類型選擇

選擇縫製計數、計件計數功能

② 設定當前值、設定值

在選定的類型中按“當前值”、“設定值”按鍵，進行有關操作

③ 選擇加計數還是減計數

在選定的類型中，按“加”、“減”按鍵，進行有關操作。

按下  鍵退出計數器設置介面。

按下  完成設置，並退出。

縫製加計數：

每縫製 1 形狀的縫製物之後，在當前值上加數。當當前值與設定值相等時，顯示出計數器溢出報警界面。

面。按下  鍵，計數器當前值恢復為 0。

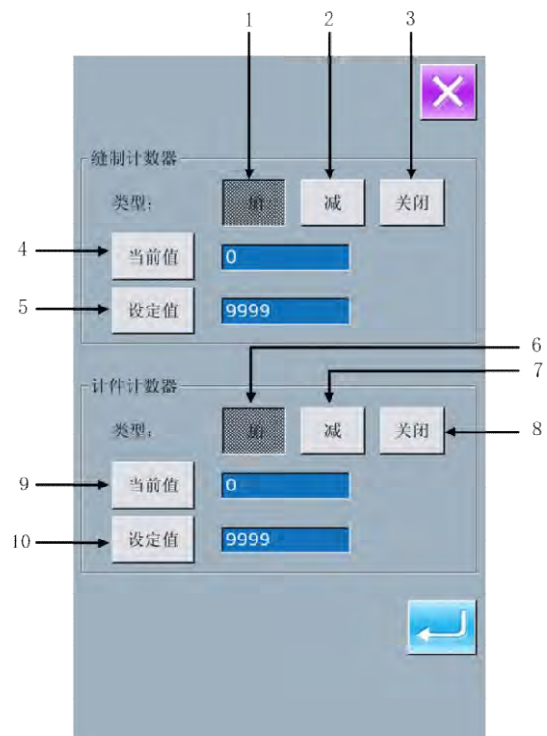
縫製減計數：

每縫製 1 形狀的縫製物之後，從當前值減 1。當當前值等於 0 之後，顯示出計數器溢出報警界面。按下

 鍵，計數器當前值恢復為設定值。

計件加計數：

每縫製 1 迴圈或 1 連續縫，在當前值上進行加數。當當前值與設定值相等時，顯示出計數器溢出報警



介面。按下鍵，計數器當前值恢復為0。

計件減計數：

每縫製 1 迴圈或 1 連續縫，從當前值減 1。當當前值

等於 0 之後，顯示出計數器溢出報警介面。按下

鍵,計數器當前值恢復為設定值。

④ 關閉計數器

在選定的類型中，按“關閉”按鍵，關閉計數器。

功能介紹

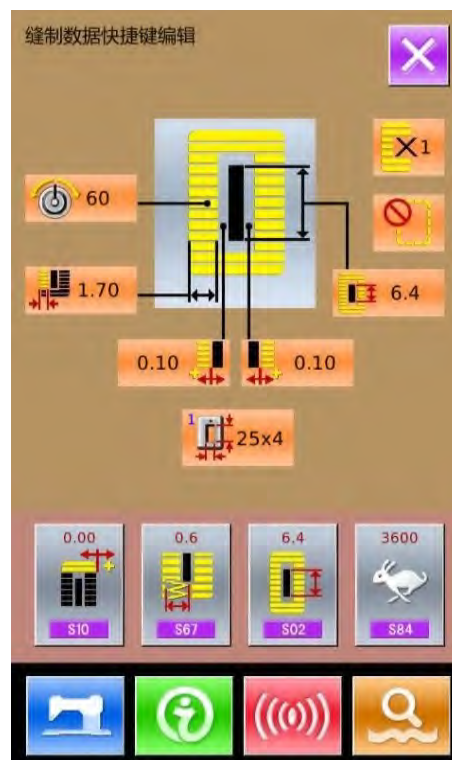
序號	功能	備註
1	縫製計數器加計數	
2	縫製計數器減計數	
3	關閉縫製計數器	
4	設定縫製計數器當前值	
5	設定縫製計數器設定值	
6	計件計數器加計數	
7	計件計數器減計數	
8	關閉計件計數器	
9	設定計件計數器當前值	
10	設定計件計數器設定值	

用戶管理項設置

可以把經常使用的縫製資料登記到管理按鍵使用。按



下進入使用者管理項設置介面(如右圖所示)。



① 登記管理按鍵

管理按鍵最多可以登記 4 個，在當前介面上顯示了 4 個管理登記按鍵，按下想登記的位置的按鍵之後，縫製資料選擇介面被顯示出來(如右圖所示)。



按下 鍵退出使用者管理項設置介面

選擇想要登記的縫製資料，按下 結束登記操作。新登記的縫製資料會顯示在使用者管理按鍵上。

② 出廠登記狀態

出廠時從左到右按照順序被登記：



：平行部間距；





: 修正左加固寬度



: 修正右加固寬度；



: 縫製開始上線張力設定

縫製資料編輯

部分縫製資料是可以設定是否被打開的，在設置模

式等級2下，按下進入縫製資料編輯介面（如右圖所示）。



: 縫製資料打開



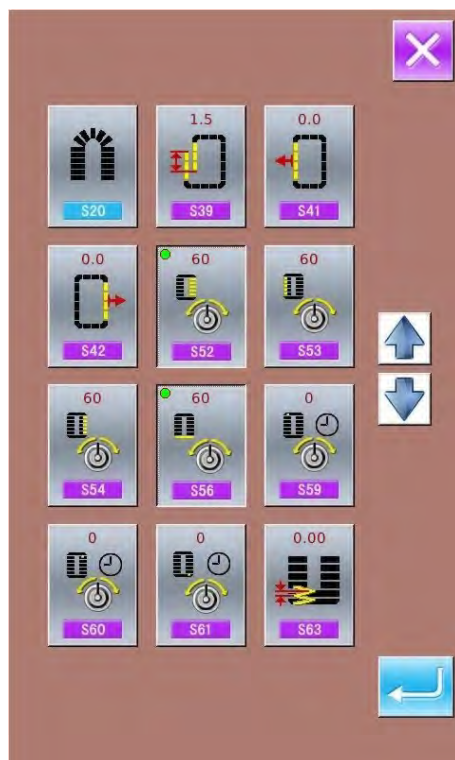
: 縫製數據關閉

選擇想要編輯的縫製資料，按鍵之後，可以變換翻轉打開/關閉顯示介面。

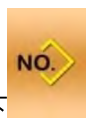
按下之後，可以確定設定的縫製資料項目目是否打開的狀態。

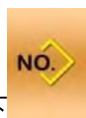


按鍵退出縫製資料編輯介面



變換縫製類型



按下  進入縫製類型選擇介面（如右圖所示）。



：普通縫



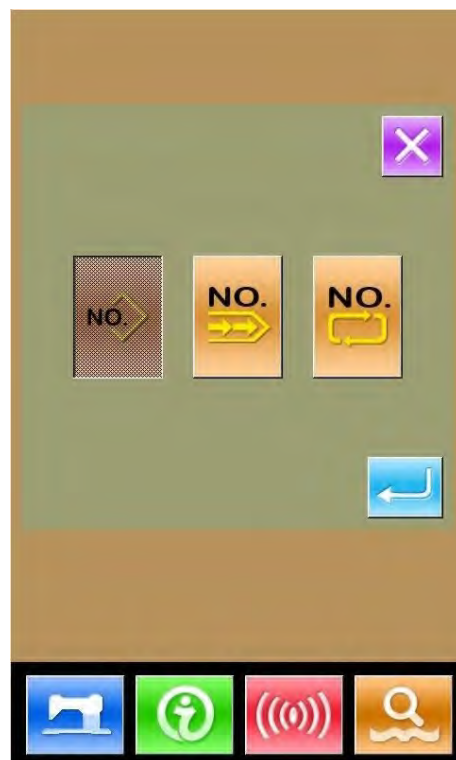
：連續縫



：迴圈縫

確定縫製類型之後，按下  結束。按  之後，顯示出選擇的縫製類型的資料登錄介面。

按  鍵退出變換縫製類型介面，原來的縫製類型不變。

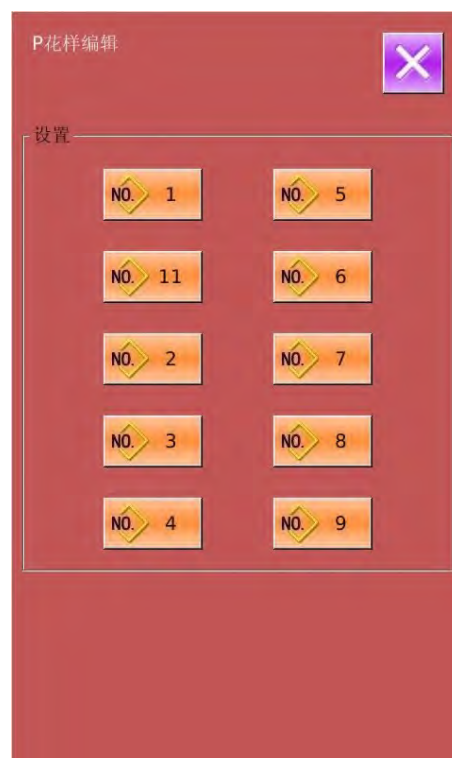


登記花樣到直接按鍵上

可以把經常使用的花樣號登記到直接按鍵上進行使用。

按下  進入到直接按鍵登記介面（如右圖所示）。

按  鍵退出花樣登記功能



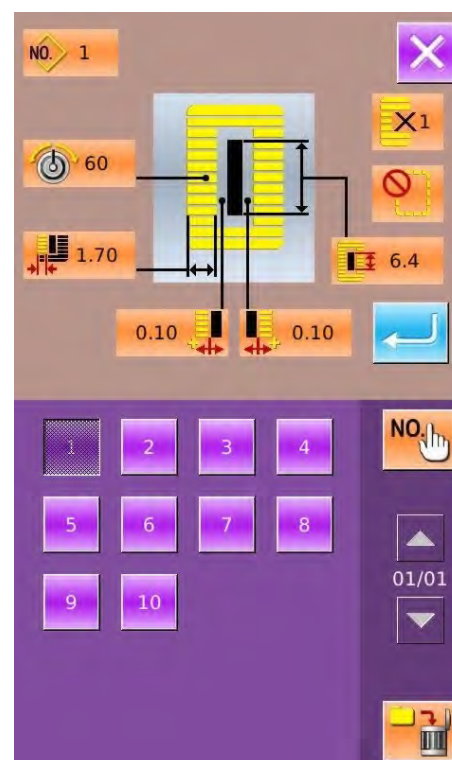
最多可以登記 10 個花樣，在顯示的 10 個直接按鍵上，選擇想登記位置的按鍵之後，進入花樣選擇介面（如右圖所示）。

藍色標示的檔是 vdt 格式檔。

 : 花樣查詢
 :
 消除當前登記花樣

 : 確定選擇

 : 退出



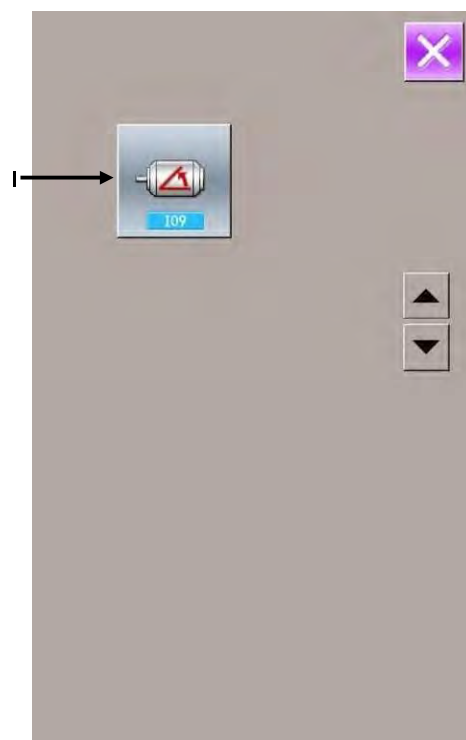
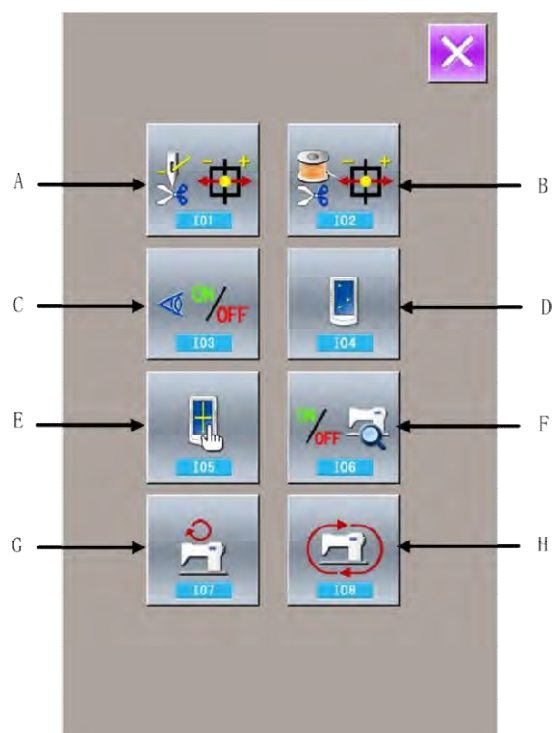
檢測模式

在設置模式等級2 下，按下  鍵可以進入檢測模式介面（如右圖所示）。

各圖示功能說明詳見下表：

序號	名稱
A	I01上剪線
B	I02下剪線
C	I03輸入檢測
D	I04液晶顯示檢測
E	I05觸控式螢幕校正
F	I06輸出檢測
G	I07轉速測定
H	I08連續運轉
I	I09電機角度

按  鍵退出檢測模式介面



(1) 上剪線的調整方法

① 上剪線調整方法

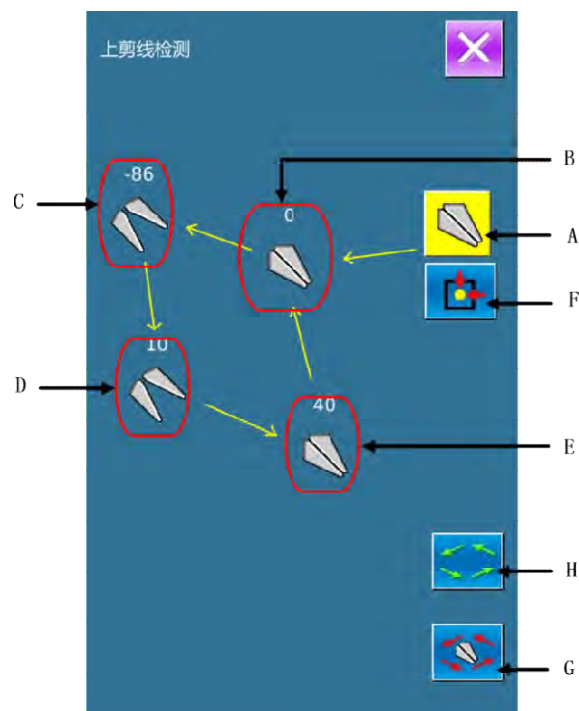
在檢測模式介面按下  (I01 上剪線) 鍵進入上剪線的調整介面 (如右圖所示)：

序號	名稱	範圍	初始值
A	原點位置		
B	起始位置	-10~10	0
C	張口位置	-95~-80	-86
D	待剪位置	0~20	10
E	剪後位置	30~50	40

② 選擇想要調整的模式位置

通過按  鍵選擇所要調整的位置 (A、B、C、D)，然後通過按加減鍵調整所需的數值。然後按  F 鍵返回到原點位置，

③ 按 鍵返回到檢測模式介面。



(2) 下剪線的調整方法

① 下剪線調整方法

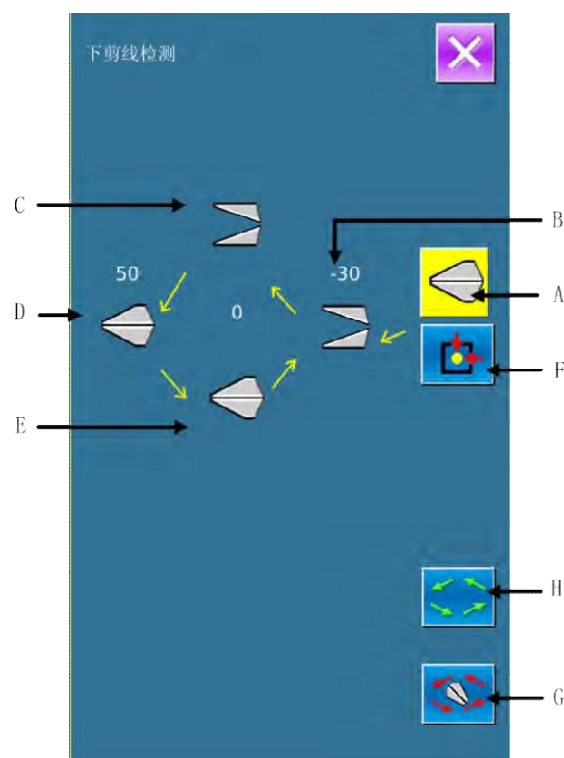
在檢測模式介面按下  (I02 下剪線) 鍵進入下剪線的調整介面 (如右圖所示)：

下剪線：

序號	名稱	範圍	初始值
A	原點位置		
B	張口位置	-40~-15	-30
C	待剪位置	-10~10	0
D	剪後位置	40~60	50
E	起始位置	-10~15	0

② 選擇想要調整的模式位置

通過按  鍵選擇所要調整的位置 (A、B、C、D)，然後通過按加鍵  或減鍵  調整所需的數值。然後按  F 鍵返回到原點位置。



按  鍵返回到檢測模式介面。

(3) 輸入信號檢測方法

在檢測模式介面按下  (IO3輸入檢測) 鍵進入輸入檢測介面(如右圖所示)，在該介面下可以確認各種開關和感測器的輸入狀況。

ON：表示開啟

OFF：表示關閉

A：踏板量

B：踏板感測器

C：斷線檢測 D：

切刀感測器

E：機頭翻倒感測器

F：停止開關

G：擺針感測器

H：縫紉機半月板感測器

I：Y 送布原點檢測

J：壓腳原點檢測

K：剪麵線電機原點檢測

L：剪底線電機原點檢測



(4) 液晶檢測



在檢測模式介面按下 (I04液晶檢測) 鍵進入液晶檢測介面 (如右圖所示)，在該狀態下檢測液晶是否失色。

在介面下點按，在“藍色 — 黑色 — 紅色 — 綠色 — 白色”間迴圈顯示

按退出鍵  退出液晶檢測介面。



(5) 觸控式螢幕校正



A、在檢測模式介面按下 (I05 觸控式螢幕校正) 鍵，提示【確定進入觸控式螢幕校正模式】，按  進入觸控式螢幕校正介面 (如右圖所示)，按  可以退出觸控式螢幕校正狀態。

B、需要進行 5 點校正，最好採用觸摸筆一類的工具點擊畫面中的十字游標，校正結束後，會顯示本次操作是否成功

※ 校正過程中，請務必按照十字游標標識的位置進行，否則會導致校正結束後無法正常使用觸控式螢幕的情況



（6）輸出檢測方法

在檢測模式介面按下 （IO6輸出檢測）鍵進入輸出檢測介面（如右圖所示），

在該介面下可以檢測的輸出狀態包括：

- A：擺針電機檢測B：壓腳電機檢測C：底線剪線電機檢測D：送布電機檢測E：麵線電機檢測
- F：線張力電磁鐵
- G：切刀電磁鐵

- 點按 A~E 時，會出現  提示條，點按【+】、【-】鍵，提示框中顯示設定的電機的原點檢測狀態。
- 點按 F~G 時，相應的電磁鐵會有動作。
- 按  退出輸出檢測介面



※ 注意縫紉機會有相應的動作

（7）轉速測定

① 顯示轉速測定介面

在檢測模式介面按下 （IO7轉速測定）鍵進入轉速測定介面（如右圖所示），在該介面下可以檢測主軸馬達轉速。

按退出鍵  退出轉速測定介面。

② 轉速測定設置

通過按加鍵“+”和按減鍵“-”可以設置主軸馬

達轉速，按下  後，主軸馬達會以已設定的轉速旋轉。此時，實際測得的轉速在介面中的實

際轉速欄中顯示。按下  則機器停止運轉。



（8）連續運轉

① 顯示連續運轉介面

在檢測模式介面按下 （IO8連續運轉）鍵進入連續運轉介面（如右圖所示）。

A：動作間隔B：

收針原點檢測

按逸出鍵  退出連續運轉介面。

② 連續運轉設置

點擊連續運轉狀態下的“動作間隔”輸入框和“收針原點檢測”輸入框，通過數位鍵盤輸入設置值，可設定動作間隔時間和收針原點檢測。

按  鍵，踩下腳踏板即開始連續運轉。連續運轉過程中可以通過暫停開關暫停，也可以在動作結束後壓腳抬起時踩下腳踏板或按暫停開關停止連續運轉。



亮度調節

在設置模式等級2下，按下可以進入亮度調節介面（如右圖所示），分為20~100檔。可以通過加鍵或減鍵調節所需的數值，也可以通過數位鍵盤輸入數值然後按下完成輸入，按退出鍵退出亮度調節介面。



鎖鍵盤操作

在設置模式等級2下，按下進入鎖鍵盤設置介面。

① 鎖鍵盤操作



：未設定鎖鍵盤狀態

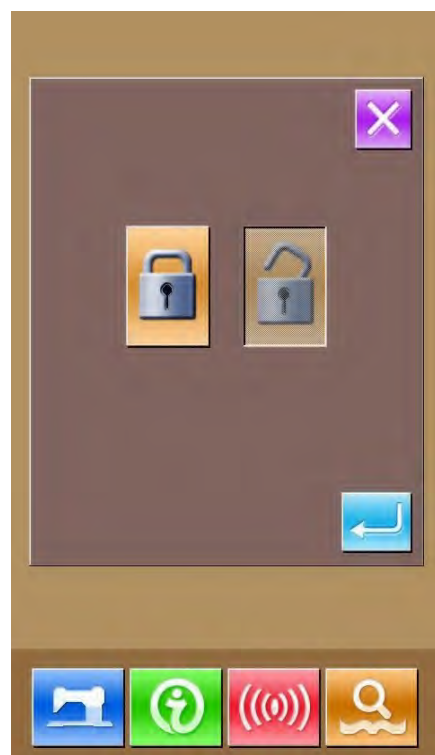


：已設定鎖鍵盤狀態

選擇，按下完成鎖鍵盤操作。按退出鍵退出鎖鍵盤操作。

② 鎖鍵盤狀態顯示

關閉參數設置模式介面，返回資料登錄介面，如右



圖，可以看到花樣號碼下方有一個顯示鎖鍵盤狀態

的圖示 。在鎖鍵盤狀態下僅顯示可使用圖示。

③ 鎖鍵盤範圍

1. 普通縫資料登錄介面：

- 1) 花樣登記
- 2) 花樣複製
- 3) 花樣命名
- 4) 用戶管理
- 5) 壓腳選擇
- 6) 形狀和相關縫製資料

2. 普通縫縫製介面：

- 1) 計數器設置
- 2) 上張力設置

3. 連續縫資料登錄介面：

- 1) 花樣登記
- 2) 花樣複製
- 3) 花樣命名
- 4) 送布量
- 5) 刪除
- 6) 花樣縫製數據

4. 連續縫縫製介面：

- 1) 計數器設置
- 2) 上張力設置

5. 迴圈縫資料登錄介面：

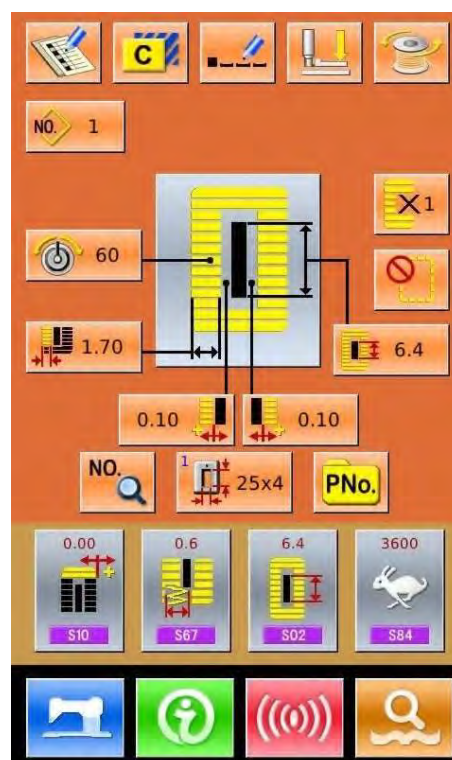
- 1) 花樣登記
- 2) 花樣複製
- 3) 花樣命名
- 4) 刪除
- 5) 全部刪除
- 6) 縫製衣物
- 7) 子花樣登記

6. 迴圈縫縫製介面：

- 1) 計數器設置
- 2) 上張力設置

7. 參數設置模式：

- 1) 參數 1 級
- 2) 參數 2 級
- 3) P 花樣編輯
- 4) 用戶管理
- 5) 縫製資料編輯
- 6) 檢測模式
- 7) 計數器編輯



格式化操作

按下  進入鎖鍵盤設置介面。

在該介面下，可以完成：

- U盤格式化
- 記憶體花樣格式化
- 自訂格式化

按下相應的功能鍵，進入相關介面。

按逸出鍵  退出格式化U 盤



① 按“USB”鍵，進入U盤格式化

按回車鍵  全部格式化U 盤檔按

逸出鍵  退出格式化U 盤



② 按“記憶體”按鍵，格式化記憶體
花樣格式花樣花樣包括：

- 普通花樣
- 連續縫花樣
- 迴圈縫花樣
- 登記的P花樣

按回車鍵  全部格式化U盤檔按

逸出鍵  退出格式化U 盤

※ 格式化記憶體花樣會將記憶體中存在的全部花樣檔刪除，請謹慎操作！



③ 按“自訂”鍵，進入批量刪除功能
在該介面下，會顯示當前記憶體中存在的所有花樣檔，點按相應的按鍵完成批量刪除功能。

自訂功能的操作：

- A、利用“上箭頭”、“下箭頭”鍵進行翻頁
- B、利用下面三種操作，選擇花樣

➤ 按  選擇全部花樣，

➤ 按  反向選擇

➤ 點擊花樣號碼按鍵

C、按  完成批量刪除功能

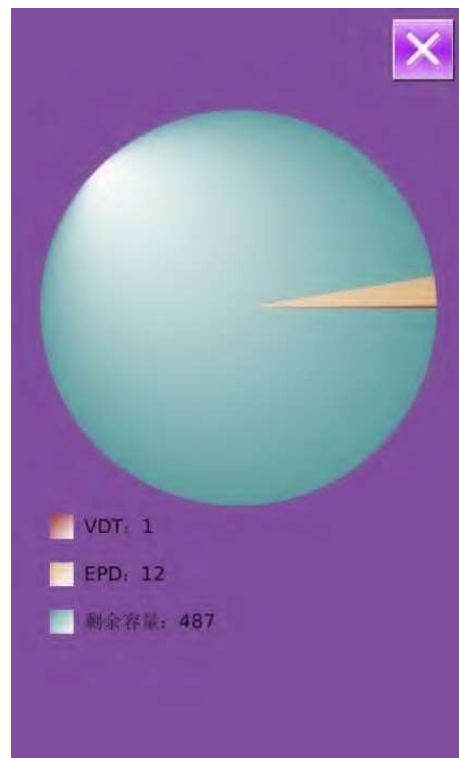
D、按逸出鍵  退出到格式化操作介面。

※ 藍色標示的檔是 vdt 格式檔



- ④ 在自訂格式化介面下，按  鍵，顯示當前記憶體中花樣佔用的空間，及各類型花樣的個數

按逸出鍵  退出到上一介面。



參數備份還原

使用者可以根據需要保存 8組U級參數數值，用於以後的調用。

在設置模式等級2 下，按  鍵進入參數還原備份介面，如右圖所示：

清除鍵：清除全部已經保存的自定參數
保存鍵：保存當前參數
恢復鍵：恢復當前參數

① 點擊  其中任意一鍵，以確定參數保存位置，然後點擊「保存」鍵進行保存。

② 觀察「自定參數 xx（有/無）」鍵顯示內容，如果括弧內顯示為「有」的則表示該位置上存儲了使用者參數。

，例如 。

③ 選擇已經存儲參數的自定參數鍵，按下「恢復」鍵就會重新載入相應的參數設定值。

④ 按下「清除」鍵會清楚全部已存參數



Storage switch backup/restore interface. It features a list of 8 custom parameter buttons, each labeled with a number and a status in parentheses. At the bottom, there are three buttons: '清除' (Clear), '保存' (Save), and '恢复' (Restore).

Parameter	Status
自定参数01	(无)
自定参数02	(有)
自定参数03	(有)
自定参数04	(无)
自定参数05	(无)
自定参数06	(无)
自定参数07	(无)
自定参数08	(无)

8 通訊功能

通信功能完成以下幾項功能：

- 把其它縫紉機編制的縫製資料或打版軟體編制後的縫製資料下載到縫紉機；
- 向U盤或電腦裡載入縫製資料。
- 從U盤載入參數
- 將操作頭中保存的參數導入到U盤中
- 操作頭軟體升級

關於可以處理的資料

可以處理的縫製資料有以下2 種，其資料形式如下。

數據名稱	尾碼	資料內容
向量形式資料	[0-9][0-9][1-9].vdt	編制的落針點數據。
參數資料	[0-9][0-9][1-9].epd	縫紉機編制的縫製形狀。

往U盤保存資料時，請保存到DH_PAT資料夾裡，否則就不能讀取檔。

功能操作

① 顯示通信介面

在資料登錄介面，按通信鍵之後，顯示出通信介面。

② 選擇相應操作

該介面下可選擇的功能，分為三類：

- 花樣傳輸
- 參數傳輸
- 軟體升級

點按相應的圖示，進行功能操作。

③ 按通訊鍵退出通訊功能



花樣傳輸

① 顯示通信介面

在通訊介面下，按：

A: 從U盤中向操作頭導入花樣

B：將操作頭中保存的花樣匯出到U盤中

U盤的路徑：DH_PAT

- ※ 從U盤導入花樣時，請將花樣檔保存在U盤的DH_PAT目錄中
- ※ 從操作頭匯出花樣時，匯出的花樣檔保存在U盤的DH_PAT中
- ※ U盤中的花樣命名方式

從U盤導入花樣時，請遵守下面的規則命名：

檔案名：三位元數字，001~500

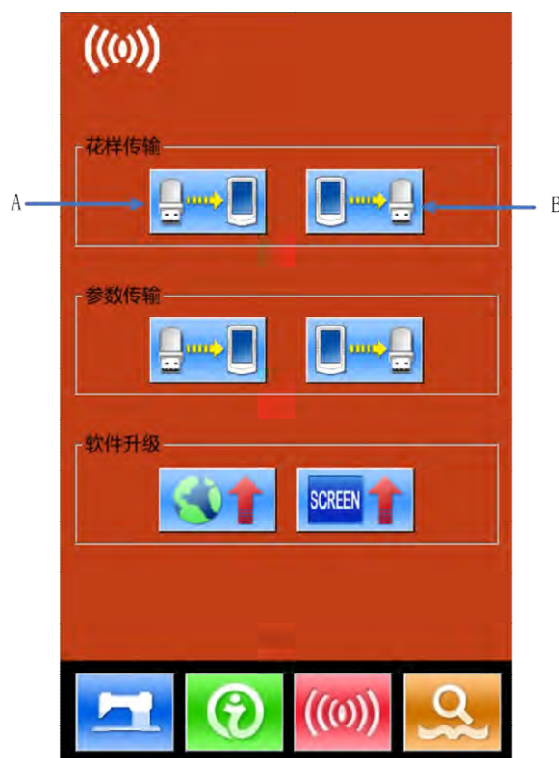
尾碼名：epd、vdt（大小寫無關）

舉例：

正確的檔命名：001.epd、100.vdt、

003.EPD、102.VDT

其他的命名方式不正確，系統不能識別



② 按A指示鍵，進入從U盤向操作頭導入花樣介面

A、利用【上箭頭】、【下箭頭】鍵進行翻頁

B、利用下面三種操作，選擇花樣

➤ 按  選擇全部花樣，

➤ 按  反向選擇

➤ 點擊花樣號碼按鍵

C、按  完成導入花樣功能

D、按  完成選中花樣的刪除功能

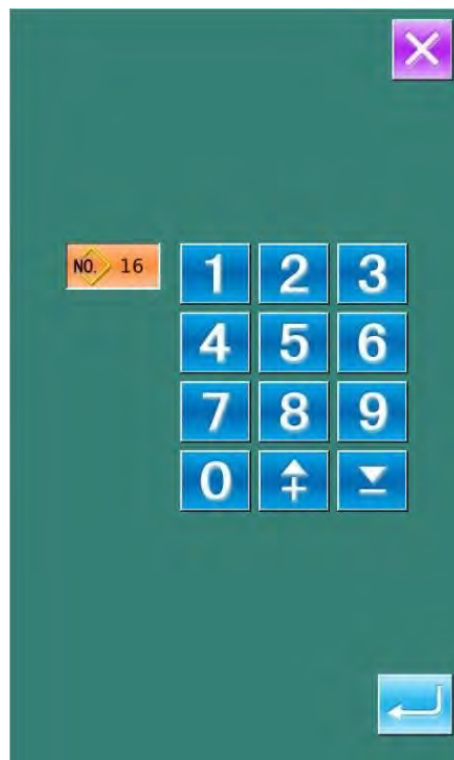
E、按逸出鍵  退出到通訊介面。



F、按  鍵，出現右圖所示介面，
輸入要存入的花樣號；

按回車鍵 ，可以將選中的U盤中的花樣，存入到指定的花樣號中，並返回上一介面；

按逸出鍵  退出到上一介面。



③ 按B指示鍵，完成操作頭的花樣匯出到U盤中

A、利用【上箭頭】、【下箭頭】鍵進行翻頁

B、利用下面三種操作，選擇花樣

➤ 按  選擇全部花樣，

➤ 按  反向選擇

➤ 點擊花樣號碼按鍵

C、按  完成選中花樣的刪除功能

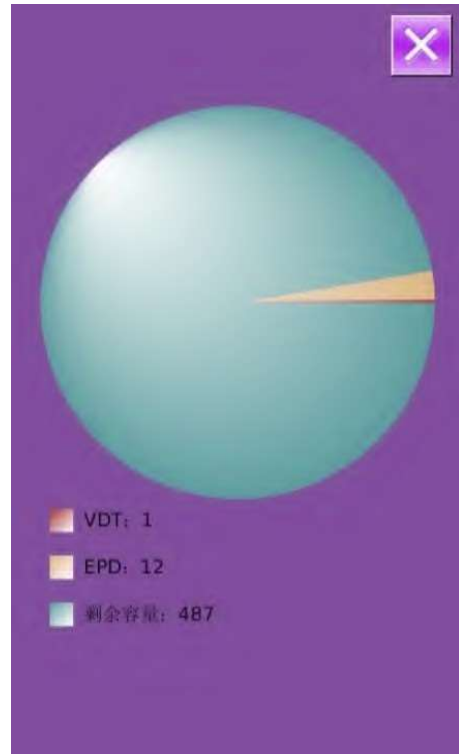
D、按  完成匯出花樣功能

E、按逸出鍵  退出花樣匯出功能介面

F、在該介面下，按  鍵，顯示當前記憶體中花樣佔用的空間，及各類型花樣的個數



※ 藍色標示的檔是vdt格式檔



參數傳輸

① 顯示通信介面

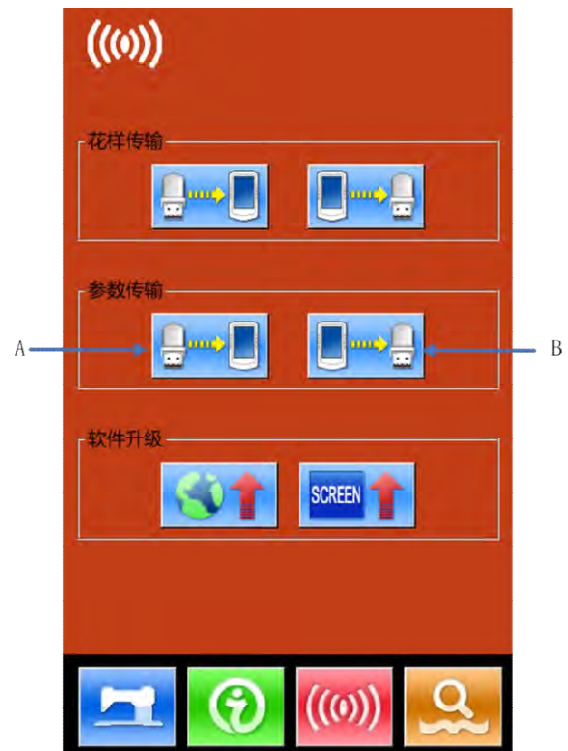
A: 從U盤中向操作頭導入參數

B: 將操作頭中保存的參數匯出到U盤中

※ 從U盤導入參數時，請將參數檔保存在U盤的DH_PARAM目錄中，並命名為：PS_Param

※ 從操作頭匯出參數時，匯出的參數檔保存在U盤的DH_PARAM中，參數檔：PS_Param

※ 參數檔是二進位檔案，對檔的操作在操作頭上完成，不要手動修改檔，以免影響使用。



② 按A指示鍵，完成從U盤向操作頭導入參數

A 按回車鍵完成從U盤向操作頭導入參數並退出

B、按逸出鍵直接退出



③ 按B指示鍵，完成操作頭的參數匯出到U盤中

A、按回車鍵完成從操作頭向U盤匯出參數並退出

B、按逸出鍵直接退出



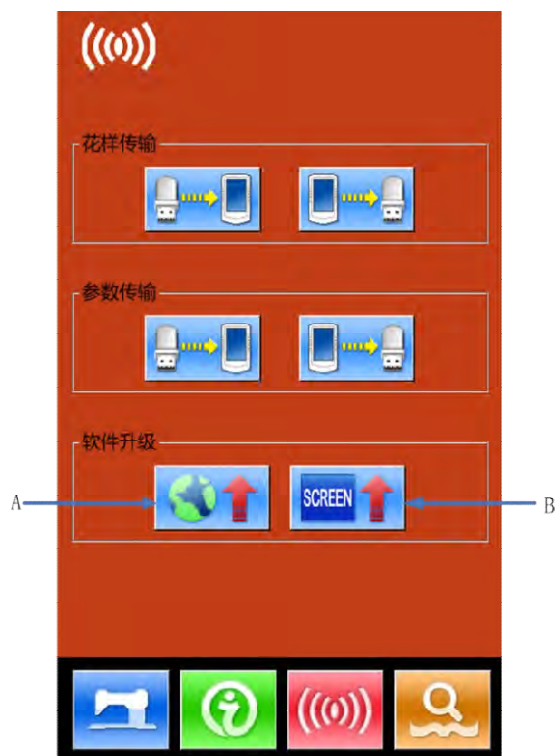
軟體升級

① 顯示通信介面

A：軟體升級

B：批量選擇升級開機畫面

在通訊介面下，按 A 鍵進入軟體升級介面。



② 升級類型選擇軟

體升級包括：

- ◆ 操作頭程式
- ◆ 圖示
- ◆ 顯示字形檔
- ◆ 開機畫面

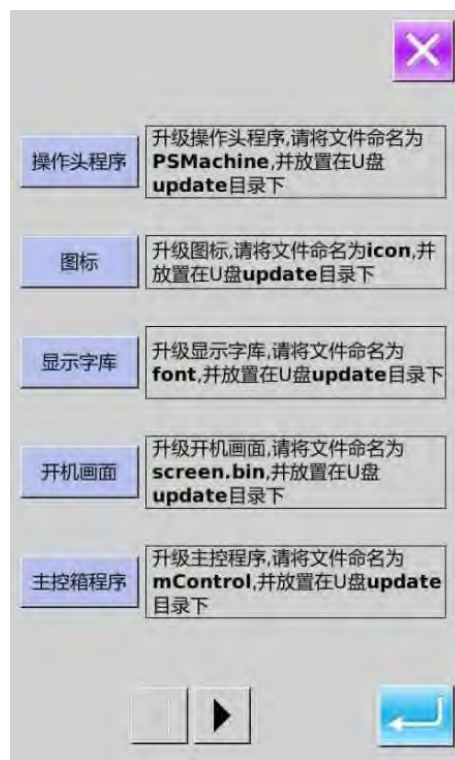
按 ◀ 和 ▶ 鍵進行翻頁

A、按回車鍵  完成選中功能的升級，並退出

B、按逸出鍵  直接退出

C、各個功能鍵能同時多選，系統循序執行相應的升級功能

D、升級完成後，關機重啟即可



9 資訊功能

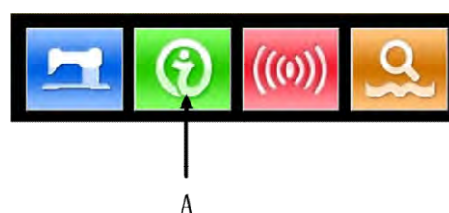
資訊功能，有下列3 種功能。

- 1) 可以指定機油更換時期，機針更換時期，清掃時期等，超過了指定事件之後，進行警告通知。
- 2) 利用顯示目標值和實際值功能，可以提高生產小組完成目標的意識，可以一目了然地確認進度。
- 3) 顯示穿線示意圖。

查看維修保養資訊

① 顯示資訊介面

在資料登錄介面，按開關密封部的資訊按鍵（A）之後，資訊介面被顯示出來。

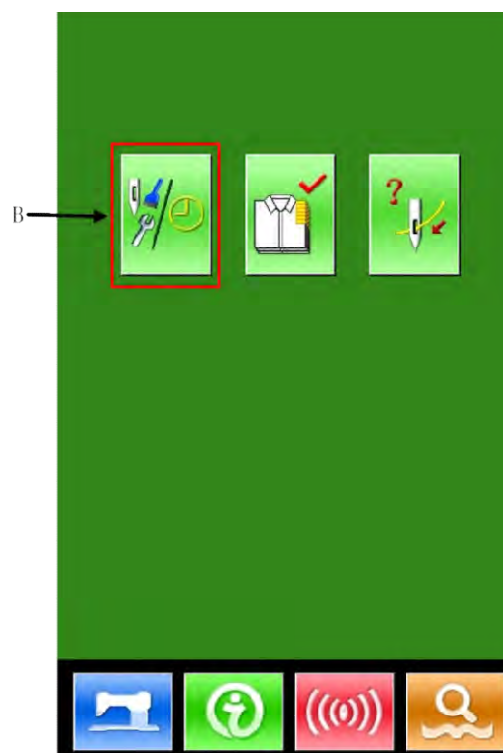


② 顯示保養維修介面。

請按資訊介面的保養維修資訊介面顯示按鍵



（B）。



在保養維修資訊介面上，有以下3 個專案的資訊被顯示出來。



：更換機針(千針)



：清掃時間(小時)

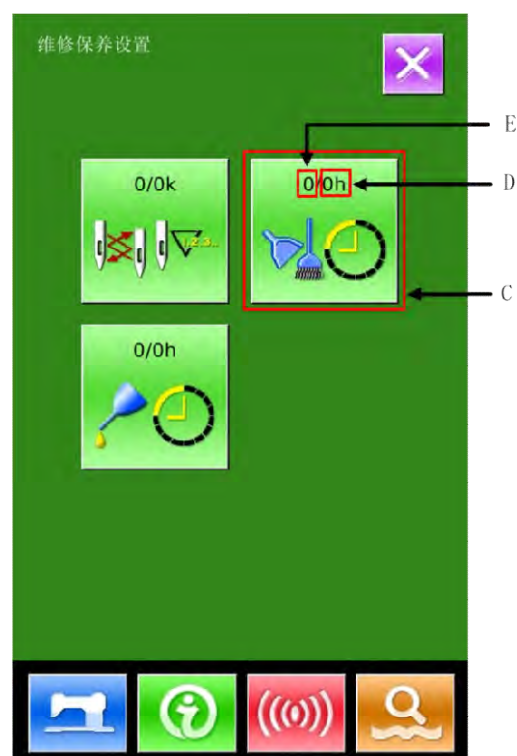


：機油更換時間(小時)

各專案顯示在按鍵(C)，通知檢修的間隔顯示在D，至更換的剩餘時間顯示在E。

點按相應的按鍵，可以清除至更換的剩餘時間。

按逸出鍵直接退回到資訊介面。

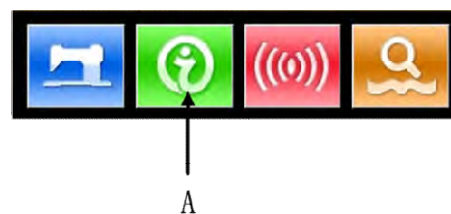


維修保養時間設置

① 顯示資訊介面（維修人員等級）

在資料登錄介面，按資訊按鍵（A）約3 秒鐘之後，資訊介面（維修人員等級）被顯示出來。

維修人員等級時，有6 個按鍵被顯示出來。



② 資訊介面功能

維修人員等級時，有六項功能顯示：

：維修保養

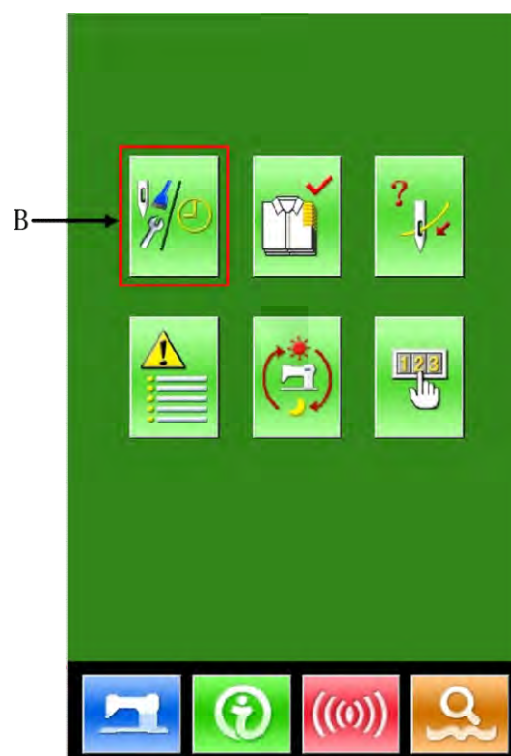
：生產管理

：穿線示意

：報警記錄

：運轉記錄

：分期密碼



請按資訊介面的保養維修資訊介面顯示按鍵



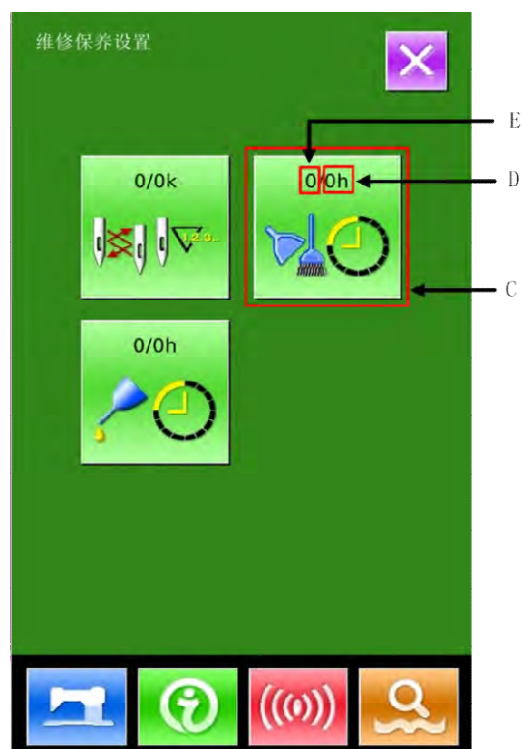
(B)，進入維修保養介面。

③ 維修保養設置

在保養維修資訊介面上，顯示出與通常的維修保養資訊介面一樣的資訊。按了想變更維修保養時間的專案按鍵(C)之後，相關輸入介面被顯示出來。

比如按下  鍵，則可以設置清掃時間。

按逸出鍵  直接退回到資訊介面。



④ 設置維修保養項

把維修保養項設定值設定為0 之後，則停止維修保養功能。

維修保養設置項包括：

- ◆ 機針更換時間設定
- ◆ 清掃時間設定
- ◆ 機油更換時間設定

按相應的圖示，進入設置介面：

A、通過數位鍵盤輸入維修保養項的設定值。

B、按回車鍵之後確定輸入。

C、按逸出鍵直接退回到維修保養介面。



警告的解除方法

到了指定的維修保養時間之後，資訊提示介面被顯示出來。要清除維修保養時間時，請按回車鍵。

在清除維修保養時間之前，每1縫製結束後顯示資訊提示介面。

各項目的資訊提示號碼如下。

- 機針更換：M031
- 機油更換時間：M032
- 清掃時間：M033

生產管理資訊

在生產管理介面上，指定開始，可以進行從開始到現在的生產件數，生產目標件數的顯示等。

生產管理介面的顯示方法有以下2種：

- 從資訊介面顯示
- 從縫製介面顯示

從資訊介面顯示

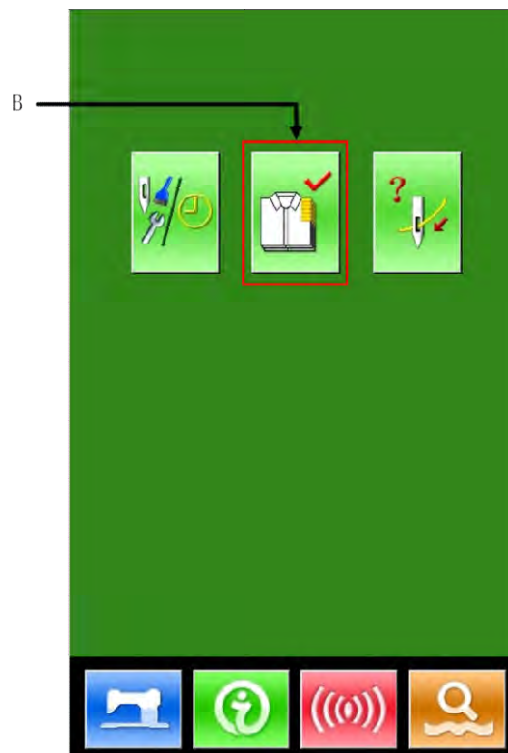
① 顯示資訊介面。

在資料登錄介面按了開關部的資訊鍵（A）之後，資訊介面被顯示出來。



② 顯示生產管理介面。

請按資訊介面的生產管理介面顯示按鍵（ B ）。
生產管理介面被顯示出來（如右圖所示）。



生產管理介面上顯示有下列5個專案的資訊。

A：目標值

依照間隔時間自動地顯示出截止現在的目標縫製件數。

B：實際值

自動地顯示已經縫製的件數。

C：最終目標值

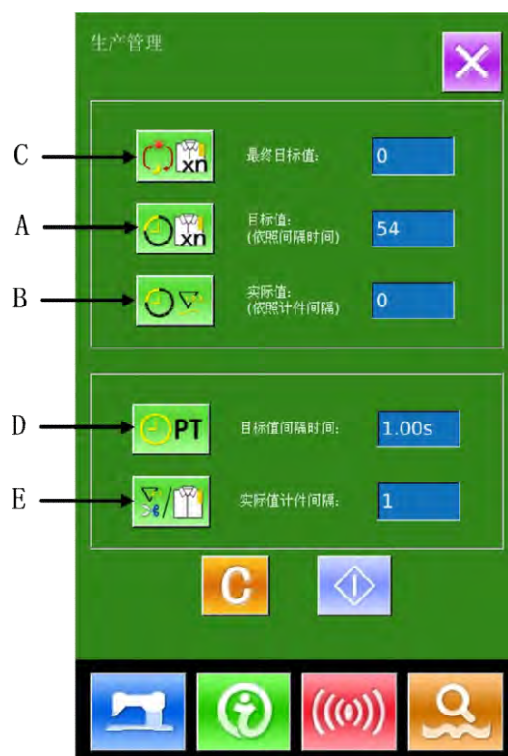
設置最終目標的縫製件數。

D：目標值間隔時間

設置完成一個工序需要的時間（秒）。

E：實際計件間隔

設置實際完成一個工序的間隔。



從縫製介面顯示

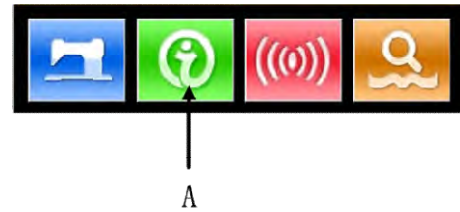
① 顯示縫製介面。

在資料登錄介面按了準備鍵之後，縫製介面被顯示出來。

② 顯示生產管理介面。

在縫製介面，按了資訊按鍵（A）之後生產管理介面被顯示出來。

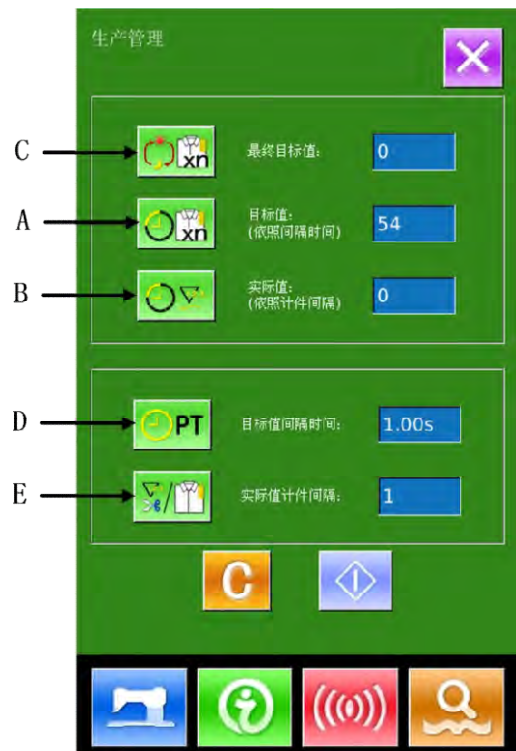
顯示內容和功能與上述9.4.1節相同。



生產管理資訊設定

① 顯示生產管理介面。

按下，顯示出生產管理介面。



② 輸入最終目標值。

首先，請輸入從現在開始進行縫製工序的生產

目標件數。按了最終目標值按鍵 (C) 之後，最終目標值輸入介面被顯示出來。

請用數位鍵或加減按鍵輸入希望的數值。輸入後，請按確定按鍵，按下逸出鍵退出。

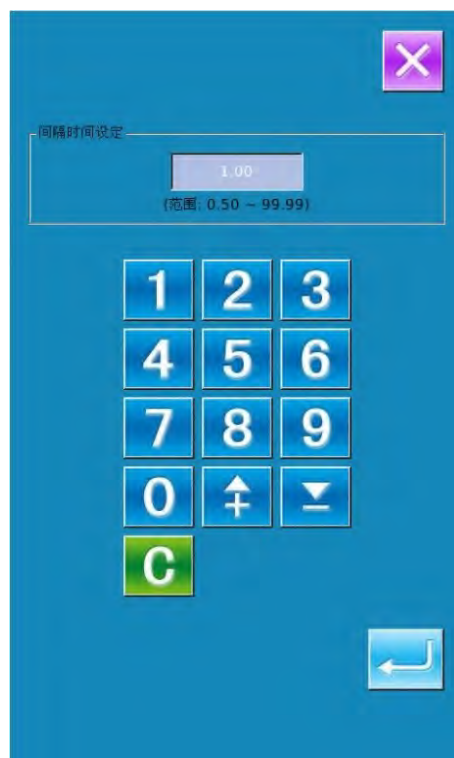


③ 輸入間隔時間。

然後，請輸入1 工序需要的間隔時間。按了前

頁的間隔時間按鍵 (D) 之後，間隔時間輸入介面被顯示出來。

請用數位鍵或加減按鍵輸入希望的數值。輸入後，請按確定按鍵，按下逸出鍵直接退出。



④ 輸入切線次數。

然後，請輸入平均1 工序的切 次數。按了前頁

的切次數按鍵 (E) 之後，切線次數的輸入介面被顯示出來。

請用數位鍵或加減按鍵輸入希望的數值。輸入

後，請按確定按鍵，按下逸出鍵直接退出。



⑤ 開始車生產件數的計數。

按 鍵 (I) 之後，【最終目標值】【目標值】【實際值】變灰，並開始生產件數的計數。

最終目標值：可以作為參考時間

目標值：目標值按照【目標值間隔】設定的時長，開始計時，每過一個時間間隔增1。

實際值：當通過“9.4.2從縫製介面顯示”進入時，實際值按照【實際值計件間隔】設定的值，開始計件，每縫完一件增1。

通過設置目標值和實際值可以對比每縫一件的生產效率是提高了還是降低了。

⑥ 停止計數。

計數狀態下，停止鍵被顯示出來。按了

停止按鍵之後，停止計數。停止後，在

停止按鍵的位置顯示出計數按鍵。需要繼

續進行計數時，請再次按計數按鍵。在按



了清除按鍵之前，計數的數值不被清除。

按下逸出鍵直接退出返回。

⑦ 清除計數值。

清除計數的值時，讓計數器為停止計數狀態，

按下清除按鍵。

可以被清除的值為現在的目標值和實

際值。

（注：僅在停止計數狀態時清除按鍵可以顯示。）

按下清除按鍵之後，顯示出清除確認介面。

在清除確認介面，按下確定按鍵確認清除，

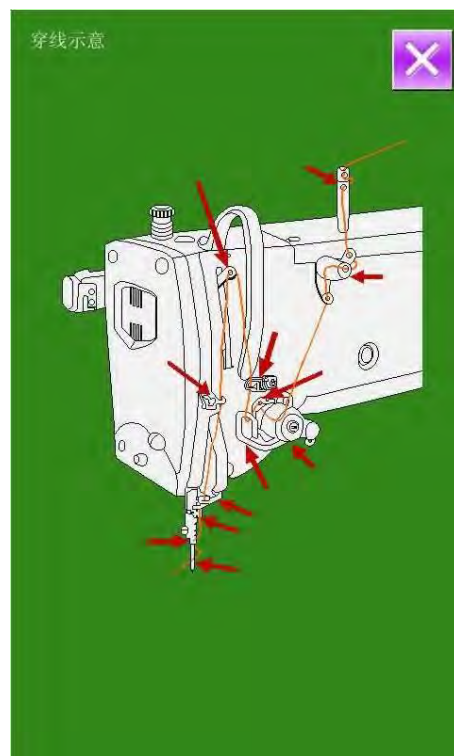
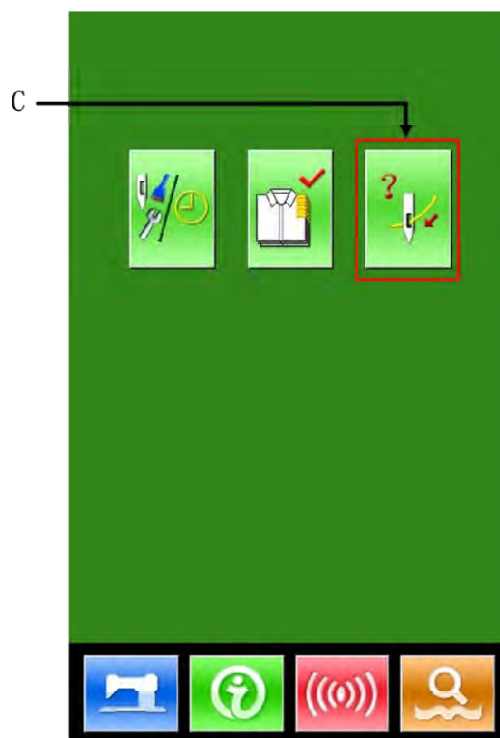
按下逸出鍵直接退出。



顯示穿線圖



資訊介面按下穿線按鍵 (C) 之後，上穿線圖被顯示出來。穿線時，請參閱。



報警記錄

- ① 維修人員等級時 按下  可以查詢機器的報警記錄資訊。



- ② 按  查詢記錄

如圖，顯示報警資訊和出現的次數
操作鍵功能：

- A、按下 、 進行翻頁
- B、按下逸出鍵  退出查詢操作。
- C、按下清除鍵  清除保留的報警記錄



- ③ 按報警提示欄左邊的序號鍵，顯示報警記錄的詳細資訊

例如按 “1” 提示右邊的資訊

A、按退出鍵退出。



運轉記錄

- ① 維修人員等級時，按下可以查詢機器的運轉資訊。



② 運轉記錄包括：



：機器累積運轉時間（小時單位）



：機器累積切線次數



：機器累積上電時間（小時單位）



：機器累積針數（1000針單位）

A、按退出鍵退出

B、按清除鍵清除記錄



分期密碼設置

① 維修人員等級時，按下可以設置分期密碼

該介面下會顯示輸入使用者 ID 介面，輸入正確

的

廠家 ID 後即進入密碼管理模式，主要用於使用者分期密碼的設置和管理。

- ◆ 可以最多設置 10 個不同的密碼發作日期。
- ◆ 系統可以顯示廠家設置的密碼資訊。



- ② 按下  後要求輸入廠家ID

輸入用戶ID

1	2	3	4	5	6
7	8	9	0	A	B
C	D	E	F	G	H
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z

- ③ 輸入正確的廠家 ID後，進入密碼設置介面
分期密碼設置步驟：

A、繼續輸入其他的分期密碼

厂家

板号



④ 輸入板號

按下【板號】鍵，進入板號輸入介面，輸入板號

後，按下完成板號輸入介面

※ 板號為四位，範圍 0~9999

輸入板号

1 2 3 4 5 6
7 8 9 0 A B
C D E F G H
I J K L M N
O P Q R S T
U V W X Y Z

⑤ 輸入系統時鐘

按下【時鐘】鍵，進入系統時鐘設置介面，確定系統時鐘

  14:52 

十二月 2012

	周日	周一	周二	周三	周四	周五	周六
48	25	26	27	28	29	30	1
49	2	3	4	5	6	7	8
50	9	10	11	12	13	14	15
51	16	17	18	19	20	21	22
52	23	24	25	26	27	28	29
1	30	31	1	2	3	4	5

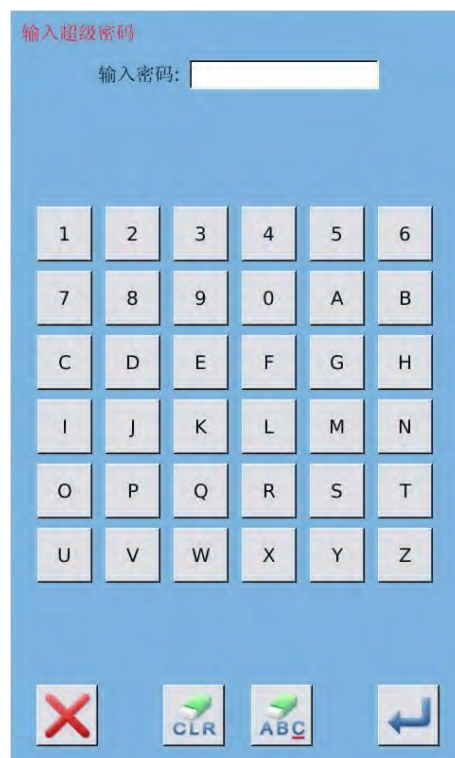


⑥ 輸入超級密碼

按下【超級密碼】鍵，進入超級密碼設置介面，
輸入超級密碼

※ 最多可輸入 9 位元總密碼

※ 密碼輸入要求確認，兩次密碼必須一致



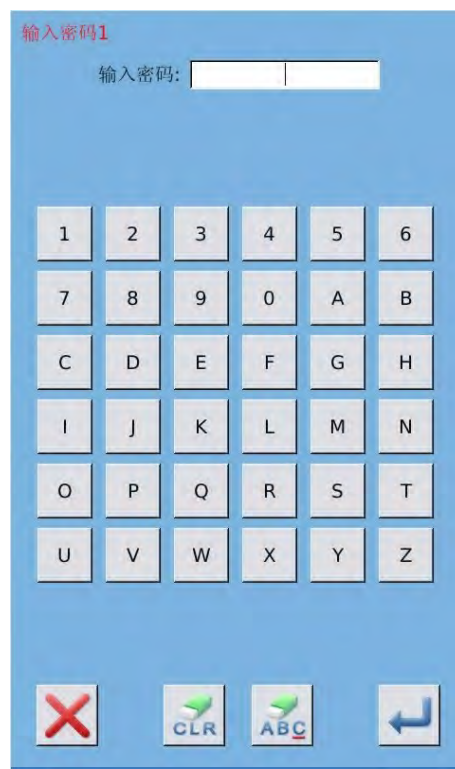
⑦ 輸入分期密碼

按下【密碼-1】鍵，進入第一次密碼到期介面，
要求輸入第一個有效日期，選擇合適的日期後，

按 確認，然後進入密碼設置介面，輸入密碼

※ 日期不能小於系統日期

※ 密碼輸入要求確認，兩次密碼必須一致



⑧ 輸入其他的分期密碼

其他分期密碼的設置和⑦相同，參考⑦的設置

※ 下一個有效日期必須大於上一個有效日期



A screenshot of a password entry interface with a blue background. It contains several input fields with labels in Chinese: '厂家' (Factory) with '*****', '板号' (Board Number) with '0001', '时钟' (Clock) with '2012-12-07 15:05', '超级密码' (Super Password) with '*****', '密码-1' (Password-1) with '2012-12-24', and '密码-2' (Password-2). At the bottom left is a red 'X' button, and at the bottom right is a blue arrow button.

⑨ 保存密碼

A、密碼輸入完成後，按完成密碼保存

B、密碼保存成功，顯示【密碼保存成功】介面，

按完成密碼保存並退回到【資訊主介面】



⑩ 主動清除密碼

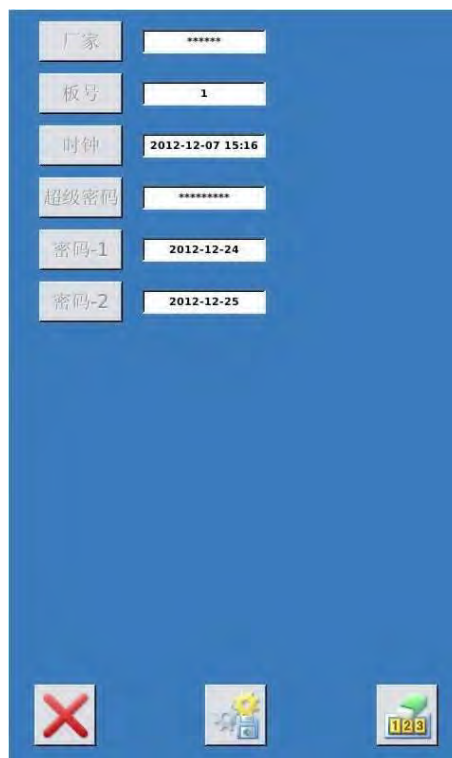
主動清除密碼是指在分期密碼發作前主動清除密碼的設置

- A、進入密碼的方法同密碼設置
- B、輸入正確的廠家 ID後，顯示右邊的介面
- C、系統顯示當前時鐘和各個分期密碼發作日期
- D、按下 ，從前向後依次刪除分期密碼

連續輸入正確的分期密碼後清除當前期的密碼，當輸入是超級密碼時，則全部清除；

密碼清除後會以紅色顯示清除的分期日期；

如果全部密碼清除完畢，則自動退出，返回到資訊主介面。



⑪ 密碼發作時清除

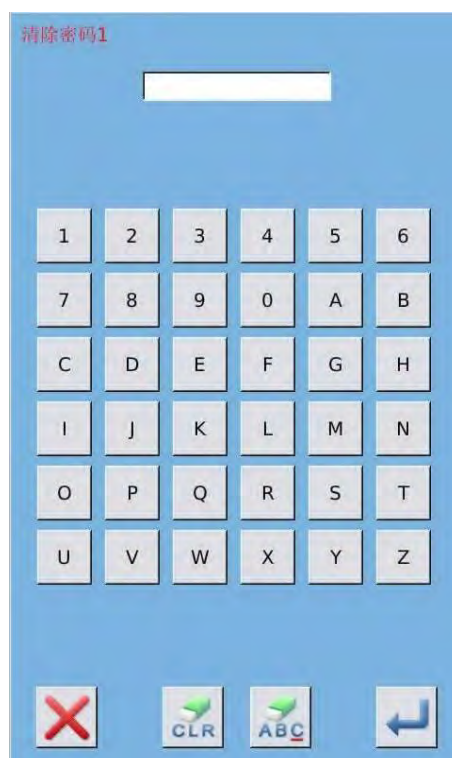
如果系統設置了密碼，並且沒有清除，則使用至密碼發作日期時，會遇到密碼發作。

此時若繼續使用，必須輸入密碼才能繼續正常使用。

A、有效密碼包括當期提示的密碼和超級密碼。

B、若輸入的是當期密碼，則清除當期密碼。清除當前密碼後，若後面沒有密碼，則機器不再會出現密碼發作的問題。

C、若輸入的是超級密碼，則全部清除分期密碼。



10 附錄 1

報警信息一覽表

故障號	故障名稱	復位方法
E-001	腳踏板未在中央位置	關機
E-002	機器進入急停狀態	關機
E-006	IPM 過流	關機
E-007	電流異常	關機
E-008	輔助設備電壓（24V）過流	關機
E-010	主軸轉速異常（超過最高轉速）	關機
E-011	主軸超載	關機
E-012	IPM 過流	關機
E-013	編碼器故障或未連	關機
E-014	主軸停車超時	關機
E-015	超出縫製範圍	關機
E-016	針杆上位置異常	關機
E-017	斷線檢測異常	點Enter 鍵
E-018	切刀位置異常	關機
E-020	確認機頭部放倒	關閉機頭翻倒開關，或把機頭翻倒
E-022	擺針（DSP2 第1 軸）指令校驗錯誤	關機
E-023	主軸編碼器異常	關機
E-025	擺針原點檢測異常	關機
E-026	送布原點檢測異常	關機
E-027	壓腳原點檢測異常	關機
E-028	面剪原點檢測異常	關機
E-029	底剪原點檢測異常	關機
E-030	底剪（DSP1 第1 軸）指令校驗錯誤	關機
E-031	送布（DSP1 第2 軸）指令校驗錯誤	關機
E-032	切刀（DSP1 第1 軸）指令校驗錯誤	關機
E-033	動框角度計算錯誤	關機
E-034	壓腳（DSP2 第2 軸）指令校驗錯誤	關機
E-035	切面線馬達異常	關機
E-036	切底線馬達異常	關機
E-039	主軸零位元角度錯誤	關機
E-040	面剪（主控電機）指令校驗錯誤	關機
E-041	步進軟體與機型不匹配	關機
E-042	花樣傳輸錯誤	關機
E-043	花樣參數錯誤	關機
E-044	機頭板 EEPROM 讀寫錯誤	關機

故障號	故障名稱	復位方法
E-045	板載Flash寫入錯誤----- 6G	關機
E-046	主軸位置超差	關機
E-047	電控存儲資料讀取錯誤	關機
E-048	DSP2 尋相錯誤	關機
E-049	DSP1 尋相錯誤	關機
E-050	寫主控步進參數錯誤	關機
E-051	寫主控步進曲線錯誤	關機
E-052	寫主控 ID 錯誤	關機
E-053	面剪電機過流	關機
E-054	面剪電機超差	關機
E-055	底剪電機過流	關機
E-056	底剪電機超差	關機
E-057	主控 SPI 校驗錯誤	關機
E-058	主控 SPI 指令錯誤	關機
E-060	擺針電機過流	關機
E-061	切刀電機過流	關機
E-062	步進超速 1	關機
E-063	步進超速 2	關機
E-064	擺針(X)電機超差	關機
E-065	切刀電機超差	關機
E-067	切刀電機超差	關機
E-068	MD1 通訊錯誤	關機
E-069	MD1 通訊錯誤	關機
E-077	flash 寫入錯誤	關機
E-078	機型與軟體不匹配	關機
E-079	機械參數錯誤	關機
E-090	送布電機過流	關機
E-091	壓腳電機過流	關機
E-094	送布(Y)電機超差	關機
E-095	壓腳電機超差	關機
E-096	DSP2 校驗錯誤	關機
E-097	DSP2 非法命令或配置	關機
E-098	MD2 讀取錯誤	關機
E-099	MD2 通訊錯誤	關機
E-100	主軸零位超時	關機
E-101	電控箱冷卻風扇異常	關機
E-102	壓腳汽缸 1 位置異常	關機
E-103	壓腳汽缸 2 位置異常	關機
E-104	USB 升級步進錯誤：數據長度異常	關機
E-105	USB 升級步進錯誤：檔校驗錯誤	關機
E-106	USB 升級步進錯誤：資料包自校驗錯誤	關機
E-107	USB 升級步進錯誤：SPI 通信校驗錯誤	關機

故障號	故障名稱	復位方法
E-108	USB 升級步進錯誤：flash 擦除錯誤	關機
E-109	USB 升級步進錯誤：flash 燒寫錯誤	關機
E-110	USB 升級步進錯誤：flash 校驗錯誤	關機
E-111	USB 升級步進錯誤：資料包 crc 校驗錯誤	關機
E-112	USB 升級步進錯誤：解鎖錯誤	關機
E-113	USB 升級步進錯誤：eeprom 寫錯誤	關機
E-114	USB 升級步進錯誤：資料功能碼錯誤	關機
E-115	USB 升級步進錯誤	關機
E-116	USB 升級步進錯誤	關機
E-117	USB 升級步進錯誤	關機
E-118	USB 升級步進錯誤	關機
E-119	USB 升級步進錯誤	關機
E-130	底剪軟體過流	關機
E-131	送布軟體過流	關機
E-132	切刀軟體過流	關機
E-133	擺針軟體過流	關機
E-134	壓腳軟體過流	關機
E-135	面剪軟體過流	關機
E-136	底剪堵轉過流	關機
E-137	送布堵轉過流	關機
E-138	切刀堵轉過流	關機
E-139	擺針堵轉過流	關機
E-140	壓腳堵轉過流	關機
E-141	面剪堵轉過流	關機
E-142	面剪超速	關機
E-143	底剪超速	關機

資訊提示一覽表

信息號	資訊名稱	子資訊內容
M-001	設置值太大	請輸入範圍內數值
M-002	設置值太小	請輸入範圍內數值
M-003	存儲參數異常	請按下確定鍵恢復出廠設置
M-004	通訊錯誤	操作頭與控制箱通訊異常
M-005	操作頭與控制箱類型不符	請核對機型和軟體版本
M-006	硬體時鐘故障	發現硬體時鐘故障，請聯繫廠家維修
M-007	密碼錯誤	請重新輸入
M-008	輸入用戶 ID 有誤	請重新輸入
M-009	確認密碼失敗	請重新輸入密碼
M-010	禁止修改系統時間	設置了分期密碼，不能修改系統時間

M-011	密碼檔寫入失敗	
M-012	密碼檔讀取失敗	
M-013	密碼保存成功	
M-014	清除全部密碼失敗	密碼檔無法被刪除
M-015	清除密碼失敗	清除密碼後，檔寫入異常
M-016	密碼檔被惡意刪除	使用者設置的分期密碼被惡意刪除，請關機
M-017	輸入不能為空	請輸入密碼
M-018	當前密碼不符	請重新輸入當前密碼
M-019	新密碼不一致	請重新輸入新密碼並再次確認
M-020	分期密碼不能和總密碼相同	請重新輸入密碼
M-021	確定進入觸控式螢幕校正模式	其否確定？是：enter 否：X
M-022	觸控式螢幕校正成功	校正成功，請關閉電源後重啟
M-023	觸控式螢幕校正失敗	請重新校正
M-024	SRAM初始化	清除掉 SRAM總的全部資料，請關電並將撥碼開關位置還原
M-025	關機，再見	
M-026	無報警記錄	
M-027	確定清除報警記錄	其否確定？是：enter 否：X
M-028	USB盤已拔出	USB盤已經拔出
M-029	U盤中沒有發現花樣資料	
M-030	保存軟體版本成功	軟體版本已經成功保存到 U盤根目錄下
M-031	更換機針	更換機針設定值已到達，請更換機針
M-032	更換機油	更換機油時間設定值已到達，請更換機油
M-033	清掃機器	清掃機器時間設定值已到達，請清掃機器
M-034	確定清除更換機針計數值	其否確定？是：enter 否：X
M-035	確定清除更換機油計數值	其否確定？是：enter 否：X
M-036	確定清除清掃時間計數值	其否確定？是：enter 否：X
M-037	確定清除生產管理計數值	其否確定？是：enter 否：X
M-038	超出縫製範圍	請確保花樣資料在風中範圍以內
M-039	針數超出範圍	請減少花樣針數
M-040	載入出廠花樣	記憶體中沒有花樣，需要載入出廠花樣
M-041	花樣資料不存在	請重新讀取或打板輸入
M-042	花樣資料錯誤	當前花樣資料錯誤，將由出廠花樣替換
M-043	花樣資訊檔打開失敗	恢復出廠花樣配置
M-044	花樣已存在	不能執行覆蓋操作
M-045	花樣個數已滿	請刪除不用的花樣後再執行操作
M-046	是否覆蓋花樣	其否確定？是：enter 否：X
M-047	連續縫花樣打開失敗	花樣檔錯誤，將會被刪除
M-048	迴圈縫花樣打開失敗	花樣檔錯誤，將會被刪除
M-049	是否刪除花樣資料	按下確定鍵執行刪除操作，按下取消鍵退出當前操作
M-050	是否刪除選中的檔	其否確定？是：enter 否：X

M-051	花樣被引用，不能刪除	請在其他類型花樣中解除引用
M-052	請至少保留一個花樣	最後一個花樣不能被刪除
M-053	輸入號碼不存在	請重新輸入
M-054	縫製計數器達到設定值	請按下確定鍵清除
M-055	計件計數器達到設定值	請按下確定鍵清除
M-056	花樣打板運算異常	
M-057	切刀尺寸異常	
M-058	打板生成縫製碼錯誤	
M-059	超出針距最大間隔	
M-060	花樣檔案類型錯誤	
M-061	是否刪除選中子花樣	其否確定？是：enter 否：X
M-062	是否刪除全部子花樣	其否確定？是：enter 否：X
M-063	是否恢復出廠設置	確定鍵執行操作，取消鍵退出操作
M-064	EEPROM剪刀參數異常	按下確定鍵恢復出廠值
M-065	是否還原所有設定	其否確定？是：enter 否：X
M-066	是否還原選擇項目	其否確定？是：enter 否：X
M-067	未選擇項目	請選擇一個或幾個參數項
M-068	確定清除運轉記錄	其否確定？是：enter 否：X
M-069	成功	已成功執行當前操作
M-070	失敗	當前操作執行失敗
M-071	當前迴圈縫花樣為空或引用的連續縫花樣為空	請重新編輯
M-072	是否格式化 U 盤	按下確定鍵執行格式化操作，按下取消鍵退出當前操作。格式化後會刪除全部 U 盤檔！
M-073	是否格式化記憶體	按下確定鍵執行格式化操作，按下取消鍵退出當前操作。格式化後會刪除全部記憶體花樣資料！
M-074	請關機	當前操作結束，請重新啟動機器
M-075	恢復參數成功	恢復參數成功，請重新啟動機器
M-076	打開檔失敗	打開檔失敗
M-077	沒有選中升級條目	請選中要升級的條目，至少要選中一個條目
M-078	選中的升級條目中有些不存在	不存在升級檔的條目返回後將會取消選中，如果要升級剩下的條目，請再次確認
M-079	升級成功	升級成功，請重新啟動機器
M-080	拷貝檔失敗，請檢查磁碟空間是否已滿	請檢查磁碟空間是否已滿
M-081	拷貝檔失敗，請檢查是否拔出了 USB 盤	請檢查是否拔出了 USB 盤
M-082	檔讀寫錯誤	檔讀寫錯誤
M-083	升級主控程式時校驗失敗	
M-084	花樣資料不能刪除	被選中的縫製資料正在使用
M-085	是否執行參數傳輸操作	其否確定？是：enter 否：X
M-086	轉換花樣無法打開	請確認花樣文件
M-087	轉換花樣格式錯誤	請確認花樣文件

M-088	轉換花樣資料超長	請確認花樣文件
M-089	打板生成資料錯誤	EPD參數存在異常現象
M-090	禁止修改計數器	當修改時，請關閉設定
M-091	連續縫花樣為空	請重新選擇
M-092	針眼形狀發生變化	針眼形狀改變，注意修改對應該針眼形狀的 S 參數資料,以免影響打板！
M-093	是否清除全部自定參數	是否確定？是：Enter 否：X
M-094	USB盤不存在	請插入包含 mp3檔的 USB盤
M-095	沒有視頻檔 video.avi	請將 video.avi檔存放到 u盤的 update目錄，並進入到升級介面升級視頻檔
M-096	UK參數異常	按回車鍵恢復默認參數
M-097	輸入的號碼異常	請輸入號碼範圍內的數位
M-098	升級步進結束校驗錯誤	
M-099	底縫功能未打開	
M-100	二維碼顯示失敗	
M-101	系統已經設置為不聯網模式	打開聯網功能後可以進行檢測
M-102	聯接失敗	
M-103	打卡成功	
M-104	打卡失敗	
M-105	底線不足	底線不足,請更換梭心

常見故障處理

故障編號	故障名稱	故障處理方法及步驟
E-002	機器進入急停狀態	按復位鍵
E-004	主電壓（300V）過低	關機
E-008	輔助設備電壓（24V）過流	1、檢查氣閥線纜是否有短路現象。 2、更換電控
E-025	擺針原點檢測異常	1、檢查機械安裝處是否異常。 2、檢查壓腳電機編碼器（X18）線纜和插頭是否正常。 3、更換壓腳電機。 4、更換電控。
E-026	送布原點檢測異常	1、檢查送布感測器線纜（X48）是否異常。 2、輸入檢測觀察感測器信號是否正常。 3、更換送布感測器。
E-028	面剪原點檢測異常	1、檢查面剪感測器線纜（X44）是否正常。 2、輸入檢測模式檢測面剪感測器信號是否正常。 3、更換面剪感測器。 4、更換電控。
E-029	底剪原點檢測異常	1、檢查底剪感測器線纜（X47）是否正常。 2、輸入檢測模式檢測面剪感測器信號是否正常。 3、更換面剪感測器。

		4、更換電控。
E-055	底剪電機過流	
E-056	底剪電機超差	
E-060	擺針電機過流	
E-061	切刀電機過流	
E-064	擺針(X)電機超差	
E-065	切刀電機超差	
E-090	送布電機過流	
E-091	壓腳電機過流	

形狀初始值數據一覽表

形狀初始值資料一覽表如下表所示。

序號	項目	單位															
S01	縫製形狀	mm															
S02	切布長度	mm	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
S03	切刀槽右寬度	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S04	切刀槽左寬度	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S05	左包邊寬度	mm	1.70	1.70	1.70	1.70	1.70	1.70	1.40	1.40	1.40	1.40	1.70	1.70	1.70	1.70	1.70
S06	左右形狀比率	%	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
S07	平行部間隔	mm	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
S08	第二加固縫長度	mm	1.0	—	1.0	—	1.5	3.0	1.0	—	1.5	3.0		1.0	1.0	1.5	3.0
S09	第一加固縫長度	mm	1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S10	右加固寬度補償	mm	0	—	0	—	0	—	0	—	0	—	—	0	0	0	—
S11	左加固寬度補償	mm	0	—	0	—	0	—	0	—	0	—	—	0	0	0	—
S12	左錐形加固對稱	mm	—	—	—	—	—	0.85	—	—	—	0.85	—	—	—	—	0.85
S13	右錐形加固對稱	mm	—	—	—	—	—	0.85	—	—	—	0.85	—	—	—	—	0.85
S14	圓頭扣眼形狀長度	mm	—	—	—	—	—	—	2.0	2.0	2.0	2.0	—	—	—	—	—
S15	圓頭扣眼針數	針	—	—	—	—	—	—	3	3	3	3	—	—	—	—	—
S16	圓頭扣眼寬度	mm	—	—	—	—	—	—	1.0	1.0	1.0	1.0	—	—	—	—	—
S17	圓頭扣眼長度	mm	—	—	—	—	—	—	3.0	3.0	3.0	3.0	—	—	—	—	—
S18	圓形形狀長度	mm	—	2.0	2.0	2.0	2.0	2.0	—	2.0	—	—	2.0	2.0	2.0	2.0	2.0
S19	輻射形狀針數	針	—	—	3	3	3	3	—	3	—	—	—	—	—	—	—
S20	輻射形狀加固有/無	—	—	—	無	無	無	無	—	無	—	—	—	—	—	—	—
S21	加固部分間隔	mm	0.30	0.30	0.30	-	0.30	0.30	0.30	-	0.30	0.30	0.25	0.30	0.25	0.25	0.25
S22	第1間隙	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
S23	第2間隙	mm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
S31	單/雙重縫	—	單	單	單	單	單	單	單	單	單	單	單	單	單	單	單

S32	選擇雙重縫	—	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
S33	補償雙重縫寬度	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S34	下縫次數	次	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S35	下縫速度	mm	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
S36	下縫捲入長度	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
S37	下縫捲入間隙	mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
S38	下縫捲入寬度	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
S39	補償下縫落針前後	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
S40	補償下縫落針左右	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S41	補償下縫左側位置	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S42	補償下縫右側位置	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S44	下縫速度設定	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
S45	對縫功能有/無	—	無	無	無	無	無	無	無	無	無	無	無	無	無	無	無
S46	對縫寬度	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
S47	對縫間隙	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
S51	左平行張力	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S52	右平行張力	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S53	左平行張力（雙重縫的第一迴圈）	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S54	右平行張力（雙重縫的第一迴圈）	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S55	第一加固部張力	—	35	60	120	35	35	35	60	60	60	60	60	60	60	60	60
S56	第二加固部張力	—	35	60	35	35	35	35	60	60	60	60	60	60	60	60	606
S57	設定縫製開始上線張力	—	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
S58	設定下縫上線張力	—	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
S59	開始第一加固縫，	針	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	調整 AC同步																
S60	右包縫開始，ACT 同步調整	針	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S61	開始第 2加固縫， 調整 AC同步	針	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S62	開始縫加固針數	針	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S63	開始縫加固間隙	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S64	開始縫寬度	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S65	開始縫加固豎向修 正	mm	0	1.5	0	1.5	0	0	0	1.5	0	0	1.5	0	0	0	0
S66	開始縫加固橫向修 正	mm	0	0	0	0	0	0.7	0	0	0	0.7	0	0	0	0	0.7
S67	結束縫加固寬度	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S68	結束縫加固針數	針	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S69	結束縫加固豎向修 正	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S70	結束縫加固橫向修 正	mm	0.9	0.9	0.9	0.9	0	0.7	0.9	0.9	0	0.7	0.9	0.9	0.9	0	0.7
S81	切刀動作有/無	—	有	有	有	有	有	有	有	有	有	有	有	有	有	有	有
S83	雙重縫的第 1迴圈 切刀有/無	—	無	無	無	無	無	無	無	無	無	無	無	無	無	無	無
S84	最高速度限制	rpm	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
S86	前進前距	mm															
S87	前進寬度	mm															
S88	返回間距	mm															
S89	返回寬度	mm															

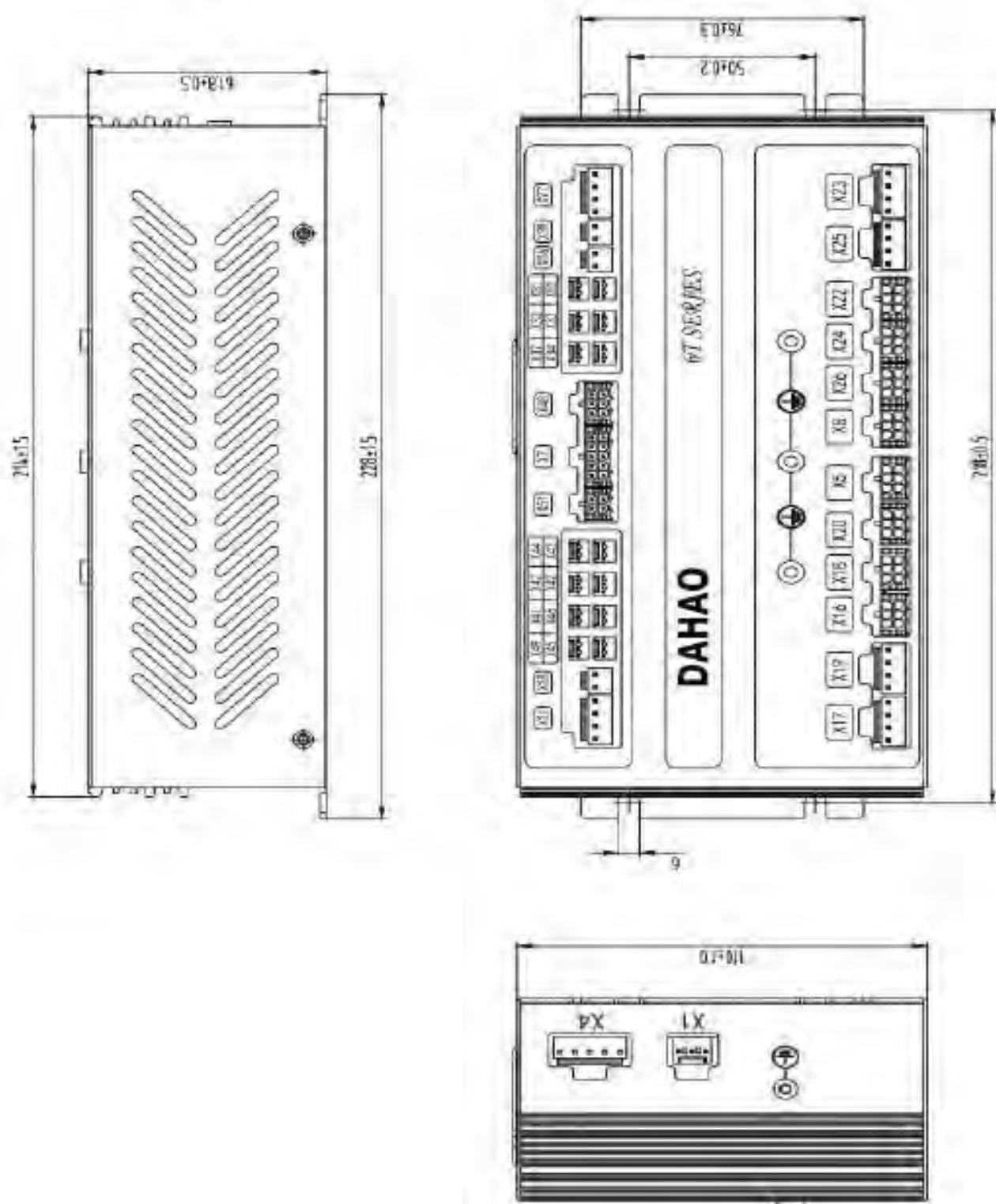
序號	項目	單位															
S01	Sewingshape	mm															
S02	切布長度	mm	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13	19.1	19.1	19.1
S03	切刀槽右寬度	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	—	—	0.10	0.10
S04	切刀槽左寬度	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	—	0.10	—	0.10
S05	左包邊寬度	mm	1.40	1.40	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	—	—	—	—
S06	左右形狀比率	%	100	100	100	100	100	100	100	100	100	100	100	—	—	—	—
S07	平行部間隔	mm	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	—	—	—	—
S08	第二加固縫長度	mm	—	—	—	—	—	1.5	3.0	—	—	—	—	—	—	—	—
S09	第一加固縫長度	mm	—	—	1.0	1.0	1.0	1.0	1.0	—	—	—	—	—	—	—	—
S10	右加固寬度補償	mm	—	—	0	0	0	0	0	—	—	—	—	—	—	—	—
S11	左加固寬度補償	mm	—	—	0	0	0	0	0	—	—	—	—	—	—	—	—
S12	左錐形加固對稱	mm	—	—	—	—	—	—	0.85	—	—	—	—	—	—	—	—
S13	右錐形加固對稱	mm	—	—	—	—	—	—	0.85	—	—	—	—	—	—	—	—
S14	圓頭扣眼長度	mm	2.0	2.0	—	—	—	—	—	—	—	—	—	—	—	—	—
S15	圓頭扣眼針數	針	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—
S16	圓頭扣眼寬度	mm	1.0	1.0	—	—	—	—	—	—	—	—	—	—	—	—	—
S17	圓頭扣眼寬度	mm	3.0	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—
S18	圓形形狀長度	mm	2.0	2.0	2.0	2.0	2.0	—	—	2.0	2.0	2.0	2.0	—	—	—	—
S19	輻射形狀針數	Stitch	—	—	3	—	—	—	—	3	3	3	—	—	—	—	—
S20	輻射形狀加固有/無	—	—	—	無	—	—	—	—	無	無	無	—	—	—	—	—
S21	加固部分間隔	mm	0.25	0.30	0.30	0.25	0.30	0.30	0.30	0.25	0.30	0.25	0.25	—	—	—	—
S22	第1間隙	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—	2.0	2.0	2.0
S23	第2間隙	mm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	—	2.0	2.0	2.0
S31	單/雙重縫	—	單	單	單	單	單	單	單	單	單	單	單	—	—	—	單

S32	選擇雙重縫	—	<	<	<	<	<	<	<	<	<	<	<	—	—	—	<
S33	補償雙重縫寬度	mm	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—
S34	下縫次數	次	0	0	0	0	0	0	0	0	0	0	0	3	2	2	—
S35	下縫速度	mm	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	—
S36	下縫捲入長度	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	—
S37	下縫捲入間隙	mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	—
S38	下縫捲入寬度	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—
S39	補償下縫落針前後	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—
S40	補償下縫落針左右	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
S41	補償下縫左側位置	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
S42	補償下縫右側位置	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
S44	下縫速度設定	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	—
S45	對縫功能有/無	—	無	無	無	無	無	無	無	無	無	無	無	—	—	—	—
S46	對縫寬度	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	—	—	—	—
S47	對縫間隙	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	—	—	—	—
S51	左平行張力	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S52	右平行張力	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S53	左平行張力（雙重縫的第一迴圈）	—	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S54	右平行張力（雙重縫的第一迴圈）	—	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S55	第一加固部張力	—	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S56	第一加固部張力	—	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S57	設定縫製開始上線張力	—	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
S58	設定下縫上線張力	—	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
S59	開始第一加固縫，	針	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—

	調整 AC同步																
S60	右包縫開始，ACT 同步調整	針	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S61	開始第 2加固縫， 調整 AC同步	針	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—
S62	開始縫加固針數	針	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S63	開始縫加固間隙	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S64	開始縫寬度	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S65	開始縫加固豎向修 正	mm	1.5	1.5	1.5	1.5	1.5	0	0	1.5	1.5	1.5	1.5	0	0	0	0
S66	開始縫加固橫向修 正	mm	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0
S67	結束縫加固寬度	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S68	結束縫加固針數	針	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S69	結束縫加固豎向修 正	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S70	結束縫加固橫向修 正	mm	0.9	0.9	0.9	0.9	0.9	0	0.7	0.9	0.9	0.9	0.9	0	0	0	0
S81	切刀動作有/無	—	有	有	有	有	有	有	有	有	有	有	有	—	有	有	有
S83	雙重縫的第 1迴圈 切刀有/無	—	無	無	無	無	無	無	無	無	無	無	無	—	—	—	—
S84	最高速度限制	rpm	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
S86	前進前距	mm												0.80	0.80	0.80	0.80
S87	前進寬度	mm												1.7	1.7	1.7	1.7
S88	返回間距	mm												0.80	0.80	0.80	0.80
S89	返回寬度	mm												1.7	1.7	1.7	1.7

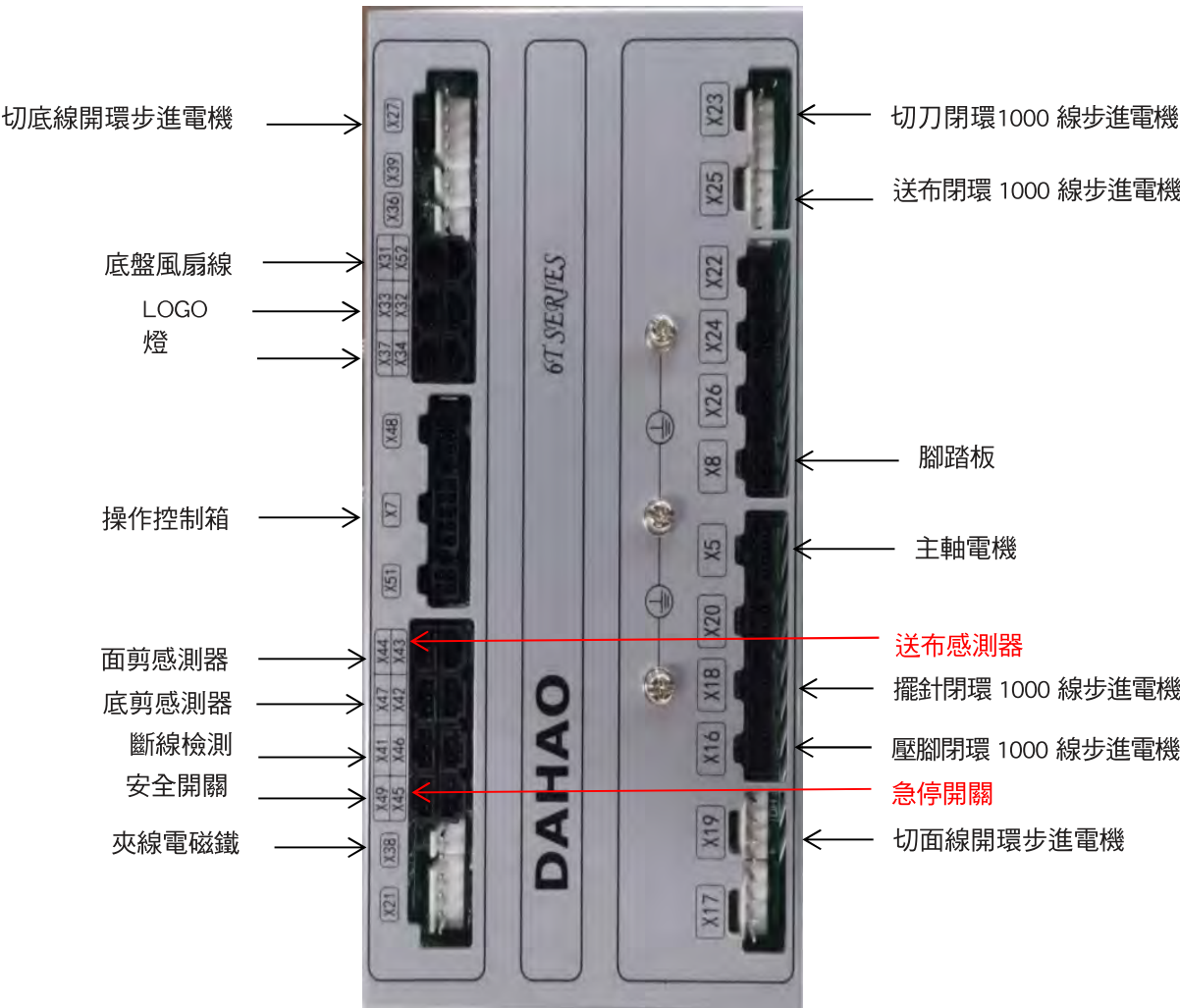
11 附录 2

11.1 电控箱安装尺寸

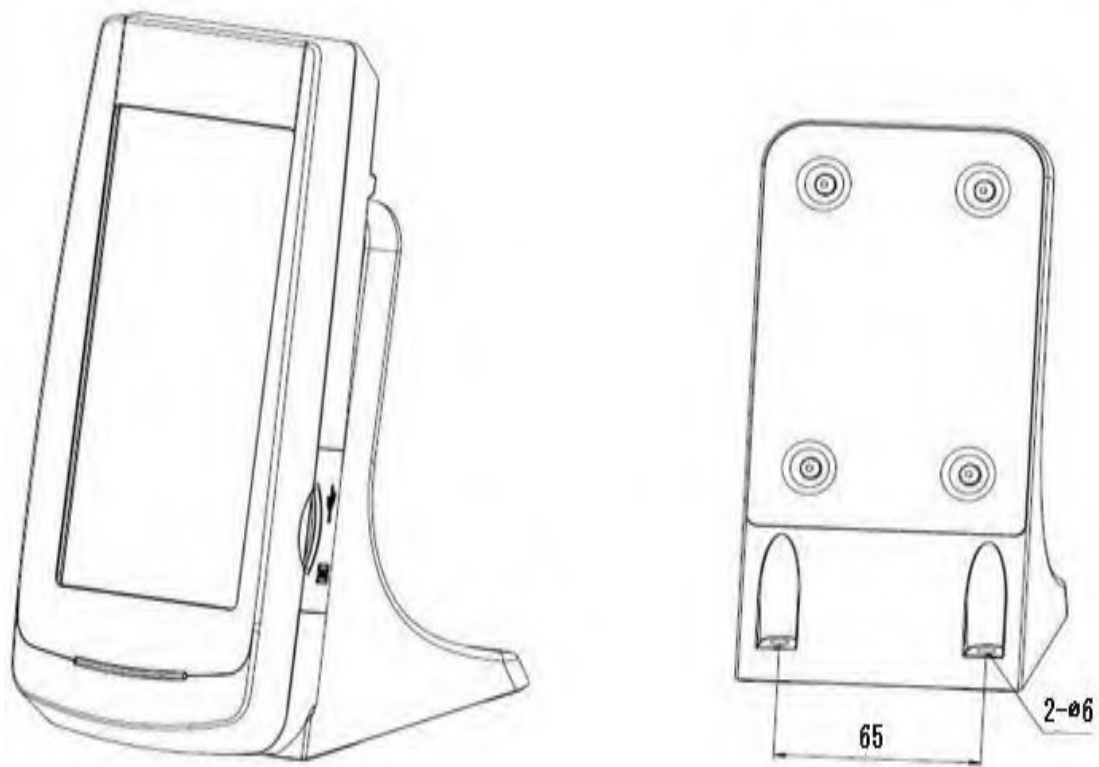


11.2 控制箱外部连接线缆

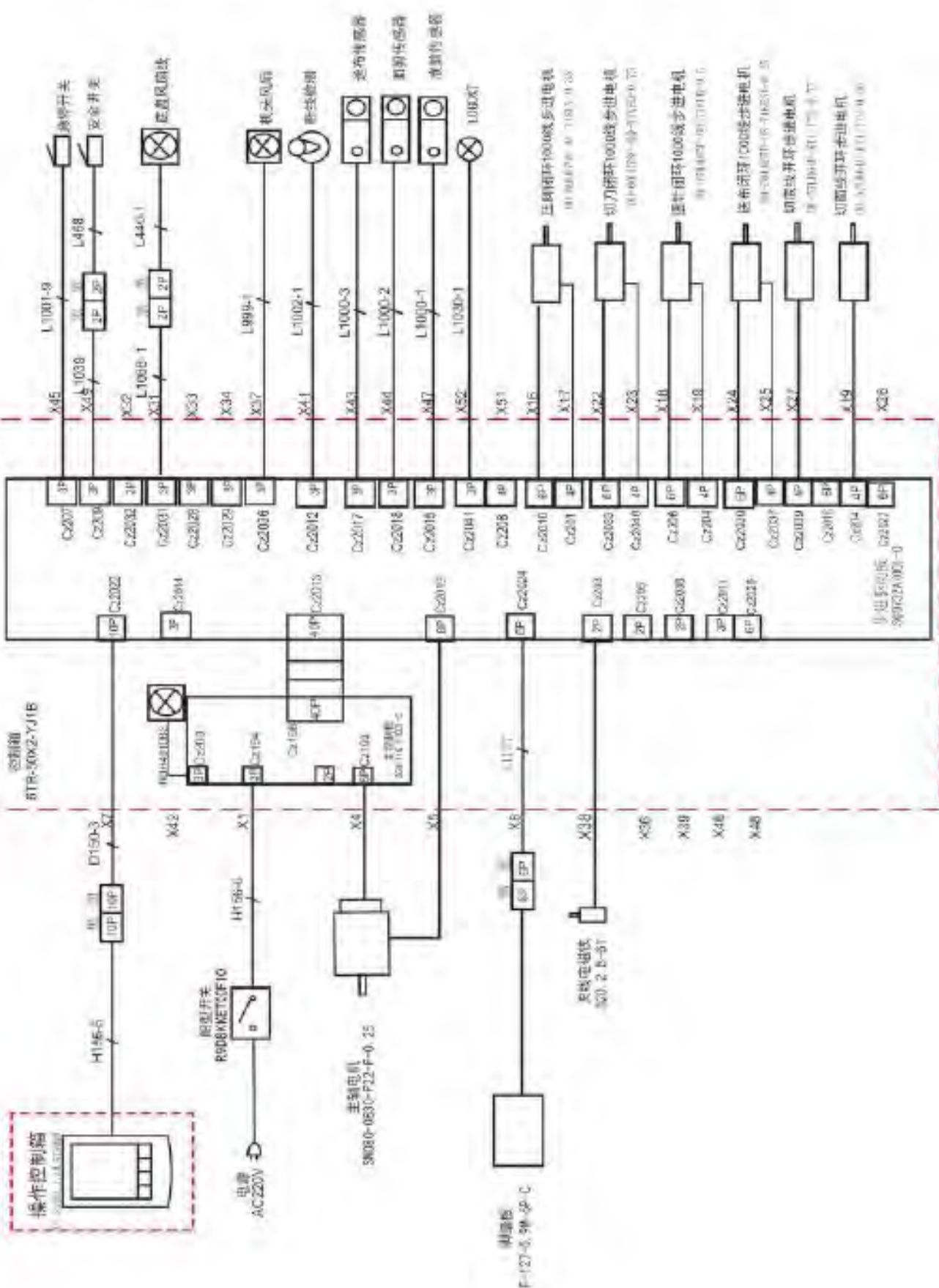
MASC500電控箱後板接線圖



11.3 操作箱安裝尺寸



操作箱安裝尺寸圖



Forewords

Thank you for using our Computerized Control System for Buttonhole Machine.

It is appreciated that you do read this manual carefully in order to operate the machine correctly and effectively. If the user operates the machine contrary to regulations herein, thus causes losses to user or third party, we will not take any responsibility. Besides that, you should keep this manual for future use. For any fault or problem of machine, please ask the professionals or the technicians authorized by us for repair service

Safety Matters for Attention

1. Signs & Definitions of Safety Marks

This User's Manual and the Safety Marks printed on the products are for you to use this product correctly so as to be away from personal injury. The signs and definitions of Marks are shown at below:

 Danger	Danger: The incorrect operation due to negligence will cause the serious personal injury or even death.
 Caution	Caution: The incorrect operation due to negligence will cause the personal injury and the damage to mechanism
	This kind of marks is "Matters for Attention", and the figure inside the triangle is the content for attention. (Exp. The left figure is "Watch Your Hand!")
	This kind of mark is "Forbidden".
	This kind of mark means "Must". The figure in the circle is the contents that have to be done. (Exp. The left figure is "Ground!")

2. Safety Matters for Attention

 Danger	
	For opening the control box, please turn off the power and take away the plug from socket firstly, and then wait for at least 5 minutes before opening the control box. Touching the part with high voltage will cause the personal injury.
 Caution	
Usage Environment	
	Try not to use this sewing machine near the sources of strong electronic disturbance like (high-frequency welding machine). The source of strong electronic disturbance will affect the normal operation of the sewing machine.
	The voltage fluctuation shall be within $\pm 10\%$ of the rated voltage. The large fluctuation of voltage will affect the normal operations of sewing machine, and the regulator will be needed in that circumstance
	Working temperature: $0^{\circ}\text{C} \sim 45^{\circ}\text{C}$. The operation of the sewing machine will be affected by environment with temperature beyond the above range.
	Relative Humidity: $35\% \sim 85\%$ (No dew inside the machine), or the operation of sewing machine will be affected.
	The supply of the compressed gas should be over the consumption of the sewing machine. The insufficient supply will be cause the abnormal operation of the machine.
	In case of thunder, lightning or storm, please turn off the power and pull plug out the socket. Because these will have the influence on the operation of sewing machine
Installation	
	Please ask the trained technicians to install the sewing machine.
	Don't connect machine to power supply until the installation is finished. Otherwise the action of sewing machine may cause personal injury once the start switch is pressed by mistake.
	When you tilt or erect the head of sewing machine, please use both of your hands in that operation. And never press the sewing machine with strength. If the sewing machine loses its balance, it will fall into floor thus causes the personal injury or mechanical damage.

	Grounding is a must. If the grounding cable is not fixed, it may cause the electric-shock and mis-operation of machine
	The entire cables shall be fixed with a distance at 25mm away from the moving component at least. By the way, don't excessively bend or tightly fixed the cable with nails or clamps, or it may cause the fire or electric shock.
	Please attach the safety cover at the head.
Sewing	
	This sewing machine can only be used by the trained staff.
	This sewing machine has no other usages but the sewing.
	When operating the sewing machine, please remember to put on the glasses. Otherwise, the broken needle will cause the personal injury.
	At following circumstances, please cut off the power at once so as to avoid the personal injury caused by the mis-operation of start switch: 1. Threading; 2. Replacement of needles; 3. The sewing machine is left unused or beyond supervision
	At working, don't touch or lean anything on the moving components, because both of the above behaviors will cause the personal injury or the damage to the sewing machine
	During working, if the mis-operation happens or the abnormal noise or smell is found at the sewing machine, user shall cut off the power at once, and then contact the trained technicians or the supplier of that machine for solution.
	For any trouble, please contact the trained technicians or the supplier of that machine.
Maintenance & Inspection	
	Only can the trained technicians perform the repair, maintenance and inspection of this sewing machine.
	For the repair, maintenance and inspection of the electrical component, please contact the professionals at the manufacturer of control system in time.
	At following circumstances, please cut off the power and pull off the plug so as to avoid the personal injury caused by the mis-operation of start switch: 1.Repair, adjustment and inspection ; 2. Replacement of the consumptive devices, like needle, knife and so on.
	Before checking, adjusting and repair any air-driven equipment, user needs cut off the source of gas and wait for the pressure indicator drop to "0".
	If you have to adjust the machine when the power is on, you can't be too careful at following the entire Safety Matters for Attention
	If the sewing machine damages due to the unauthorized modification, our company will not be responsible for it.

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1 General Information

1.1 General

This computerized control system for sewing machine features the following advantages: 1) Adoption of the world leading AC servo control technology on main shaft motor provides high torque, good efficiency, stable speed and low noise; 2) Diversified design of control panel can meet the special requirement of users on attachment; 3) System adopts German style structure, which offers easy installation and maintenance to users; 4) The system control software can be updated via the remote communication, which is easy for user to improve the performance of machine.

1.2 Function and Specification

For the functions and parameters of this computerized control AC servo system, please refer to table 1:

Table 1: Functions and Parameters

NO.	Name of Controller	LBHS-1790DQ
1	Width	5mm (Min: 0.05mm)
2	Size of Knife(Length)	6.4~31.8mm (1/4"~11/4")
3	Sewing Length (Max)	41mm (The Max size is at 120mm with optional device)
4	Sewing Speed	Standard 3600rpm Max 4200rpm
5	Speed Control Method	Input via Control Panel
6	Needles	DP×5 # 11J ~ # 14J
7	Stroke of Needle Bar	34.6mm
8	Threading Bar	Chain-style Threading Bar
9	Shuttle	Type DP, All-auto Rotation Oil-supply Shuttle
10	Presser Height	14mm (Customized Setting) Max 17mm(At contrary rotation)
11	Presser Driving Device	Pulse Motor (1 pedal· 2 pedals)
12	Winding	Build-in Type (only winding at machine running)
13	Cloth-feeding Driving Device	Pulse Motor
14	Swing Needle Driving	Pulse Motor
15	Knife Driving Device	Two-way Solenoid
16	Upper-thread Tension Function	Solenoid Tension Method User can set the data at control panel to adjust each part (Parallel Part, Doubling Part Tension)
17	Stitch Form	Angle, Radial, Round (Selected at Control Panel) and other 30 types
18	Patterns in Memory	500 Patterns
19	Memory Media	U Disk
20	1/2 Shift	Can be set at every pattern

21	Motor	Small AC Servo Motor 400W Direct Driving
22	Size	Width 200mm、Height 360mm、Length 570mm
23	Head Weight	70Kg
24	Power	600W
25	Working Temperature	0℃～45℃
26	Working Humidity	35%～85% (No Dew)
27	Voltage Input	AC 220V ± 10%; 50/60Hz

Presser Specification:

	Presser 1	Presser 2	Presser 3	Presser 5
Width	4mm	5mm	5mm	3-6mm(Set at will)
Sewing Length (Max)	25mm	35mm	41mm	10-120mm (Set at will)

Specification of Models S: Standard K: Knitting

※ Effective standard for product: QCYXDK0004—2022 《Computerized Control System for Industrial Sewing Machine》.

1.3 Standardization

The button using the common figure can be understood by the users from different countries.

1.4 Matters for Safe Using

● Installation

- Control Box
 - ◆ Please install the control box according to the instruction
- Attachments
 - ◆ If other attachments are needed, please turn off the power and pull off the power plug.
- Power Cable
 - ◆ Do not press power cable with force or excessively twist power cable.
 - ◆ The power cables shall be fixed with a distance at 25mm away from the rotating component at least.
 - ◆ Before powering the control box, user shall carefully check the voltage of power supply and position of power input on control box. If the power transformer is used, user should also check it before powering the machine. At this moment, the power switch of sewing machine must be set as “Off”.
- Grounding
 - ◆ In order to avoid the noise disturbance and shock caused by electrical leakage, user should ground the grounding cable.
- Attachments
 - ◆ If the electrical attachments are needed, please connect them to the proper positions.
- Disassemble

- ◆ When removing the control box, user should turn off the power and pull off the power plug.
- ◆ At pulling off the power plug, user should hold the plug and remove it, instead of pulling the power cable only.
- ◆ The control box contains the dangerous high voltage power. For opening the control box, please turn off the power and take away the plug from socket firstly, and then wait for at least 5 minutes before opening the control box.

● Maintenance, Inspection and Repair

- Only can the trained technicians perform the repair and maintenance of this machine.
- When replacing the needles and shuttles, user has to turn off the power.
- Please use the spare parts from the authorized manufacturers

● Others

- Do not touch the rotating or moving part of the machine, especially the needle and belt, when the machine is working. User should also keep his/her hair away from those moving parts, so as to avoid the danger.
- Do not drop the control device on the floor, nor insert ant stuff into the slot on the control box.
- Do not run the machine without the cover shells
- If this control device is damaged or unable to work normally, please ask the technicians to adjust or repair it. Do not run the machine when the problem is not solved
- Please do not change or modify the control device without authorization

● Abandonment

- Dispose it as common industrial trash.

● Warning and Danger

- The mistake operation may cause danger. For the serious level, please refer to the figure at below:

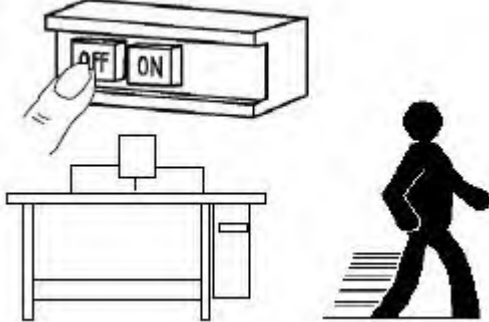
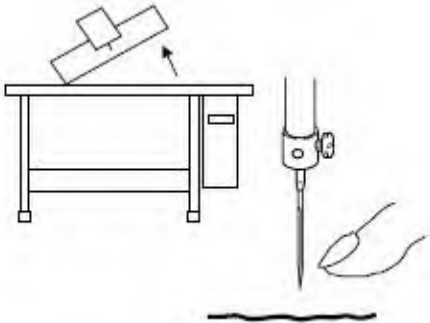
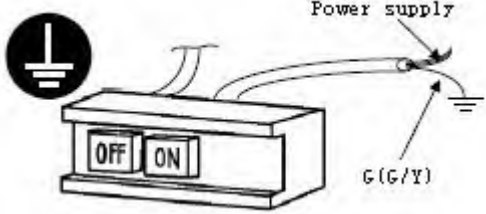
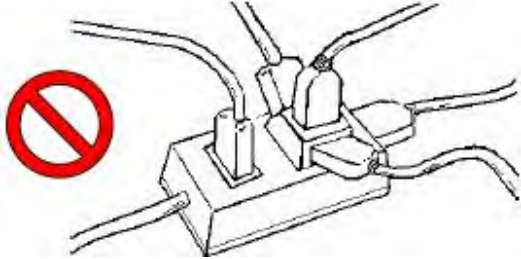
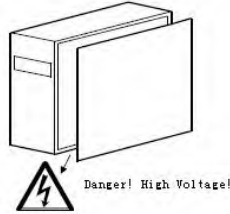
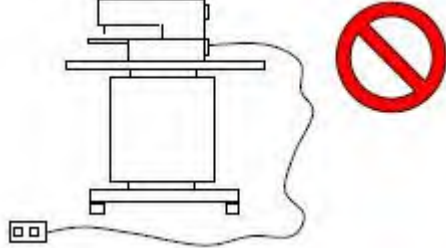
 Warning	The wrong operation may cause serious injury or death	 Caution	The wrong operation may cause personal injury or loss of property
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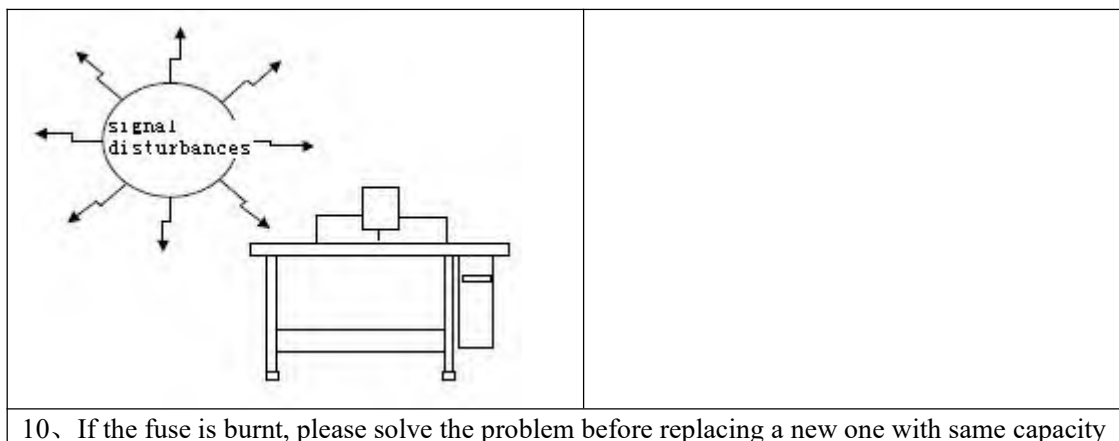
- The meaning of the figure are shown at below:.

	Please operate machine according to instruction		Caution: High Voltage
	Caution: High Temperature		Grounding is a must
	Never do this.		

1.5 The Preventions on Instruction

Warning

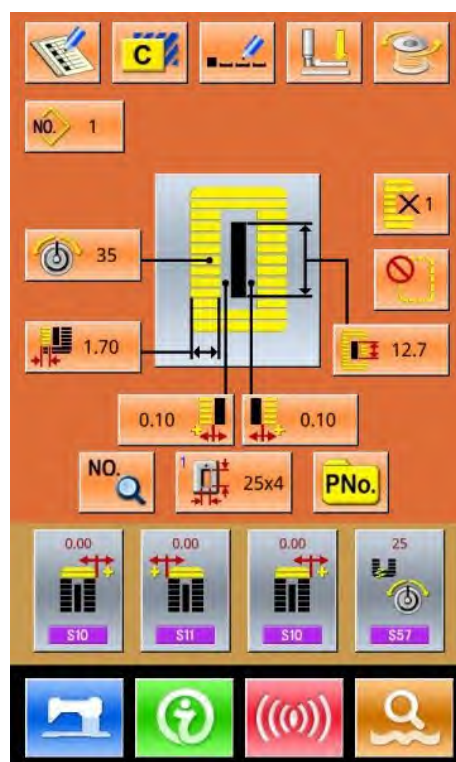
1、 When you leave the machine, please turn it off. 	
3、 If user needs tilt the head or replace the needle or thread the Needle thread, please turn off the power 	4、 Grounding the machine with ground cable 
5、Do not use the household terminal block to let machines to share one power supply 	6、For opening the control box, please turn off the power and take away the plug from socket firstly, and then wait for at least 5 minutes before opening the control box 
8、 Please keep it away from the machine creating the high cyclic disturbance	9、 fuser needs the external signal socket to connect the attachments, the connecting wire shall be as short as possible. The long cable may cause the wrong operation. And the connection cable shall be the isolated cable 



1.6 Operation Method

We use the advanced touching operation technique on the operation panel, whose friendly interface and simple operation will bring the big changes to users in their usage. Users can finish the relating operations by using their fingers or other object to touch the screen.

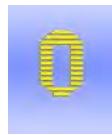
The function keys include Ready Key, Information Key, Mode Key and Communication Key. For the specific operation, please refer to the chapters at below:



Warning

Never use sharp object to touch the screen, otherwise the touching panel will suffer the permanent damage.

1. 7 Sewing List

01 Square 	02 Round 	03 Radial Square 	04 Radial 	05 Radial Straight Bar-tacking 
06 Radial Taper Bar-tacking 	07 Eyelet Square 	08 Eyelet Radial 	09 Eyelet Straight Bar-tacking 	10 Eyelet Taper Bar-tacking 
11 Semi-lunar 	12 Round Square 	13 Semi-lunar Square 	14 Semi-lunar Straight Bar-tacking 	15 Semi-lunar Taper Bar-tacking 
16 Eyelet Semi-lunar 	17 Eyelet Round 	18 Square Radial 	19 Square Semi-lunar 	20 Square Round 
21 Square Straight Bar-tacking 	22 Square Taper Bar-tacking 	23 Radial Semi-lunar 	24 Radial Round 	25 Semi-lunar Radial 
26 Semi-lunar Round 	27 Bar-tacking 	28 Bar-tacking Right Cut 	29 Bar-tacking Left Cut 	30 Bar-tacking Center Cut 

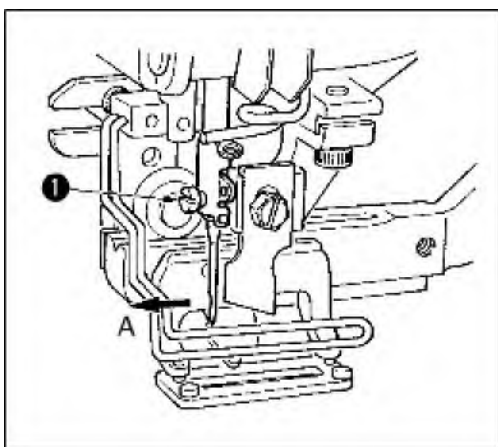
2 Preparation before Sewing

2.1 Installation of Needle



Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation



- 1) Turn the wheel to lift the needle to the highest position.
- 2) Turn the slot on the needle to the front (in Direction A).
- 3) Insert the needle into the needle bar hole deeply.
- 4) Fix the needle screw ①

※ The needle should be DP×5 # 11J ~ # 14J

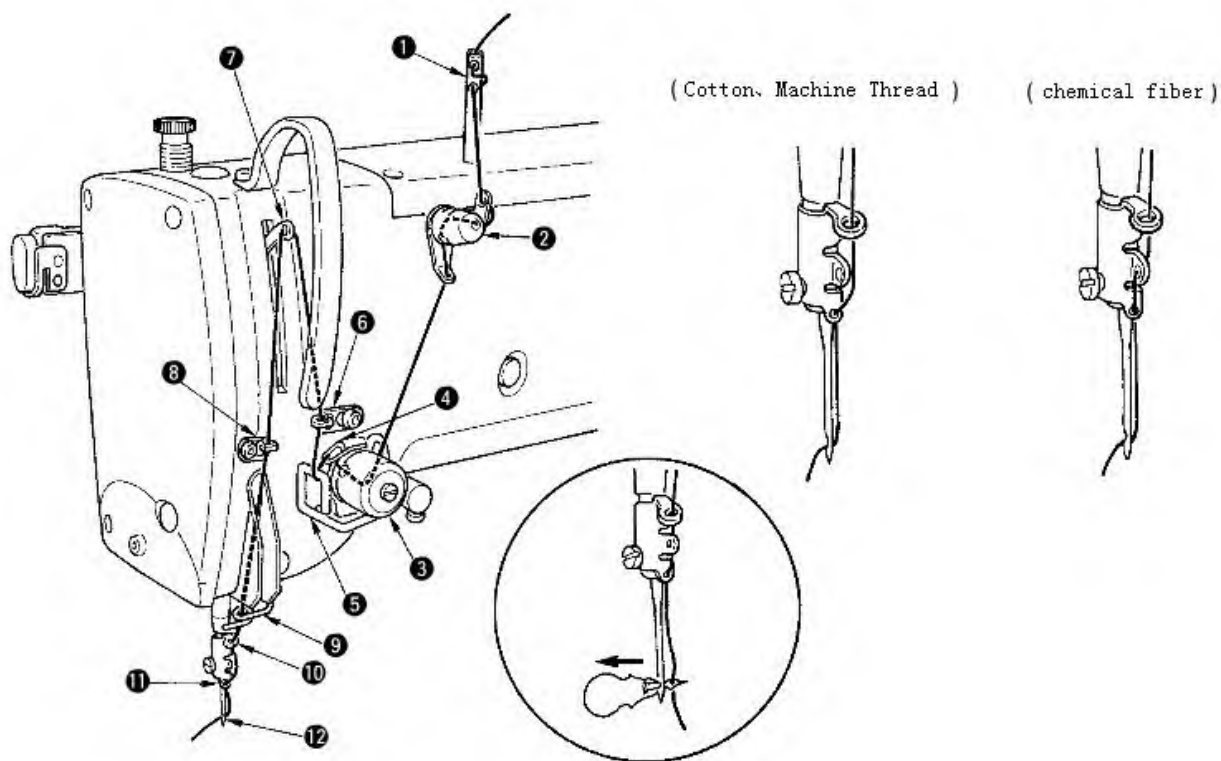
Do turn off power when you install needles.

2.2 Threading (Needle Thread)



Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation



As shown in the picture above, please follow the steps from 1 to 12.

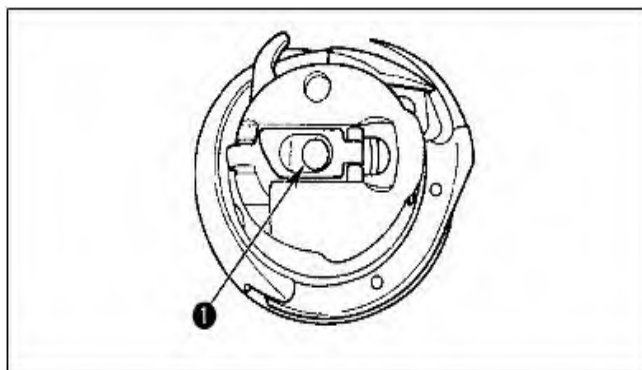
At threading, the threading device can help user to do this job in an easy and fast way.

2.3 Installation of Bobbin



Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation



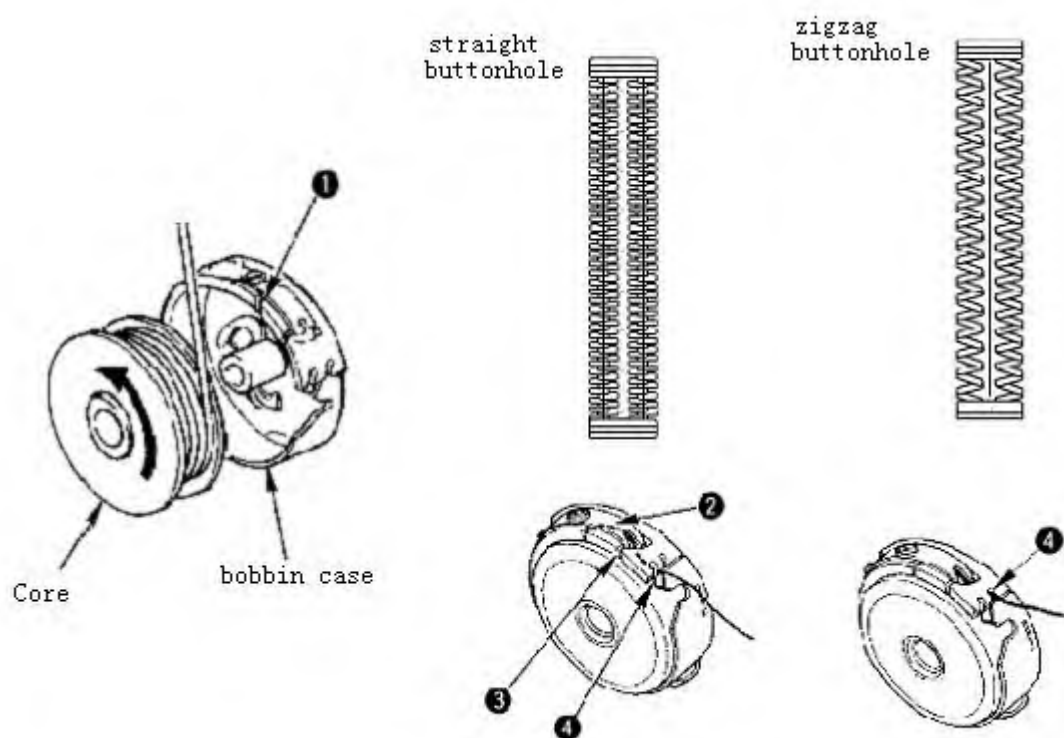
- ① Erect the bobbin handle
 - ② Insert the bobbin shaft ① and close the handle.
When the bobbin is pressed to the certain position, user will hear “Crack” at machine.
- ※ **If the bobbin is not in the proper position, the shuttle core will move at sewing and thread will be wound to shaft**
- ※ **The shape of standard shuttle is different from that of Non-oil shuttle. They cannot be used in common.**

2. 4 Threading at Bobbin



Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation



- 1) Install the shuttle core into the case in the direction of the arrow;
- 2) Thread the thread through the threading open ① and then pass the spring ②, then go through the open ③. Finally, pull the thread from the slot ④.

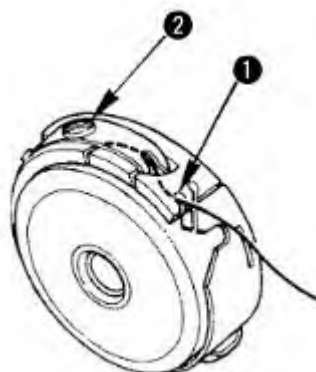
※ **Attention:** The threading method at slot ④ in straight buttonhole sewing is different from that of zigzag buttonhole.

2. 5 Adjustment of Bobbin Thread Tension



Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation



When the threading open ① is at up position, user need pull out the bobbin thread upward and adjust the tension in the way below:

Straight Buttonhole	0.05~0.15N	Hold and swing the thread from bobbin case, the case will go down slightly.
Zigzag Buttonhole	0.15~0.3N	Hold and shake the thread from bobbin case with strength, the case will go down.

Turn the tension screw ② to right to increase the bobbin thread tension, to left to decrease the tension.

※ When the chemical thread is used, please decrease the tension slightly; increase the tension when the cotton thread is used.

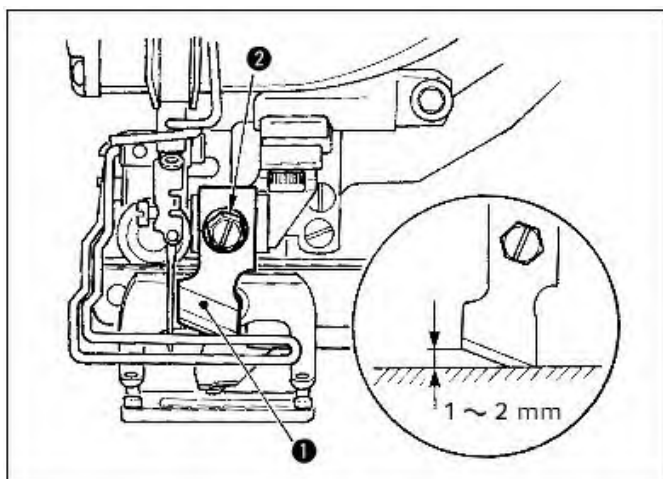
※ After adjusting the bobbin thread tension, user also needs to check the needle thread tension in the sewing parameters.

2. 6 Installation of Knife



Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation



- 1) Remove the knife screw ② to disassemble the knife ① and shim.
- 2) Press the knife and adjust the distance from the knife to the needle plate to 1~2mm as shown in the picture at above. Then install the shim and fix the screw.

If the size of the knife is printed in British size, please refer to the table at below:

Size of Knife (displayed in British size and relating metric size)

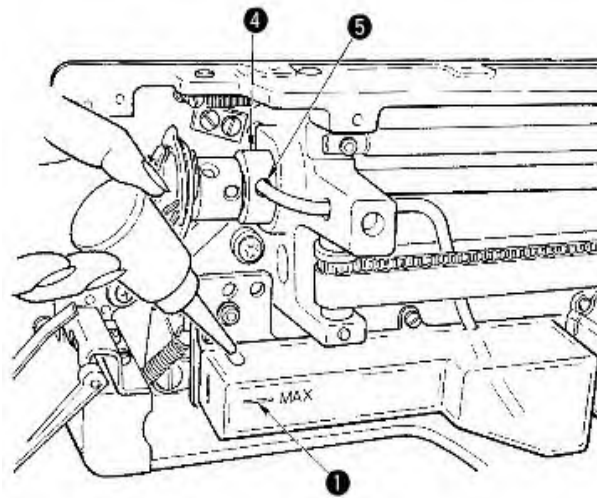
Size of Knife (British size)	Size of Knife (metric size) mm
1/4	6.40
3/8	9.50
7/16	11.10
1/2	12.70
9/16	14.30
5/8	15.90
11/16	17.50
3/4	19.10
13/16	20.60
7/8	22.20
1	25.40
1 1/8	28.60
1 1/4	31.80
1 3/8	34.90
1 1/2	38.10

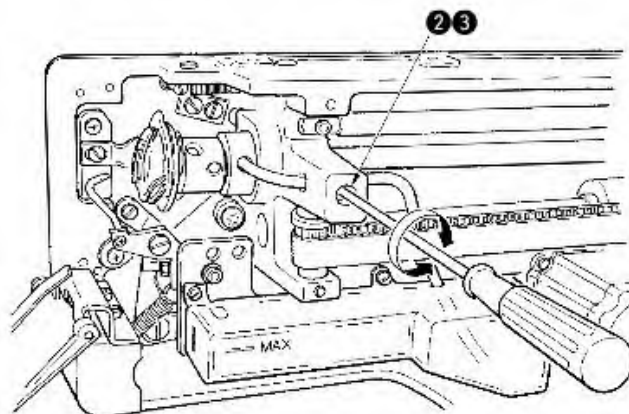
2. 7 Method for Adding Oil



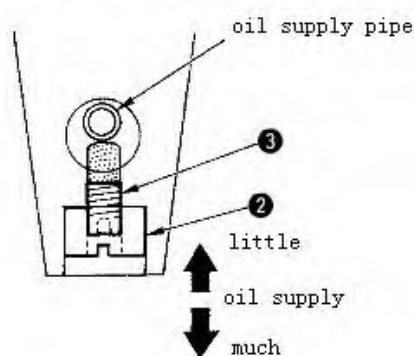
Caution!

In order to avoid the personal injury caused by the sudden start of machine, user has to turn off power and make sure the motor stops before performing the following operation





oil amount adjustment



1) Add oil to tank

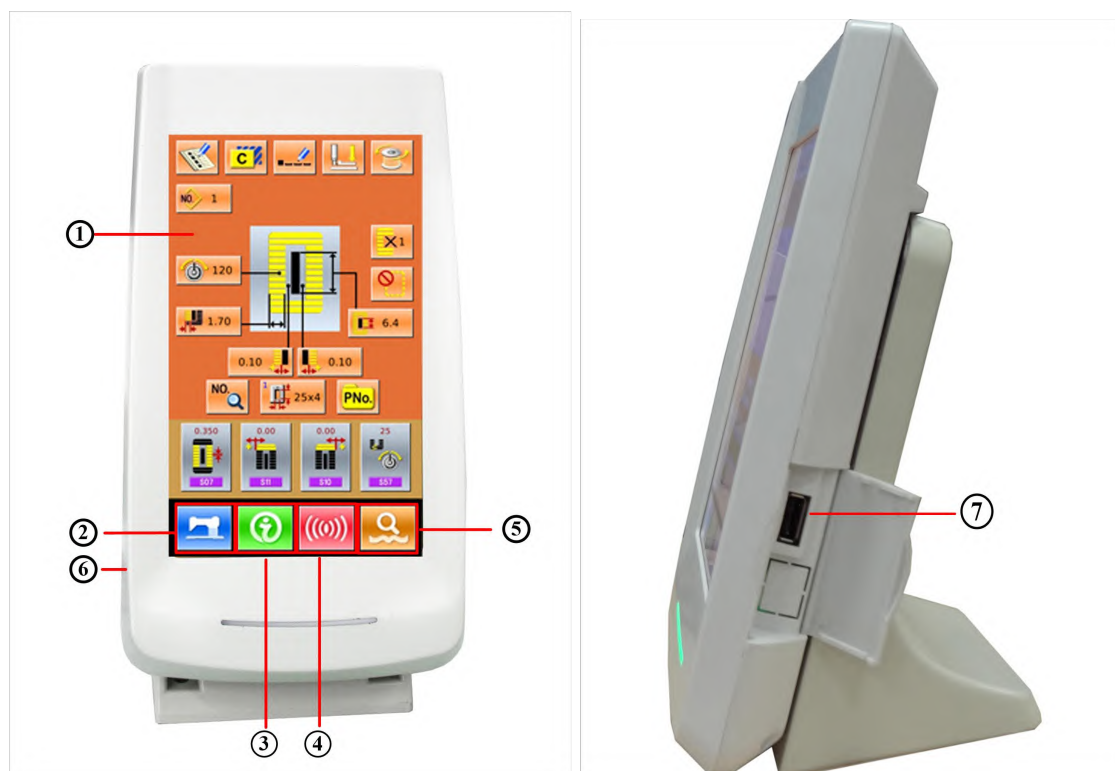
- Add oil until the oil surface reach the mark of MAX ①.

2) Adjustment of Oil Amount

- Release the fixing screw ② and adjust the Oil Adjustment Screw ③.
- At adjusting the oil amount, fix the Oil Adjustment Screw ③ to decrease the oil amount.
- After adjusting the oil amount, please fix the screw ②.
- If the sewing machine is a new one or left unused for long time, please disassemble the bobbin case and add oil for 2~3 drops. Additionally, add oil to the metal part ④ through the oiling hole ⑤ with several drops to wet the felt inside.

3 Operating Instruction

3.1 Name and Description of Each Part



① Touch Panel • LCD Displayer

②  READY Key → Shift between the data input interface and sewing interface

③  Information Key → Shift between the data input interface and information interface

④  Communication Key → Shift between the data input interface and communication interface

⑤  Mode Key → Shift between the data input interface and communication interface 模

⑥ Cable

⑦ USB Port

3.2 Common Buttons

The buttons for the common operation in each interface are shown at below:

No .	Figure	Functions	Remarks
1		ESC → Quit the current interface. At data change interface, it is for cancelling the change of data.	
2		Enter → Confirm the changed data.	
3		Plus → Increase the value	
4		Minus → Decrease the value	
5		Reset → Release the Error	
6		Number Input → Display the number keyboard and input the number.	

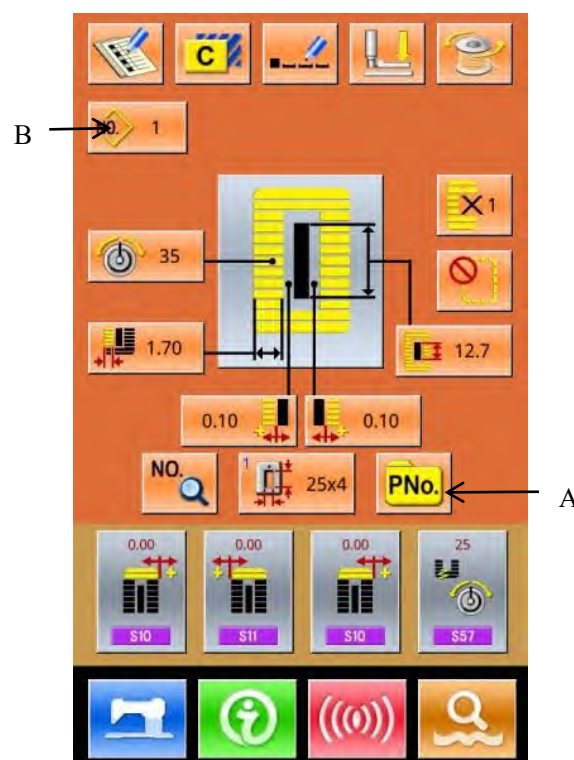
3.3 Basic Operation

① Turn on the power

First, make sure that the set presser type (A) is the same as that of the presser actually installed.

② Select the wanted pattern No.

When the power is on, the data input screen is displayed. Pattern No. (Button B) which is marked at present is displayed in the upper section of the screen. Press Button B to select the pattern No. (The unregistered Pattern No. will not be displayed)

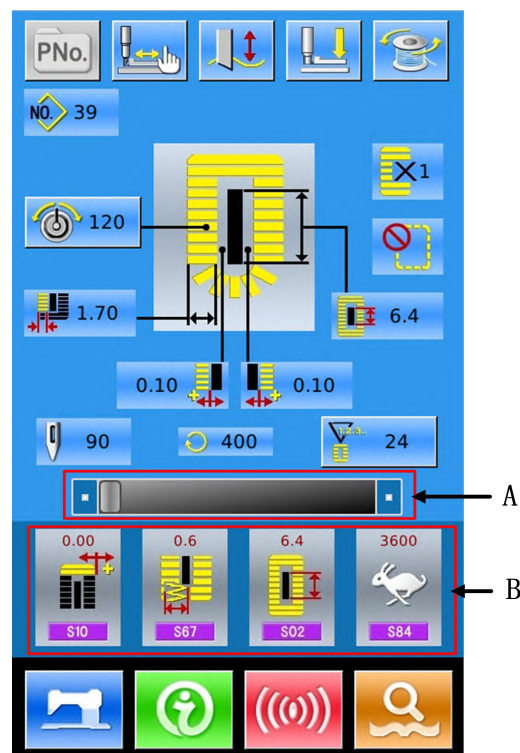


③ Set machine to Ready Sewing Status

Press READY key . The back-light of LCD displayer changes to blue color and the machine is ready for sewing. Area A is to set the speed and Area B is to display the customer management.

④ Start sewing

Set the sewing product to the presser position; operate the pedal to start the sewing machine, and sewing starts.



3. 4 Operation of Normal Pattern

The interface for setting and sewing the normal pattern is shown at right. For the function of each button, please refer to “4. Normal Pattern Sewing”.

The normal sewing is the default sewing mode in the system, which is also the initial mode of the system.

Steps of Operation:

- ① Press  to enter the Mode Setting



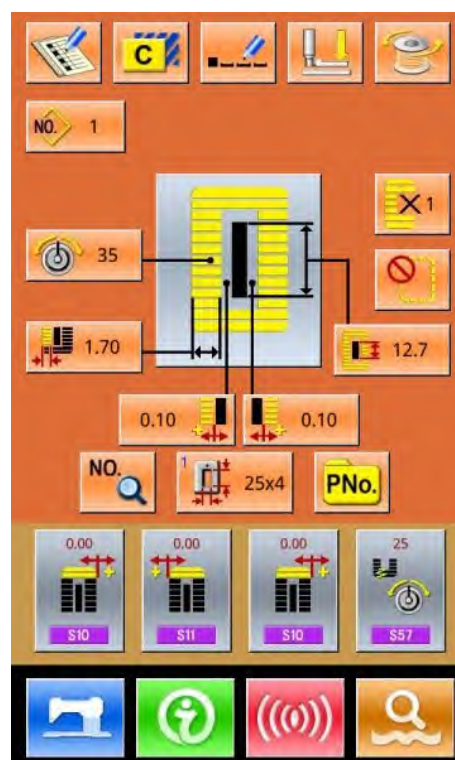
- ② Press  to select the normal sewing mode



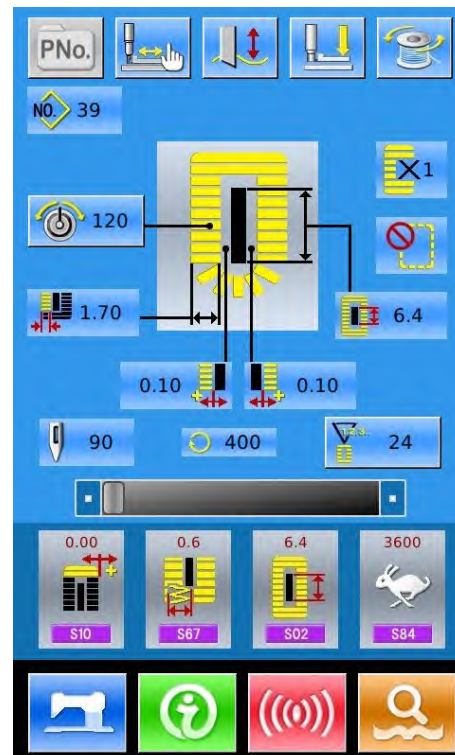
- ③ Press  and then press  to display the main interface of Normal Sewing



- ④ Select the sewing pattern
- ⑤ Set the necessary sewing parameter
- ⑥ Select the presser type
- ⑦ Perform the necessary editing operation (Registration, copy, naming and so on)



- ⑧ Press  to enter the sewing interface for sewing
- ⑨ Set knife and speed at sewing interface
- ⑩ Set the counter
- ⑪ Select the Trial Sewing if necessary
- ⑫ Drop the presser, step the pedal and start sewing



3.5 Operation of Continuous Sewing

The interface for the continuous sewing is shown at right. For the function of each button, please refer to “5. Continuous Pattern Sewing”.

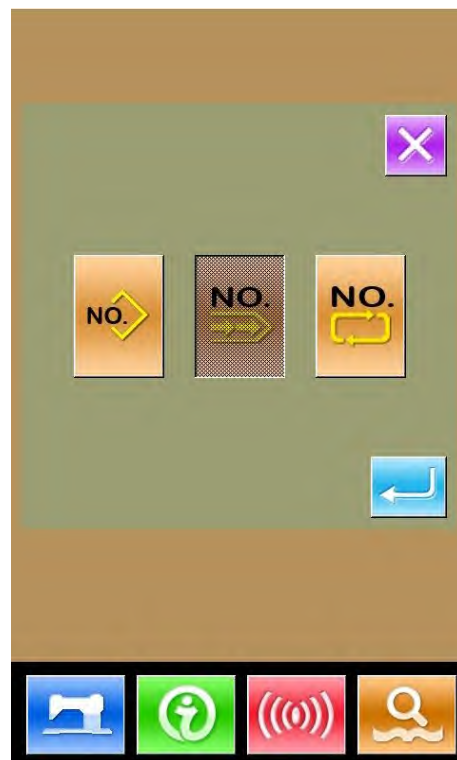
Operation Steps:

- ① Press  to enter the Mode Setting



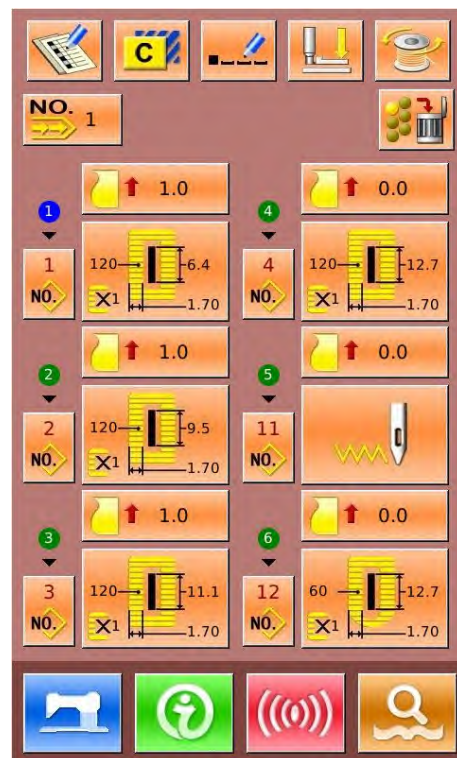
② Press  then select 

③ Press  and then press  to display the main interface of continuous sewing

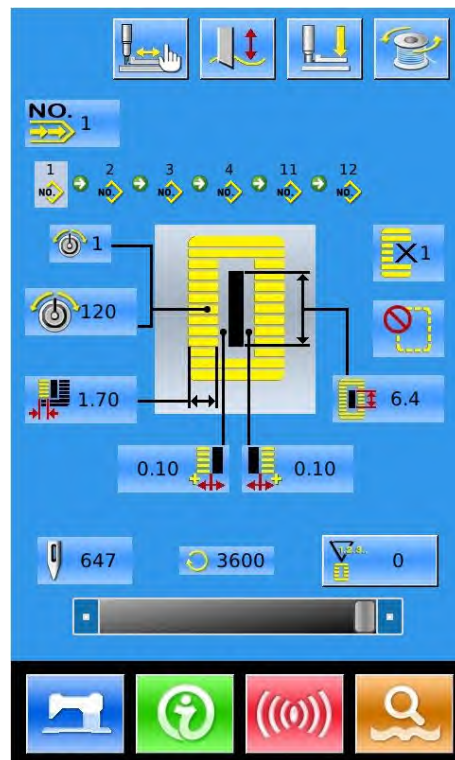


④ In the main interface of continuous sewing, please add the pattern used and the cloth-feeding amount.

⑤ Perform the necessary editing operations (Copy, Naming, Adding and Deletion)



- ⑥ Press  to enter the sewing interface for sewing
- ⑦ Set knife and speed at sewing interface
- ⑧ Set the counter
- ⑨ Select the Trial Sewing if necessary
- ⑩ Drop the presser, step the pedal and start sewing



3.6 Operation of Cyclic Sewing

The interface for the cyclic sewing is shown at right. For the function of each button, please refer to “6. Cyclic Pattern Sewing”.

Operation Steps:

- ① Press  to enter the Mode Setting



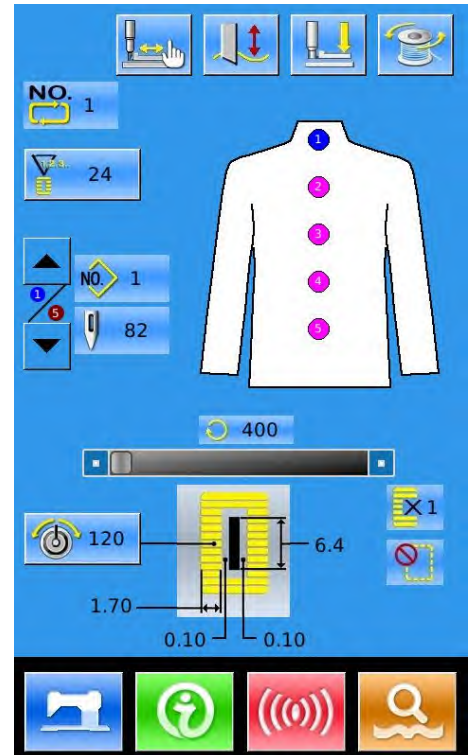
- ② Press  then select 
- ③ Press  and then press  to display the main interface of cyclic sewing



- ④ In the main interface of cyclic sewing, please select the fabric
- ⑤ Move the sewing position and add the pattern for cyclic sewing
- ⑥ Set the parameter of the pattern
- ⑦ Perform the necessary editing operations (Copy, Naming, Adding and Deletion)



- ⑧ Press  to enter the sewing interface for sewing
- ⑨ Set knife, tension and speed at sewing interface
- ⑩ Set the counter
- ⑪ Select the Trial Sewing if necessary
- ⑫ Drop the presser, step the pedal and start sewing



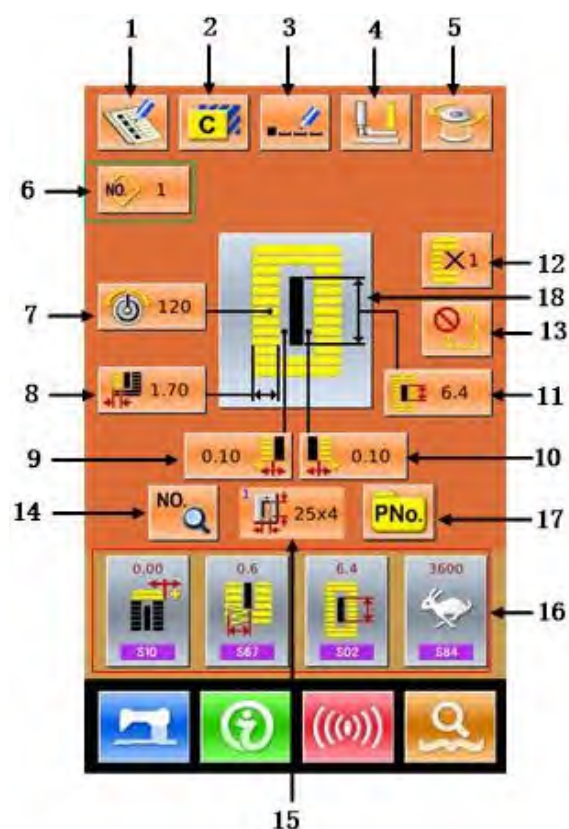
4 Normal Pattern Sewing

When the system is sold, the default mode in it is the normal pattern sewing mode. The operation steps of it are described in “3. Operation Instruction”. In this chapter, we will give the detailed description on this mode.

4.1 Function Keys

(1) Interface for Inputting Sewing Data

The interface of data input is shown as the Figure at right. For the detailed functions, please take the Function Key List for reference.



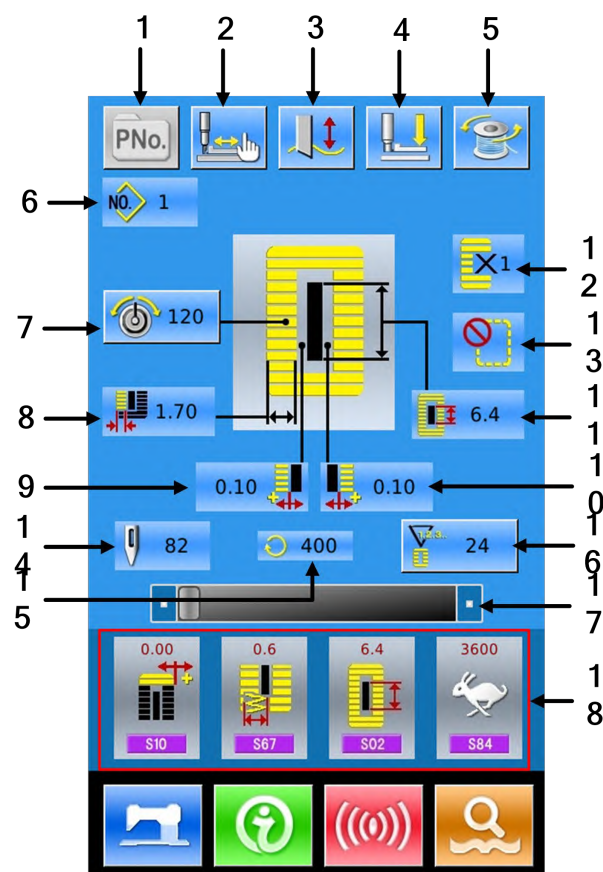
Function Key List:

No.	Figure	Function	Remarks
1		Pattern Registration	
2		Pattern Copy	
3		Pattern Naming	
4		Threading (Lower the presser foot)	User can change needle in this status
5		Winding	

No.	Figure	Function	Remarks
6		Pattern No. Selection	Pressing this button can enter the pattern selection interface
7		Set Upper-Thread Tension (S51, S52, S55, S56)	S52 and S56 will be influenced by the data switch of sewing.
8		Set/Return to Left Over-edging Width	For the pattern from No.1~ No.26, this button means to set left over-edging width; while for the patterns from No.27~ No.30, this button means to return to the Width Setting
9		Set Left Width of Knife Groove	Unavailable for Pattern No.27 &No.29
10		Set Right Width of Knife Groove	Unavailable for Pattern No.27 &No.28
11		Length of Cloth Cutting	
12		Set Double Stitching or Single Stitching	Unavailable for Pattern No.27, No.28&No.29
13		Set Numbers of Basting	Unavailable for Pattern No. 30
14		Set Sewing Data	
15		Select Type of Presser foot	
16		Customer Management	Set 4 buttons on the main interface for the 4 most frequently used sewing data groups
17		Directly Select Pattern by Number	
18		Sewing Pattern Selection	

(2) Interface of Sewing

Press  to enter the Sewing Interface shown as the figure at right. For detailed functions please take the Function Key List for reference.



Function Key List:

No.	Figure	Function	Remarks
1		P Pattern Selection Key	Controlled by Parameter k18
2		Trial sewing	
3		 : Knife Available  : Knife Unavailable	Shift Knife Status
4		Threading (Lower the presser)	
5		Winding	
6		Pattern No. Display	
7		Upper-thread Tension Setting	
8		Left Over-eding Width	

No.	Figure	Function	Remarks
9		Left Width of Knife Groove	
10		Right Width of Knife Groove	
11		Length of Cloth Cutting	
12		Single Stitching/ Double Stitching	
13		Numbers of Basting	
14		Total Number of Stitches	
15		Current Sewing Speed	
16		Counter Value  : Sewing Counter  : No. of piece counter	
17		Speed Setting	Controlled by Parameter k07
18		Customer Management	

4. 2 Pattern Registration

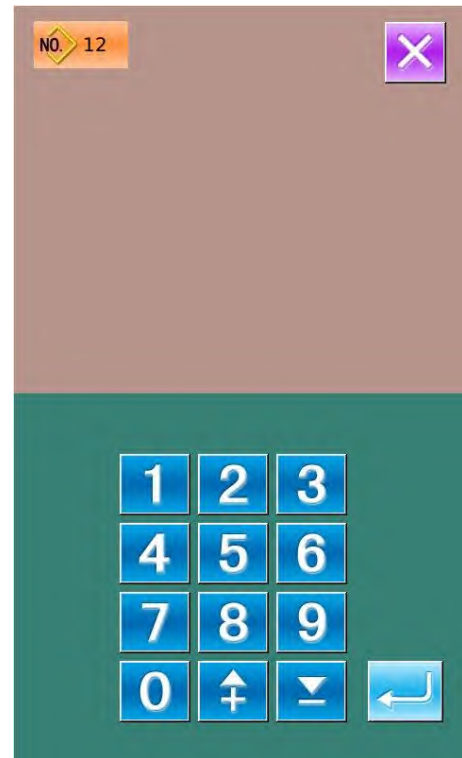
500 normal patterns can be registered for the most.

press  to enter the interface of Pattern Registration (shown as the right figure) :

① Input Pattern No.

Input the pattern No. via keyboard. If the pattern number is already existed in the system, the look and relevant information of the registered pattern will be shown on the upper interface. The used

number can't be reused, but by pressing ,
 the unregistered number can be searched.



② Select the 1st bar-tacking Sewing shape

After setting the pattern number, user can

press  to enter the interface for selecting the 1st bar-tacking sewing shape (as shown in right figure).

Press  to quit the selection.

Note: The Number of Sewing Shape is controlled by the parameter K04. Please refer to the Section 4.9 Sewing Shape Selection.



③ Finish the Selection

After user selects the 1st bar-tacking shape, the system will enter the interface of selecting the finish shape (as shown in the right figure).

Press  to finish the registration of new pattern and return to the main interface. According to the selected shape for sewing, user can set the initial value of sewing data

Press  to quit the selection

Note: The Number of Sewing Shape is controlled by the parameter K04. Please refer to the Section 4.9 Sewing Shape Selection.



4. 3 Pattern Copy

① Select the target pattern

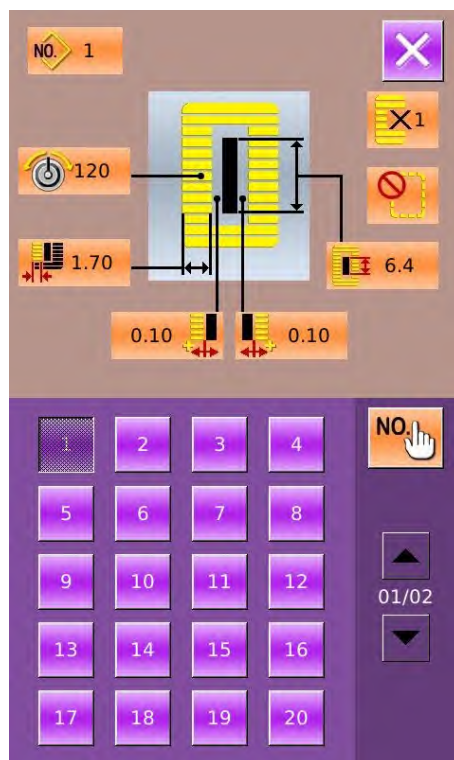
Press  to enter the interface for copying the pattern (as shown in right figure).

A、Among the registered patterns, select the pattern

number of the copied one and press .

Then the system will enter the interface for inputting the registration number.

B、 Press  to quit the pattern copy interface directly

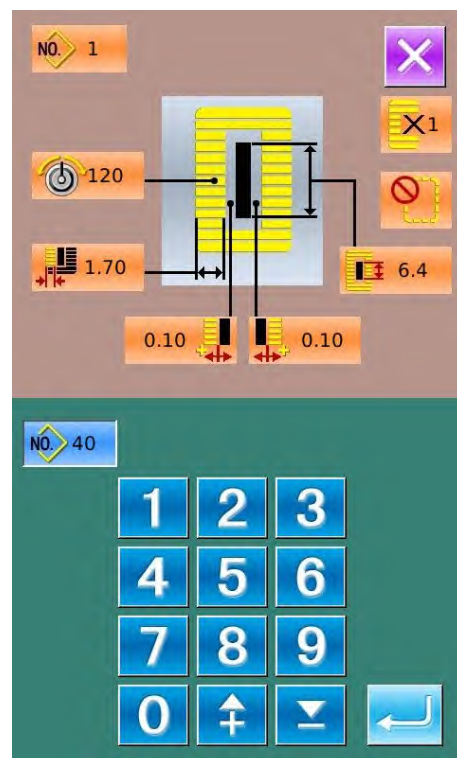


② Input the newly registered pattern number

In the interface, the upper area displays the shape and relevant sewing data of the copied pattern. The user can select the unregistered pattern number via the numeral keys. The registered pattern number can't be registered again.

A、Press  to finish the operation of copying the pattern. And return to the pattern copy interface

B、Press  to quit the number input interface directly.



4. 4 Pattern Naming

Press  to enter the interface for naming pattern (as shown in the right figure), 12 figures can be inputted at the most.

 : Icon Right-moving

 : Icon Left-moving

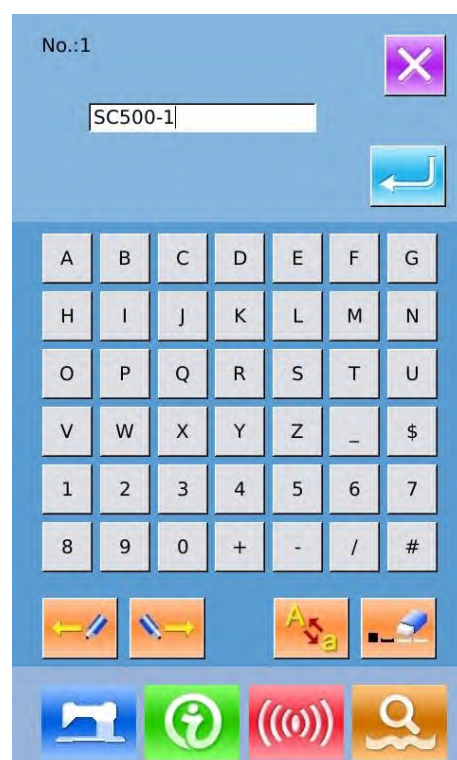
 : Caps Locks

 : Eraser

A、Select the figure wanted, press  to end the operation of naming the pattern.

B、The position of figure can be determined by moving the icon, the Eraser is used to delete the figure

C、Press  to quit directly.



4.5 Threading

Press  to enter the interface of threading; at this moment, the presser foot is lowering. Pressing the Presser Foot Up will lift the presser and have the screen to return to the main interface.



: Presser Down



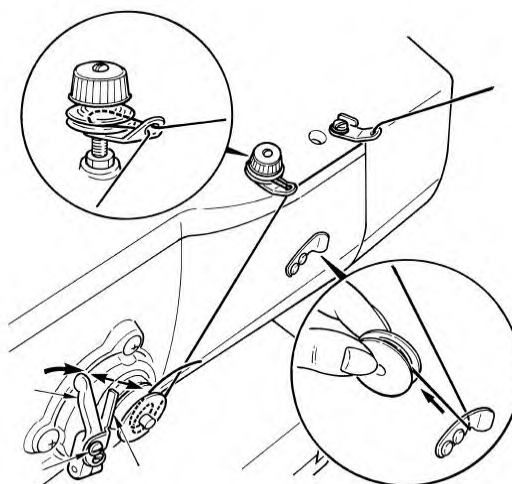
: Presser Up



4.6 Winding

① Install the shuttle core

Fit the shuttle core fully onto the winder shaft. Then push the thread guide in the direction of the arrow (as shown in the figure in right)



② Display the bobbin thread winding screen

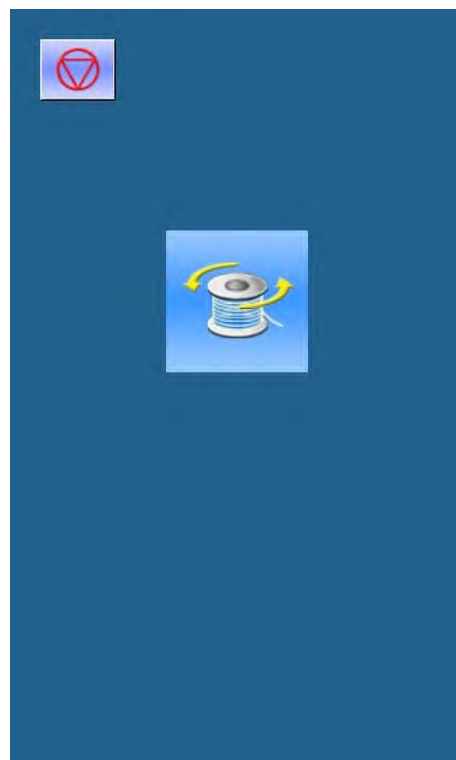
Press  in the data input interface (orange) or the sewing interface (blue), and then the winding interface will be displayed (as shown in the right figure)

③ Start Winding

Step the start pedal, and then the sewing machine runs and starts winding bobbin thread.

④ Stop the sewing machine

Press STOP button  to stop the sewing machine. The system will return to the normal mode. By the way, in the bottom-thread winding mode, stepping the start pedal will stop the machine at this mode. Step the pedal again to resume winding. This function can be used at winding several shuttle cores.



4. 7 Select the Type of Presser

① Display the data input Interface

Only at the data input interface (orange), can user change the contents of setting. In the sewing interface (blue), press READY key to display the data input interface.

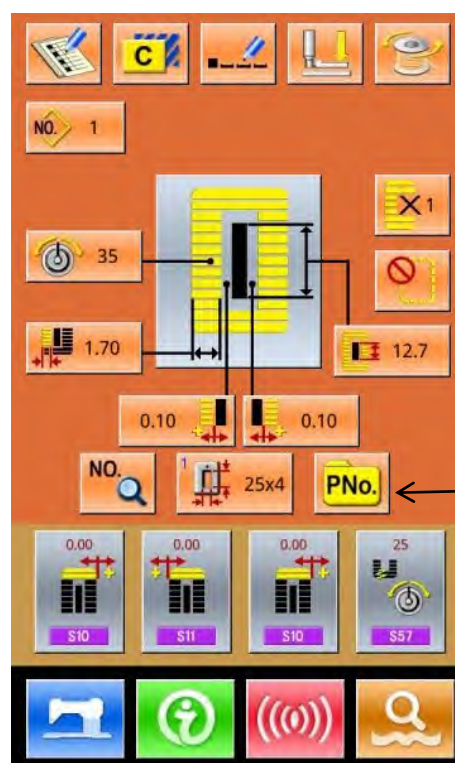
② Call the interface for selecting presser type

Press Presser Type Selection (A) to display the interface for selecting the presser type (as shown at right).

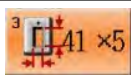
③ Select the type of presser

Press button of presser type according to the presser mounted on the sewing machine. The button pressed is displayed in shadow. For selecting the presser type, please refer to the table below

	Type	Presser Type
	Type 1	



A

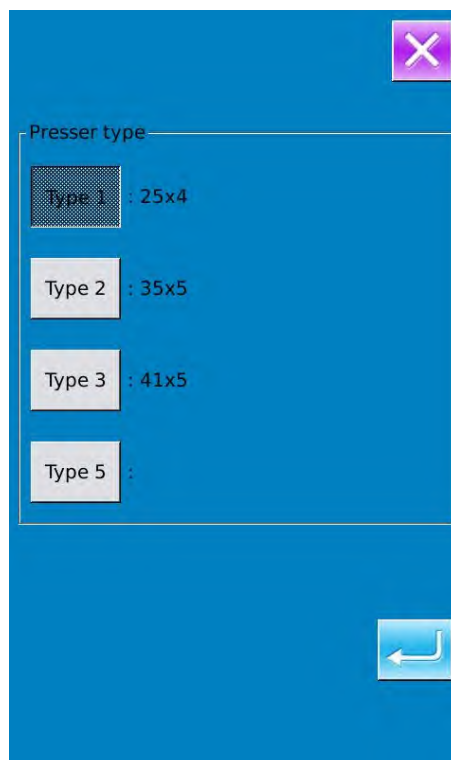
	Type 2	
	Type 3	
	Type 5	—

※ Set type 5 when using the presser foot other than type 1 to 3. Change memory switch (level 1) according to U15 Presser size width and U16 Presser size length. When using type 5 with stitch width at 6 mm or more and length at 41 mm or more, it is necessary to replace components such as presser arm, feed plate, etc

④ Determine the presser type

Press  to close the interface and finish the

change. Pressing  is to quit directly



4. 8 Pattern Selection

Press  to enter the interface for selecting pattern (as shown in the right figure), the upper area shows the shape and relevant data of the selected pattern while the lower area shows the registered number of the pattern.

: Input the number to inquire pattern

: Delete the pattern

① Pattern Selection

Every 20 numbers will be showed in one page, if exceeding, the page-turning key will be displayed and available in the interface. When the number of the registered pattern is selected, the upper area of the interface will show the details of the pattern.

Press  to finish the operation of pattern selection.

Press  to quit the Pattern Selection.

② Pattern Inquiry

Press  to activate the interface of Pattern Inquiry, input the number of pattern via the number keys, as shown in Figure 2

③ Pattern Deletion

Select the registered pattern and then press , the pattern will be deleted. However, the patterns in following three kinds can't be deleted

- A: Patterns included in continuous sewing
- B: Patterns included in cyclic sewing
- C: Patterns registered to P pattern

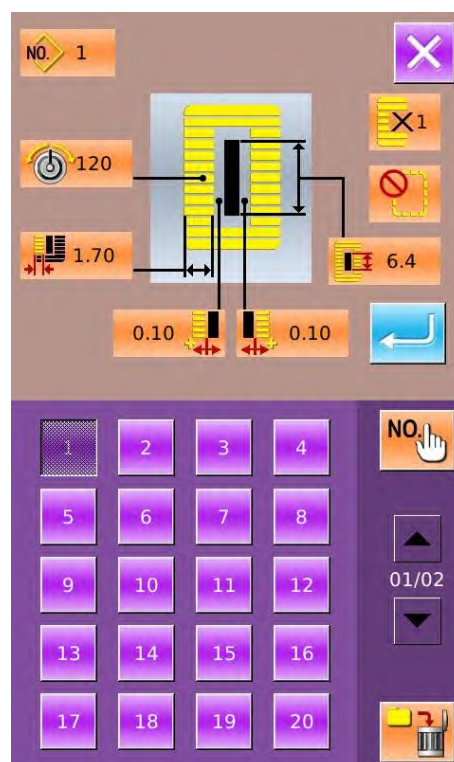


Figure 1

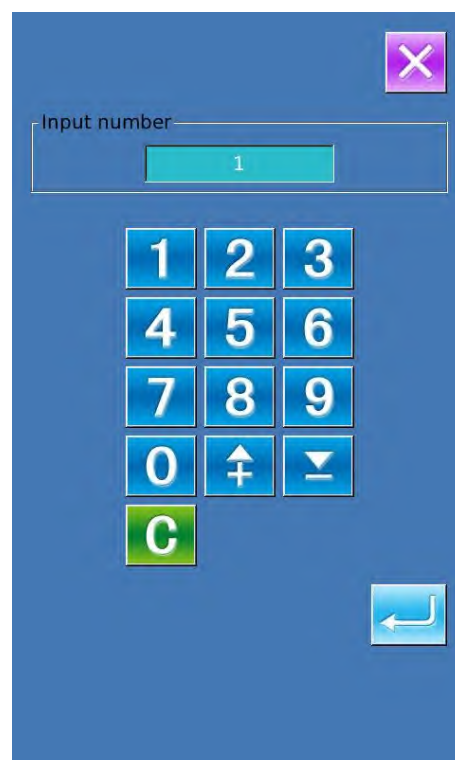


Figure 2

4.9 Sewing Shape Selection



Press  to enter the interface for selecting the sewing shape

① Select the 1st bar-tacking

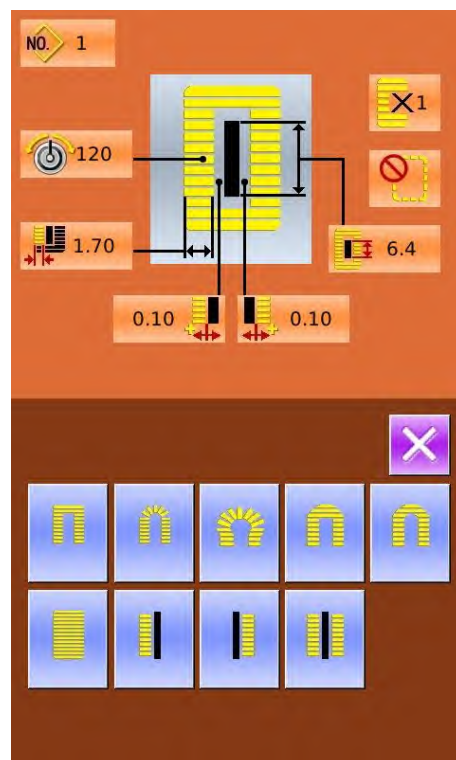
There are five common 1st bar-tacking shapes, which are Square Type, Radial Type, Eyelet Type, Semi-lunar Type and the Round Type. When the parameter K04 is set to 30, another 4 types of bar-tacking section can be used, which are bar-tacking section sewing, bar-tacking with left cut, bar-tacking with right cut and bar-tacking with center cut. Select the 1st bar-tacking section to enter the interface for selecting the shape. For the pattern from No.27 ~No.30, the user can press



to end the selection



Press  to quit directly.

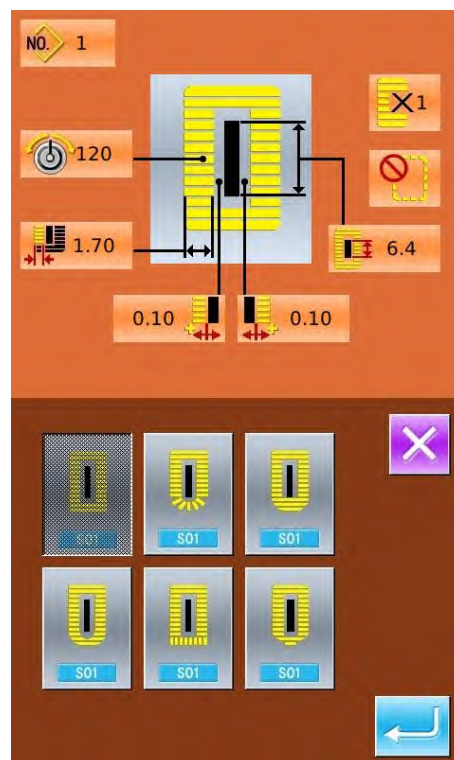


- Note:**
1. The display of 1st bar-tacking section is affected by parameter K04;
 2. When changing the 1st bar-tacking section, user has to change the sewing parameters of the relating shape. Otherwise, it may affect the data at pattern-designing or the sewing effect;
 3. For the default parameter value of the shape, please refer to 10.4 “Sewing Default Value List” in Appendix 1

② Finish the sewing shape selection

Select the end shape; press  to return to the main interface.

Press  to quit directly. The shape number will not be changed either



③ Parameter K04

	K04 = 12	K04 = 20	K04 = 30
Square	1	1, 18, 19, 20	1, 18, 19, 20, 21, 22
Radial	3, 4, 5, 6	3, 4, 5, 6	3, 4, 23, 24, 5, 6
Eyelet	7, 8, 9, 10	7, 8, 16, 17, 9, 10	7, 8, 16, 17, 9, 10
Semi-lunar	11	13, 11, 14, 15	13, 25, 11, 26, 14, 15
Round	12, 2	12, 2	12, 2
Bar-tacking			27, 28, 29, 30

Note 1: The numbers in form are the number of shape.

Note 2: The sewing shapes of No.27, 28, 29 and 30 can only be available when parameter K04 is set at 30.

④ Sewing Shape List

01 Square 	02 Round 	03 Radial Square 	04 Radial 	05 Radial Straight Bar-tacking 
06 Radial Taper Bar-tacking 	07 Eyelet Square 	08 Eyelet Radial 	09 Eyelet Straight Bar-tacking 	10 Eyelet Taper Bar-tacking 

11Semi-lunar 	12 Round Square 	13 Semi-lunar Square 	14 Semi-lunar Straight Bar-tacking 	15 Semi-lunar Taper Bar-tacking 
16 Eyelet Semi-lunar 	17Eyelet Round 	18 Square Radial 	19 Square Semi-lunar 	20 Square Round 
21 Square Straight Bar-tacking 	22 Square Taper Bar-tacking 	23Radial Semi-lunar 	24 Radial Round 	25Semi-lunar Radial 
26Semi-lunar Round 	27Bar-tacking 	28 Bar-tacking Right Cut 	29 Bar-tacking Left Cut 	30 Bar-tacking Center Cut 

4.10 Sewing Data Setting

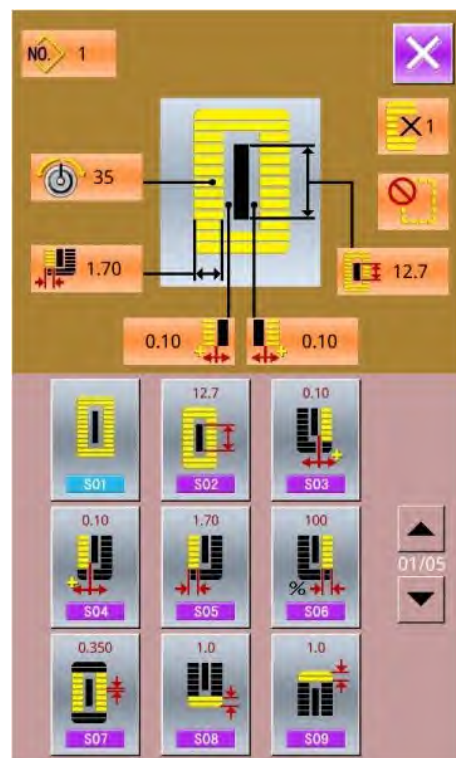
① Change Sewing Data

Press  to enter the interface for setting sewing (as shown in right figure).
Select the sewing data for changing; Then the system will enter the setting status. The parameters with **purple** background are the input type, while the parameters with **blue** background are the selection type

Press  to quit the Sewing Data Setting.

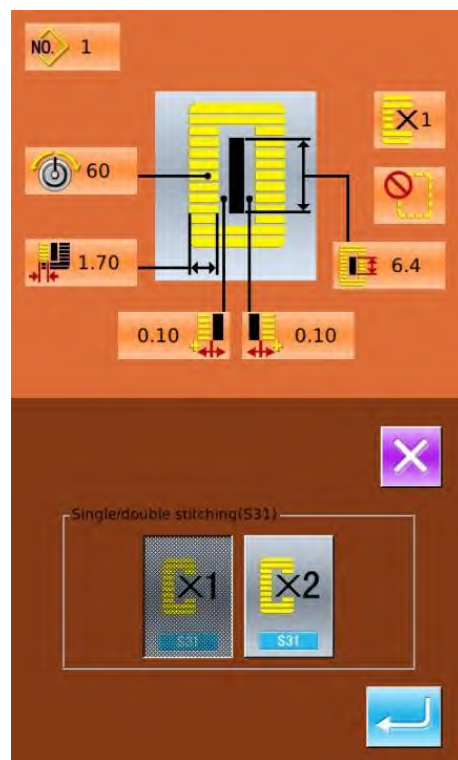
Example at below:

Select  to enter the interface (as shown in right).





Select  to enter the interface(as shown in right).



② Sewing Data List

The sewing data is related to the sewing shape selected. The different shape has the different sewing data with different default values

In mode status, user can set whether to open some sewing data. By the way, there are also some sewing data that are affected by others.

No.	Item	Range	Unit	Remarks
S01 	Sewing shape Refer to 4.9 Selection of Sewing Shape	1~30	1	Remarks 5
S02 	Length of cloth cutting This item sets the length of cloth that is cut by knife. However, in case of the shapes of No. 27, 28, 29 and 30, sewing length will be set. When activating U19 parameter (knife action number), the machine will cut the fabric according to the value in U18 (knife size).	3.0~120.0	0.1mm	
S03 	Knife groove width, right This item sets the clearance between knife and right parallel section.	-2.00~2.00	0.05mm	
S04	Knife groove width, left This item sets the clearance between knife and left parallel section.	-2.00~2.00	0.05mm	

No.	Item	Range	Unit	Remarks
 S04				
S05 	Over-edging width, left This item sets the over-edging width of left parallel section.	0.10~5.00	0.05mm	
S06 	Ratio of right and left shapes This item sets scale ratio of right side shape with the knife position as the center	50~150	1%	
S07 	Pitch at parallel section This item sets sewing pitch between left and right parallel sections.	0.200~2.500	0.025m m	
S08 	2nd bar-tacking length This item sets length of bar-tacking on the front side Square Down  Bar-tacking Down  Taper Down 	0.2~5.0	0.1mm	
S09 	1st bar-tacking length This item sets length of bar-tacking on the rear side Square Up 	0.2~5.0	0.1mm	
S10 	Compensation of bar-tacking width, right This item adjusts right over-edging section. of bar-tacking part Both 1st and 2nd bar-tacking can be adjusted Square Up  Square Down  Bar-tacking Down 	-1.00~1.00	0.05mm	
S11 	Compensation of bar-tacking width, left This item adjusts left over-edging section of bar-tacking part	-1.00~1.00	0.05mm	
S12 	Left Taper Bar-tacking This item sets length of bar-tacking section in taper bar-tacking shape	0.00~3.00	0.05mm	Remarks 1
S13	Right Taper Bar-tacking This item sets length of bar-tacking section in taper bar-tacking shape	0.00~3.00	0.05mm	Remarks 1

No.	Item	Range	Unit	Remarks
 S13				
S14 	Eyelet shape length This item sets upper side length from center of eyelet in the eyelet shape	1.0~10.0	0.1mm	Remarks 1
S15 	Number of stitches of eyelet shape This item sets number of stitches in the upper 90 ° of eyelet shape	1~8	1	Remarks 1
S16 	Eyelet width This item sets the inside crosswise size of the eyelet shape. Actual needle entry point is the dimension to which S04 Knife groove width, left is added.	1.0~10.0	0.1mm	Remarks 1
S17 	Eyelet length This item sets lengthwise size of the inside of eyelet shape.	1.0~10.0	0.1mm	Remarks 1
S18 	Round type shape length This item sets upper side length from the center of round shape Round Up  Radial Up  Semi-lunar Up  Round Down  Radial Down  Semi-lunar Down 	1.0~5.0	0.1mm	Remarks 1
S19 	Number of radial shape stitches This item sets number of stitches in the upper 90 ° of radial shape	1~8	1	Remarks 1
S20 	Radial bar-tacking: This item sets with / without bar-tacking stitches of radial shape  : No  : Yes			Remarks 1 Remarks 2
S21 	Pitch at bar-tacking section This item sets the pitch of bar-tacking section. Square Up  Round Up  Semi-lunar Up  Square Down  Round Down  Semi-lunar	0.200~2.500	0.025	

No.	Item	Range	Unit	Remarks
	 Down  Straight Bar-tacking Down  Taper Down			
S22 	1 st Clearance This item sets the clearance between 1st bar-tacking and knife groove. This item is applied to all shapes	0.0~4.0	0.1mm	
S23 	2 nd Clearance This item sets the clearance between 2nd bar-tacking and knife groove. This item is applied to all shapes	0.0~4.0	0.1mm	
S31	Single/ Double Sewing  x1 : Single Sewing  x2 : Double Sewing			
S32	Select Cross at Double Sewing At setting the double sewing, user can select parallel sewing and crossing sewing  S32 : Parallel Sewing  S32 : Cross Sewing			Remark 3
S33 	Compensation of Double Sewing Width This item sets amount to narrow over-edging width of 1st cycle at double stitching.	0.0~2.0	0.1mm	Remark 3
S34	Number of Basting Times This item sets number of basting times.  S34 : Without basting  S34 : 1~9	0~9	1 Time	
S35 	Basting Pitch This item sets pitch at performing the basting.	1.0~5.0	0.1mm	Remark 3
S36 	Rolling Length of Basting This item sets rolling length of needle thread at performing basting.	2.0~20.0	0.1mm	Remark 3
S37	Rolling Pitch of Basting This item sets rolling pitch of needle thread at performing	0.2~5.0	0.1mm	Remark 3

No.	Item	Range	Unit	Remarks
 S37	basting.			
S38  S38	Rolling Width of Basting This item sets rolling width of needle thread at performing basting.	0.0~4.0	0.1mm	Remark 3
S39  S39	Lengthwise Compensation of Needle Entry at Basting This item sets the amount to move needle entry position back and forth at performing basting more than two cycles	0.0~2.5	0.1mm	Remark 2 Remark 3
S40  S40	Horizontal Compensation of Needle Entry at Basting This item sets the amount to move needle entry position left and right at performing basting more than two cycles.	0.0~1.0	0.1mm	Remark 3
S41  S41	Compensation of Left Side Position at Basting This item sets the adjustment amount of the standard sewing position at basting from the center of left over-edging.	-2.0~2.0	0.1mm	Remarks 2 Remarks 3
S42  S42	Compensation of Right Side Position at Basting This item sets the adjustment amount of the standard sewing position at basting from the center of right over-edging.	-2.0~2.0	0.1mm	Remarks 2 Remarks 3
S44  S44	Basting Speed Set Speed of Basing	400~4200	100rpm	Remarks 3 Remarks 4
S45	Pair-sewing: Select the Start of Sewing。  S45 : Activate  S45 : Deactivate After selecting “Activate”, user can perform the sewing in the order of “Pair Sewing ->Basting-> Normal Sewing”.			
S46  S46	Pair-sewing Width Set the width at pair-sewing.	1.0~10.0	0.1mm	Remarks 2 Remarks 3
S47  S47	Pair-sewing Pitch Set the pitch at pair-sewing.	0.2~5.0	0.1mm	Remarks 2 Remarks 3
S51	Left Parallel Tension Set the needle thread tension at left parallel part.	0~200	1	

No.	Item	Range	Unit	Remarks
 S51				
S52  S52	Right Parallel Tension Set the needle thread tension at right parallel part.	0~200	1	Remark 2
S53  S53	Left Parallel Tension (1 st lap at double sewing) At double sewing, set the needle thread tension at the 1 st lap in the left parallel part	0~200	1	Remarks 2 Remarks 3
S54  S54	Right Parallel Tension (1 st lap at double sewing) At doubling sewing, set the needle thread tension at the 1 st lap in the right parallel part	0~200	1	Remarks 2 Remarks 3
S55  S55	1 st Bar-tacking Tension Set the upper the read tension at the 1 st bar-tacking part	0~200	1	
S56  S56	2 nd Bar-tacking Tension Set the upper the read tension at the 2 nd bar-tacking part	0~200	1	Remark 2
S57  S57	Set Needle Thread Tension at Sewing Start Set the needle thread tension of bar-tacking at sewing start	0~200	1	
S58  S58	Set the Needle Thread Tension at Basting Set the needle thread at basting	0~200	1	Remark 3
S59  S59	ACT Timing Adjustment at 1st Bar-tacking Start This item adjusts the start timing of needle thread tension output at 1st bar-tacking section.	-5~5	1 Stitch	Remark 2
S60  S60	ACT Timing Adjustment at Right Over-edging Start This item adjusts the start timing of needle thread tension output at right over-edging.	-5~5	1 Stitch	Remark 2
S61  S61	ACT Timing Adjustment at 2nd Bar-tacking Start This item adjusts the start timing of needle thread tension output at 2nd bar-tacking section.	-5~5	1 Stitch	Remark 2
S62	Bar-tacking Stitch Number at Sewing Start	0~8	1 Stitch	

No.	Item	Range	Unit	Remarks
 S62	Set the stitch number of bar-tacking sewing at sewing start			
 S63	Bar-tacking Pitch at Sewing Start Set the stitch pitch of bar-tacking sewing at sewing start	0.00~0.70	0.05mm	Remark 2
 S64	Bar-tacking Width at Sewing Start Set the width of bar-tacking sewing at sewing start	0.0~3.0	0.1mm	
 S65	Vertical Adjustment of Bar-Tacking Sewing at Sewing Start Set the vertical start position of bar-tacking sewing at sewing start	0.0~5.0	0.1mm	Remark 2
 S66	Horizontal Adjustment of Bar-Tacking Sewing at Sewing Start Set the horizontal start position of bar-tacking sewing at sewing start	0.0~2.0	0.1mm	Remark 2
 S67	Bar-tacking Width at Sewing End Set the width of bar-tacking sewing at sewing end	0.1~1.5	0.1mm	
 S68	Bar-tacking Stitch Number at Sewing End Set the stitch number of bar-tacking sewing at sewing end	0~8	1 Stitch	
 S69	Vertical Adjustment of Bar-Tacking Sewing at Sewing End Set the vertical start position of bar-tacking sewing at sewing start	0.0~5.0	0.1mm	Remark 2
 S70	Horizontal Adjustment of Bar-Tacking Sewing at Sewing End Set the horizontal start position of bar-tacking sewing at sewing start	0.0~2.0	0.1mm	Remark 2
S81  S81	Knife motion This item sets "With/without motion" of knife。 : Knife Off			

No.	Item	Range	Unit	Remarks
	 : Knife On			
S83	Knife motion at 1st lap of double stitching This item sets "With/without motion" of cloth cutting knife at 1st lap at double stitching  : Knife Off  : Knife On			Remarks 2 Remarks 3
S84	 Max Speed Limitation This item sets max speed of the sewing machine. The value is limited by the K07(Set maximum speed limitation)	400~4200	100rpm	Remarks 4
S86	 Pitch of Forward This item sets sewing pitch at forward side of bar-tacking shape (Shape No. 27, 28, 29 and 30 of S01)	0.200~2.500	0.025	Remarks 1
S87	 Width of Forward This item sets sewing width at forward side of bar-tacking shape (Shape No. 27, 28, 29 and 30 of S01)	0.10~3.00	0.05mm	Remarks 1
S88	 Pitch of Return This item sets sewing pitch at return side of bar-tacking shape (Shape No. 27, 28, 29 and 30 of S01)	0.200~2.500	0.025m m	Remarks 1
S89	 Width of Return This item sets sewing width at return side of bar-tacking shape (Shape No. 27, 28, 29 and 30 of S01)	0.10~3.00	0.05mm	Remarks 1
S91	 Position adjustment on the cut cloth	0~10		

No.	Item	Range	Unit	Remarks
S92 	Adjust the position under the cut cloth	0~10		
S93  : Dense needle closed  : Dense needle open	Density point adjustment:			
S101 	Hardening unit speed setting	400~4200	100rpm	
S102 	The first reinforcement tension is inserted in advance of the number of pins	0~5	1	
S103 	Right parallel tension in advance insertion needle number	0~5	1	
S104 	The second reinforcement tension is inserted in advance of the needle	0~5	1	

Remarks 1: Displayed according to the shape

Remarks 2: Displayed when it is set as activation

Remarks 3: Displayed when the function is selected

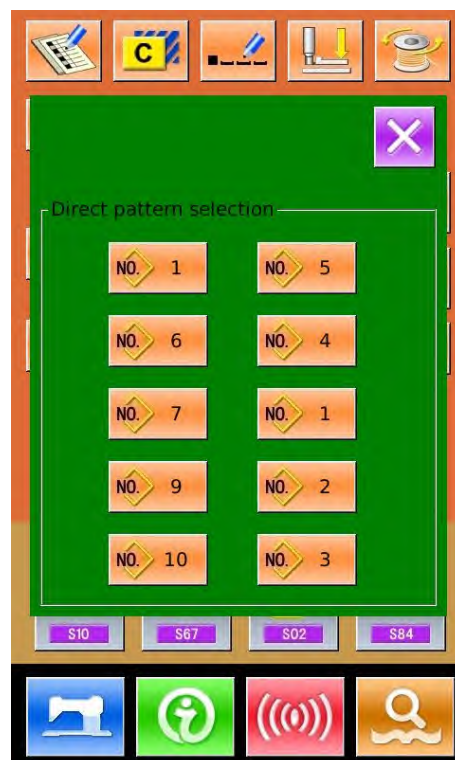
Remarks 4: It is limited by parameter K07

Remarks 5: When change the shape of 1st bar-tacking sewing, user needs to change the sewing parameters of the relating shape. Otherwise it will affect the generation of the pattern-designing data or the sewing effect

4.11 Direct Selection of Pattern

The user can register the 10 frequently used patterns to

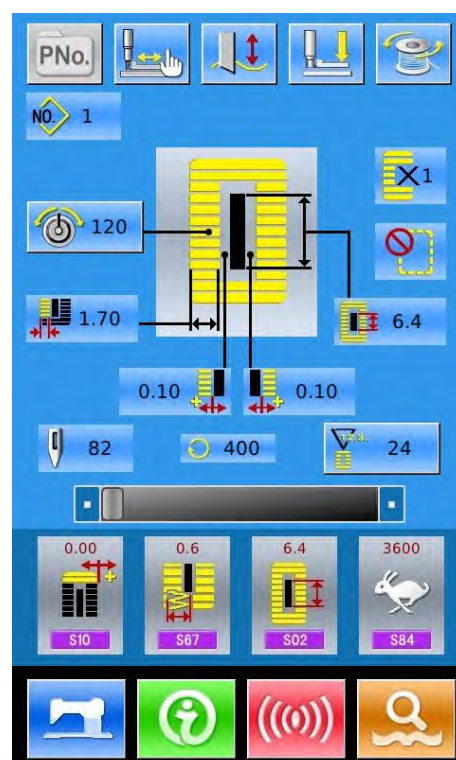
the direct keys for selecting directly, press  to enter the interface of selection as shown below.



4.12 Trial Sewing

(1) Display the interface of sewing

At data input interface, press , the background of screen will change to blue, and the system enters the interface for sewing.



(2) Display of Trial Sewing

In the sewing interface. Press  to enter the trial sewing interface (As Shown at Right):

-  : Return to Origin
-  : Return
-  : Forward
-  : Tension at Stitch Point
-  : Current/ Total Stitch Number
-  : Sewing Order
-  : Thread Trimming Order
-  : Jump Feed Order
-  : Thread Tension Order
-  : Knife Driving Order

(3) Begin Trial Sewing

A、By using ,  and  to start trial sewing (Single Step). Under this mode, step on the pedal switch to start the machine for sewing the leftover stitches.

B、Holding  or  will have system to sew the entire pattern as trial. 长

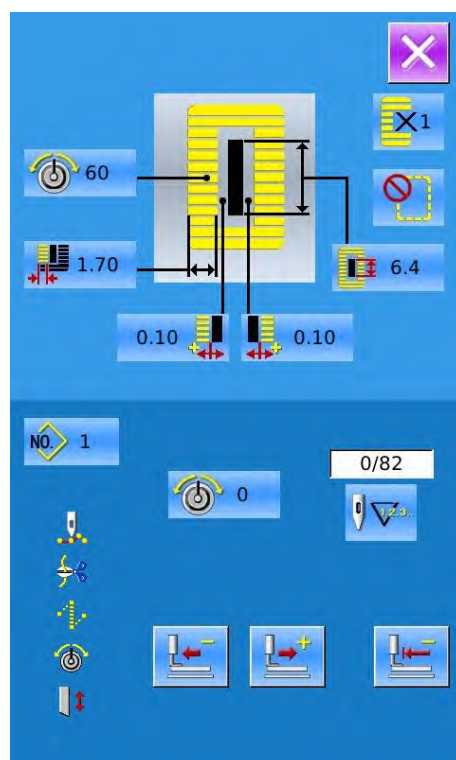
C、During the trial sewing. The relating order marks at left side will be displayed in dark according to the sewing data

Exp: When the sewing data is the thread-trimming,

the figure will turn to .

(4) End Trial Sewing

Press  to quit the interface of trial sewing and return to the sewing interface.



4.13 Set Needle Thread Tension

At Changing the Thread Tension

① Display the Data Input Interface

Only on the data input screen (orange) or sewing screen (blue), needle thread tension can be changed. At the sewing screen (blue), press READY switch and display the data input screen (orange).

② Call the interface for changing the needle thread tension

Press  to display the interface for changing the needle thread tension (as shown in right figure).

③ Change the Needle Thread Tension

At the interface for changing the needle thread tension, user can change the needle thread tension at parallel part and bar-tacking part. By selecting



user can set S51, S52, S55 or S56 respectively, among which the S52 and S56 can be deactivated at Edition of Sewing Data in Mode Status. Press **【Tension 1】** **【Tension 2】** to shift between two tension groups

④ Finish the Change of Needle Thread Tension

Press  to close the interface for changing Needle thread tension. And end the change.

※ **Change the tension other than that at parallel section and bar-tacking section**

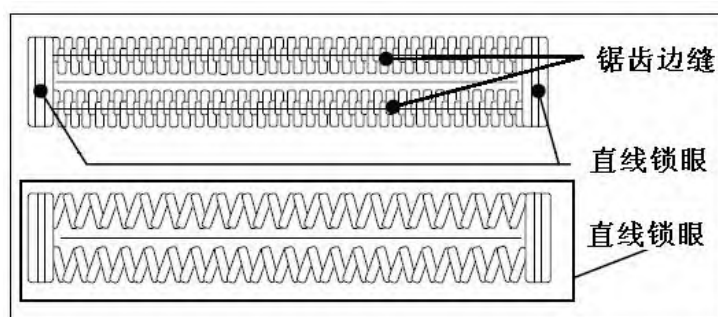
Set value of tension at: 1.Parallel section; 2.Bar-tacking section



	Set value on panel			
		⊕	Initial value	⊖
Zigzag Buttonhole	①Parallel section tension	Crest is lowered	1 2 0	Crest is raised
	②Bar-tacking tension	Down Tension	3 5	Needle Thread Tension
Straight Buttonhole	①Parallel section tension	Down Tension	6 0	Needle Thread Tension
	②Bar-tacking tension	Down Tension	6 0	Needle Thread Tension

In case of the radial eyelet shape, set the bar-tacking tension to approximately 120 and make the balance of stitches

About Zigzag Buttonhole and Straight Buttonhole



Zigzag Buttonhole

It enhances the needle thread tension. It is the zigzag stitch form that pass the center of the stitch form of needle thread at both sides

Straight Buttonhole

It is the retrieval stitch form, which only has needle thread on front surface of fabric, while bobbin thread at backside.

4.14 Operation of Counter

(1) Set Counter

① Display the counter interface

In the sewing interface, press  (), the interface of counter setting comes out.



: Sewing Counter



: No. of Pieces Counter

The user can set the type of counter by choosing



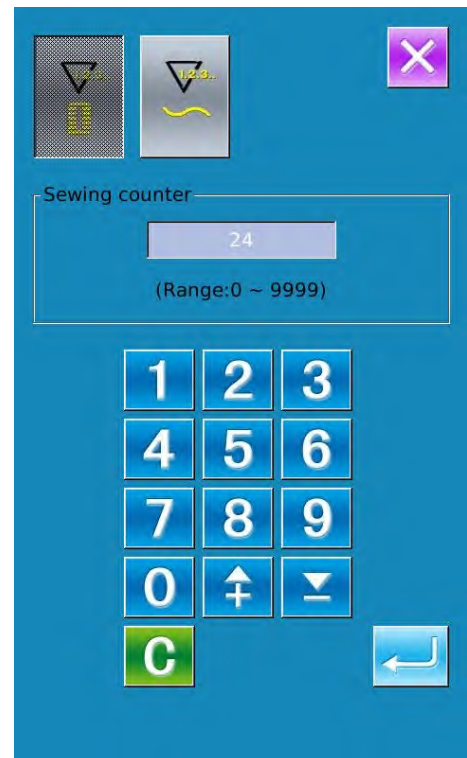
and



, and set the value of counter

A、Press  to activate the setting at return

B、Press  to cancel the operation and return



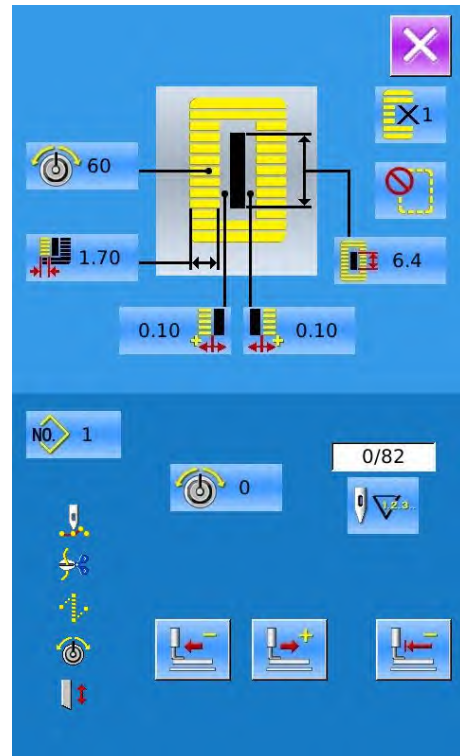
4. 15 Emergency Stop

When STOP switch is pressed during sewing, the sewing machine interrupts sewing and stops. The interface, as the figure at right, is displayed



Press  to release the error. And the interface of single-step motion comes out (shown as the figure at right)

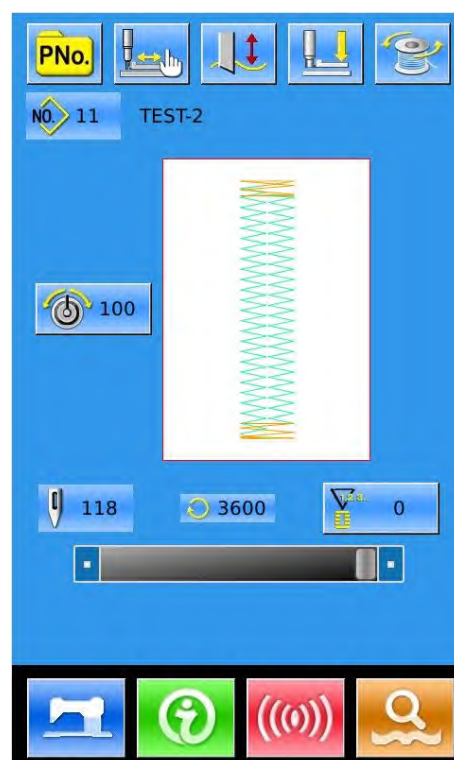
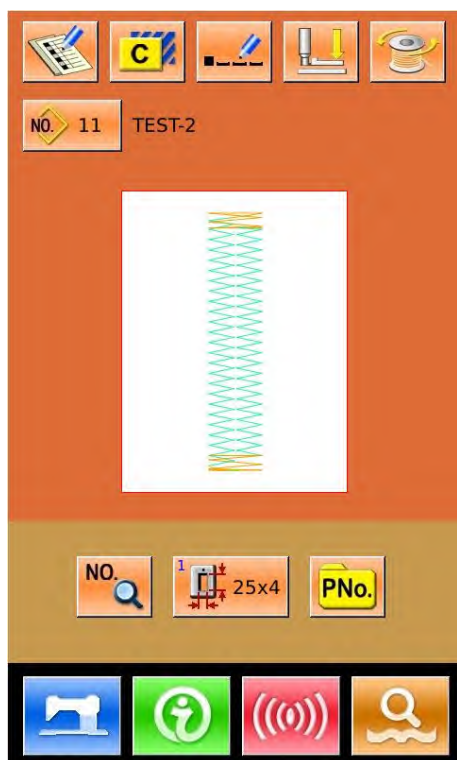
The operation is same as the operations in trial sewing.
Step the pedal and continue the sewing.



4. 16 VDT Pattern Operation

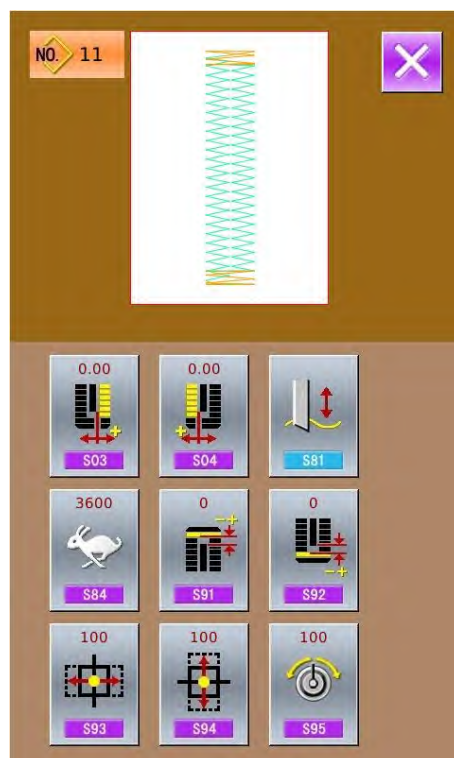
4. 16. 1 Display and Operation of VDT Pattern

User can use the pattern-making software to create the patterns in VDT format. By inputting it from U disk to memory, the user can activate the data input interface and sewing interface as below:



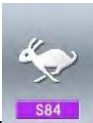
Press  to enter the sewing data setting interface, as shown at right:

Press  to cancel the operation and return to main interface.



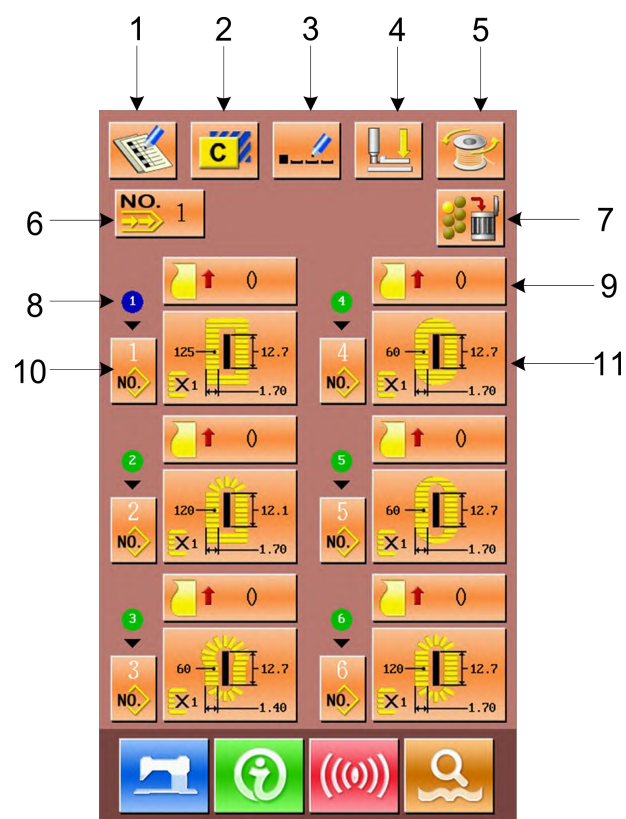
4. 16. 2 Sewing Data of VDT Pattern

Sewing Data List of VDT Pattern:

No.	Item	Range	Unit	Initial Value
 S03	Right Width of Knife Groove Set the interval between the knife and right parallel part.	-2.00~2.00	0.05mm	0
 S04	Left Width of Knife Groove Set the interval between the knife and left parallel part	-2.00~2.00	0.05mm	0
S81	Knife motion This item sets "With/without motion" of knife.  : Knife Off  : Knife On			Knife On
 S84	Max Speed Limitation This item sets max speed of the sewing machine. The value is limited by the K07(Set maximum speed limitation)	400~4200	100rpm	Parameter K07
 S91	1 st Pitch Adjustment	-9~9	1 针	0
 S92	2 nd Pitch Adjustment	-9~9	1 针	0
 S93	Scale Ratio (X Direction)	20~200	1%	100
 S94	Scale Ratio (Y Direction)	20~200	1%	100
 S95	Standard Tension	0~200	1	100

5 Continuous Sewing

This kind of sewing can sew 6 shapes at most without lifting presser. At most, 50 continuous sewing patterns can be registered.



5. 1 Function List

No	Figure	Function	Remarks
1		New Pattern Registration	
2		Pattern Copy	
3		Pattern Naming	
4		Threading	
5		Winding	
6		Select Pattern for Continuous Sewing	
7		Delete All	Delete the entire sub-pattern in the existing continuous pattern
8		Sewing Order	

No	Figure	Function	Remarks
9		Feeding Amount Input	
10		Sub-pattern Selection	
11		Sewing Data Edition	

5. 2 Edition of Continuous Sewing

5. 2. 1 Selection of Continuous Sewing Pattern

Press  to enter the interface for selecting the pattern (as shown in right figure).

Please operate in the following way:

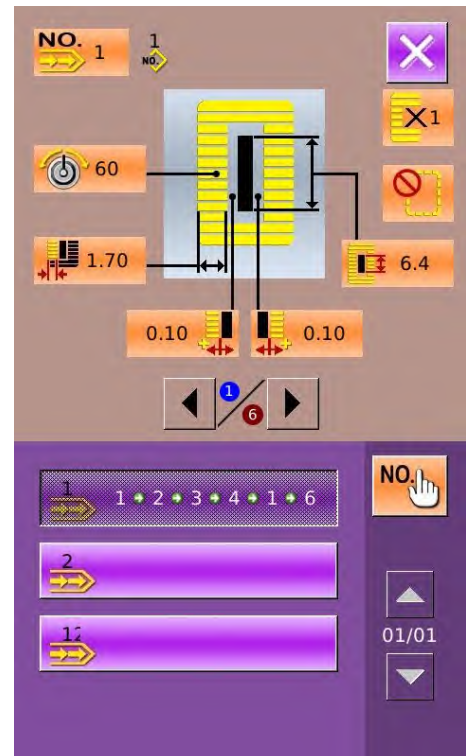
A、Press  &  to look up the information of the registered patterns in continuous stitching.

B、Press  to select pattern via number

C、Press  to delete the selected pattern

D、Select the proper pattern, press  to end the selection and to return the main interface.

E、Press  to cancel the operation and return to main interface



5. 2. 2 Edition of Continuous Sewing Pattern

① Set Cloth-feeding Amount

Press  (In figure 1) to enter the interface for setting the feeding amount (figure 2).

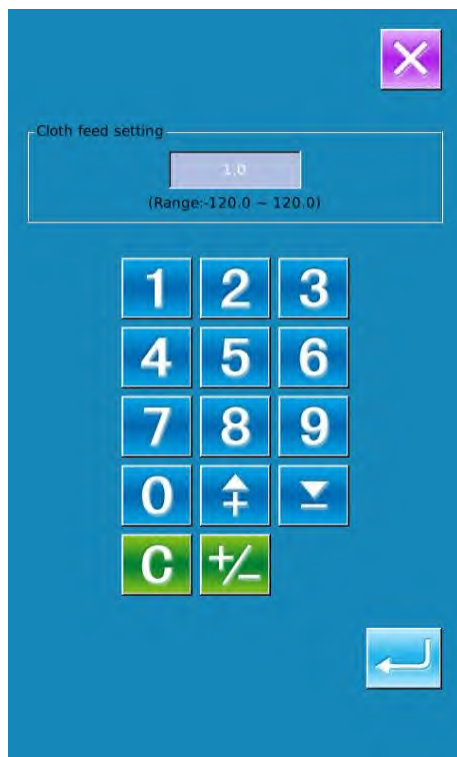


Figure 2

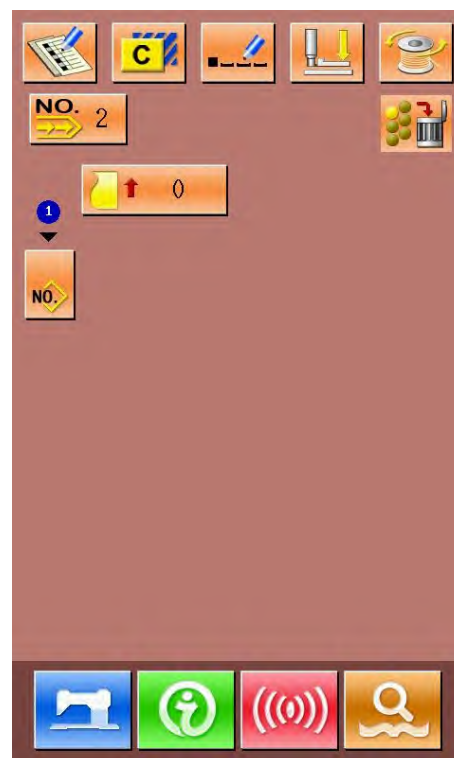


Figure 1

② Select Pattern

Press  to enter the interface for selecting pattern (as shown in right figure)

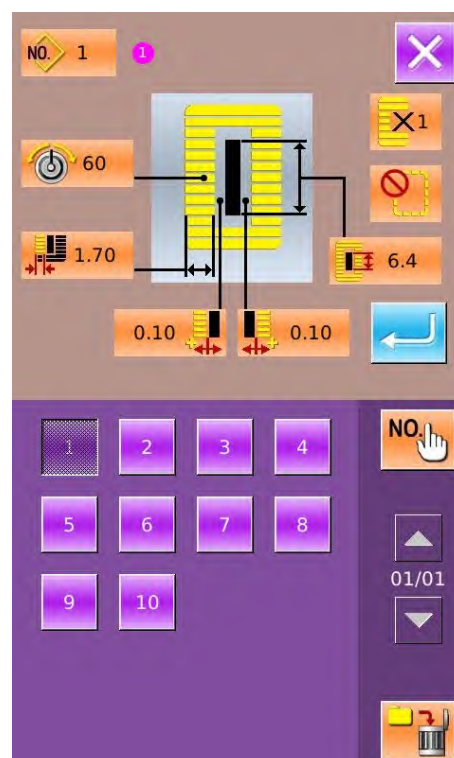
A、In this interface, there are two ways to select pattern:

- Press  to input the pattern number
- Input pattern number directly

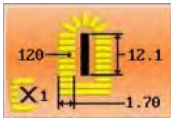
B、Press  to delete the currently selected pattern

C、Press  to cancel the operation

D、Select the proper pattern and press  to confirm it.



③ Change Sewing Data

Press  to enter the interface for setting the sewing data (as shown in figure 2 at right).

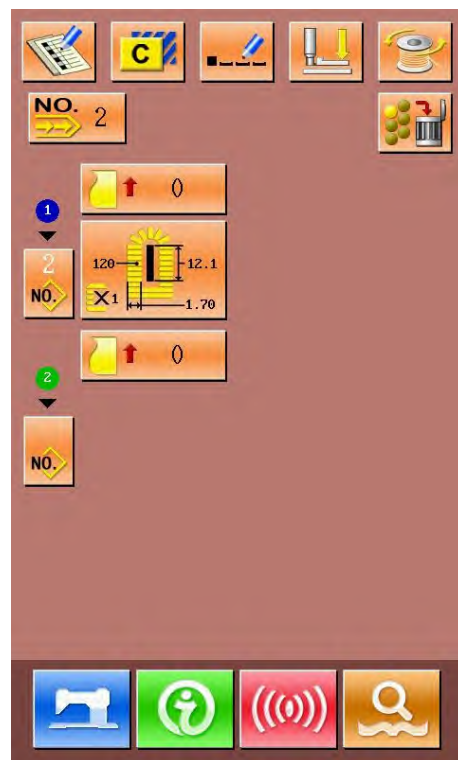


Figure 1

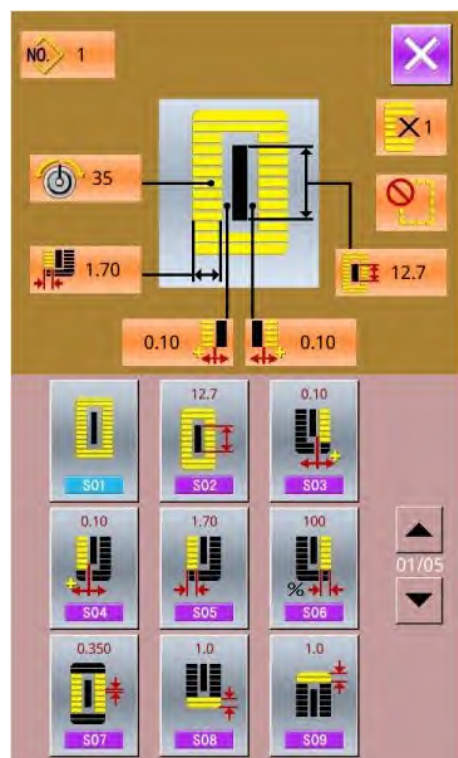


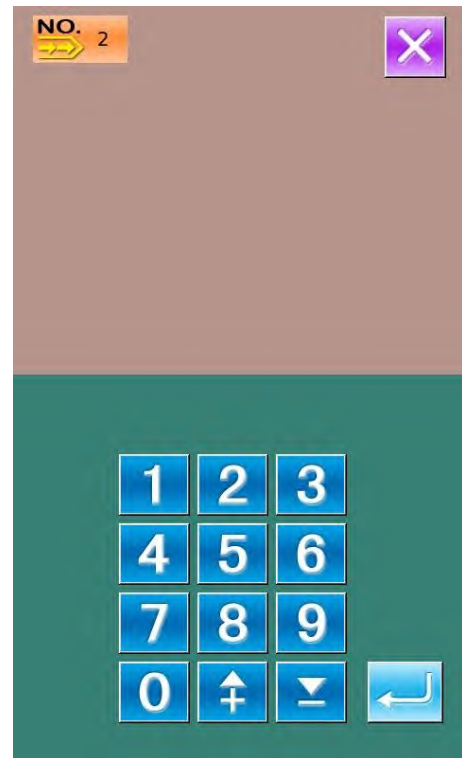
Figure 2

5. 2. 3 Continuous Sewing Pattern Registration

50 continuous patterns can be registered for the most. press  to enter the interface of Pattern Registration (shown as the right figure) :

① Input Pattern No.

Input the number of the pattern via key board. The registered number can't be registered again. By pressing  and , user can search the unregistered number.



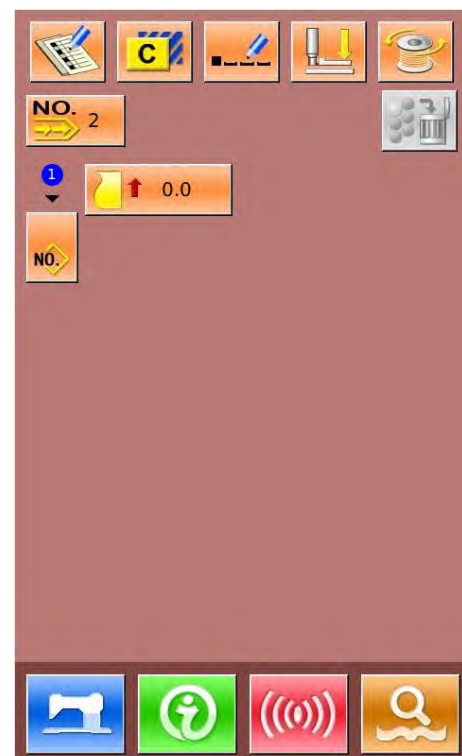
② Edition of Continuous Sewing

After setting the pattern number, please press



to enter the interface for editing the continuous sewing (as shown in right):

For the following operations, please refer to Section “5.2.2”



5. 2. 4 Continuous Sewing Pattern Copy

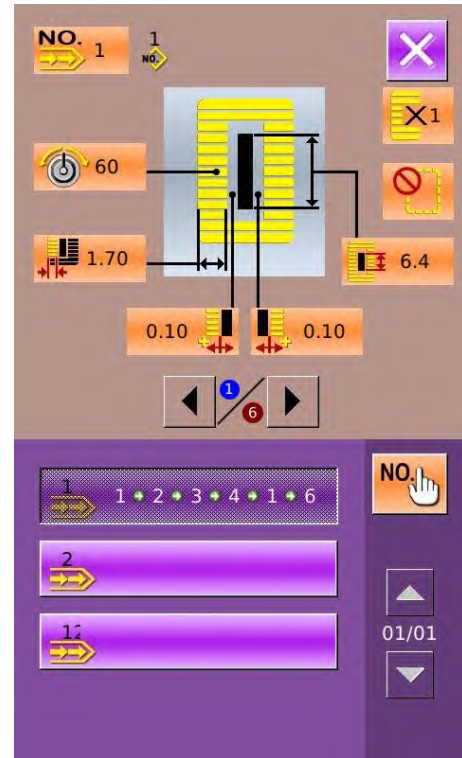
① Select the target pattern

Press  to enter the interface of pattern copy (as shown at right). Among the registered patterns, select the pattern number of the copied one and

press .

Press  and  to check the pattern shape contained in the continuous sewing

Press  to cancel the copy operation



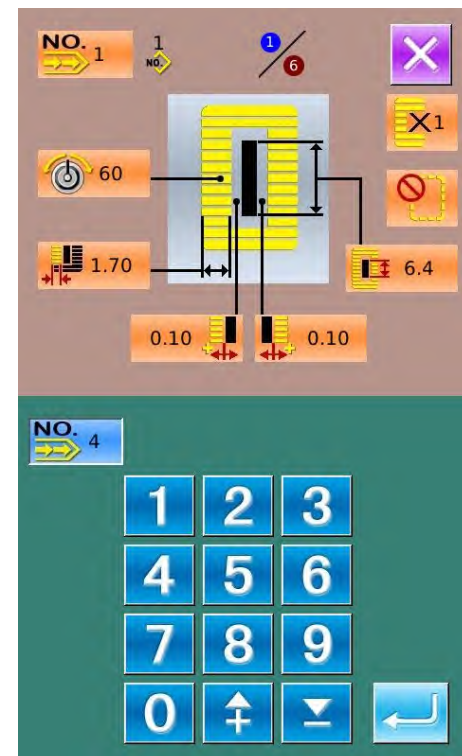
② Input the newly registered pattern number

In the interface, the upper area displays the shape and relevant sewing data of the copied pattern. The user can select the unregistered pattern number via the numeral keys.

Press  to finish the pattern copy operation

Press  to cancel the operation and return to the upper interface

※ The registered pattern number cannot be registered again.

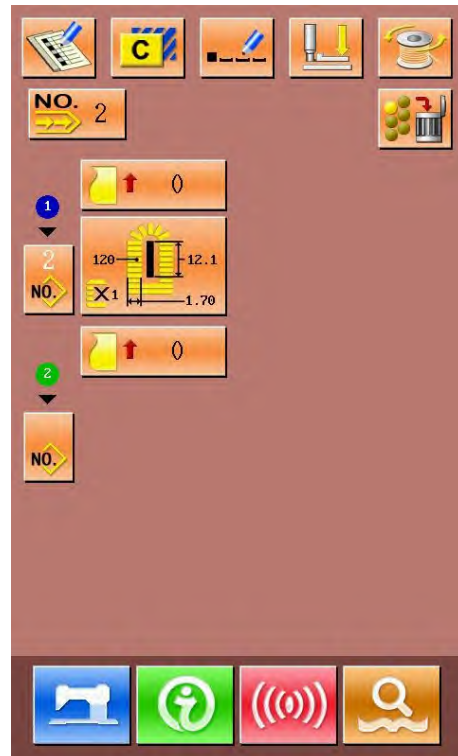


5. 2. 5 Deletion of Continuous Sewing Pattern

① Select the target pattern

Press  to select pattern. Press  to return to the main interface, as shown at right.

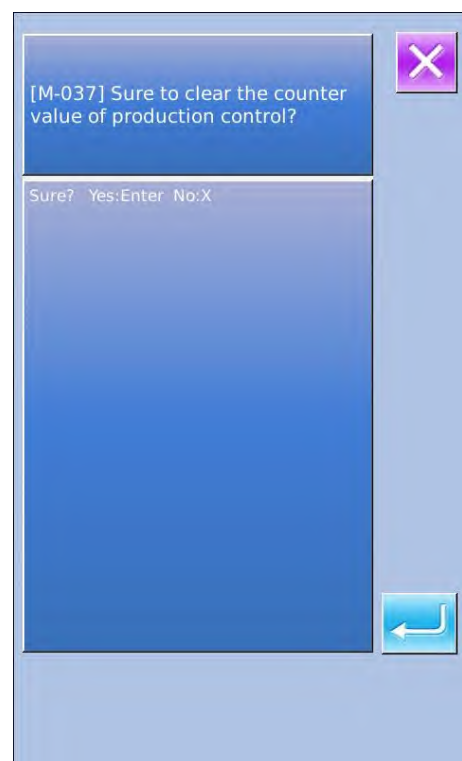
Press  to delete the continuous sewing pattern



② Confirm the Deletion

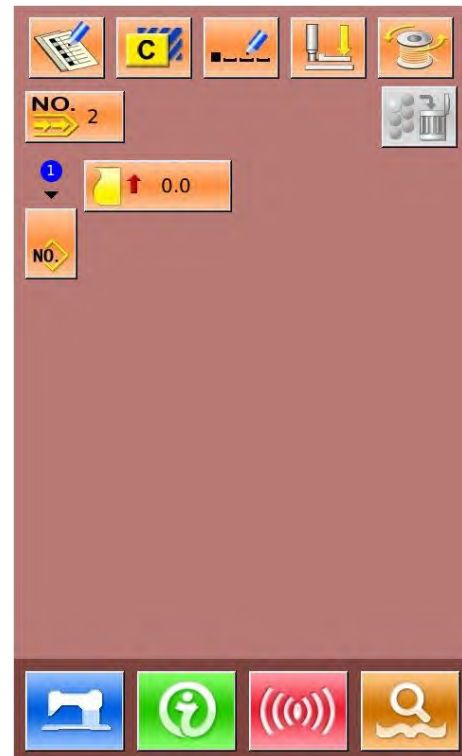
Press  to finish the pattern deletion

Press  to cancel the operation



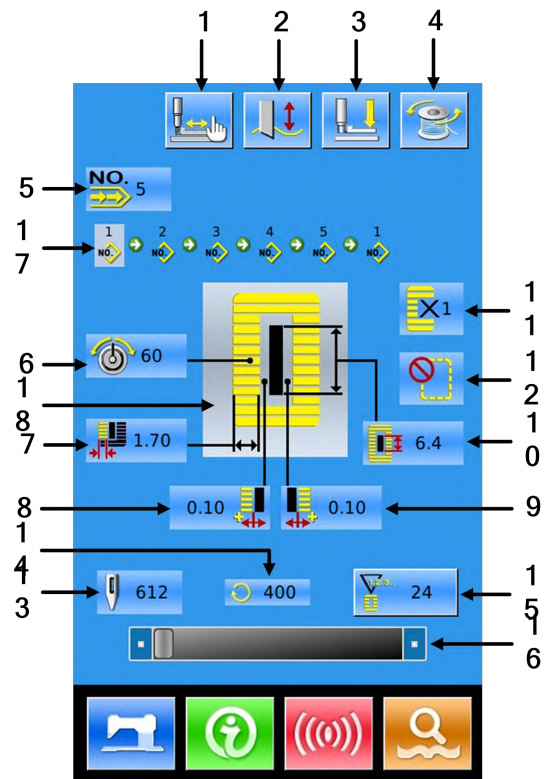
③ Finish the Deletion

After deleting the continuous sewing pattern, user can have system to return to main interface. Then user can edit the pattern again.



5. 3 Continuous Sewing Interface

Press  to enter the interface for sewing (as shown in right figure).



5. 3. 1 Function List

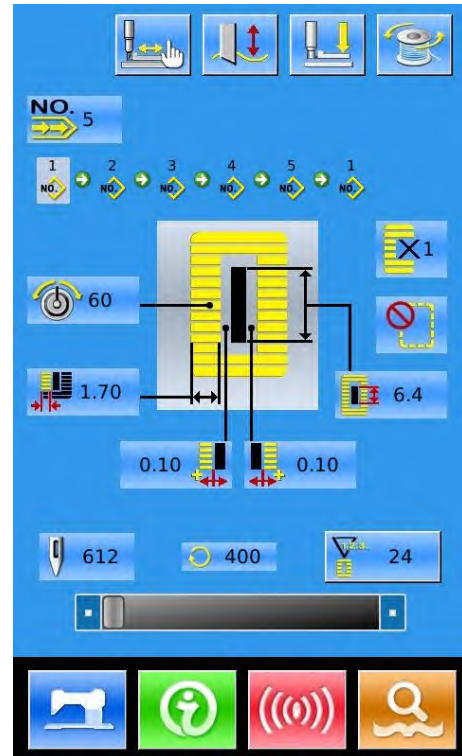
No.	Figures	Functions	Remarks
1		Trial Sewing	
2		Knife Function	Shift knife functions
3		Threading (Presser Down)	
4		Winding	
5		Pattern Number Display	
6		Needle Thread Tension Setting	
7		Left Over-edging Width	
8		Left Width of Knife Groove	

No.	Figures	Functions	Remarks
9		Right Width of Knife Groove	
10		Length of Cloth Cutting	
11		Single Sewing/ Double Sewing	
12		Number of Basting	
13		Stitch Number	
14		Current Sewing Speed	
15		Counter Value  : Sewing Counter  : No. of piece counter	
16		Speed Setting	
17		Pattern Number Input at Continuous Sewing Data	
18		Display of Sewing Shape	

5.3.2 Trial Sewing for Continuous Sewing

(1) Display the interface of sewing

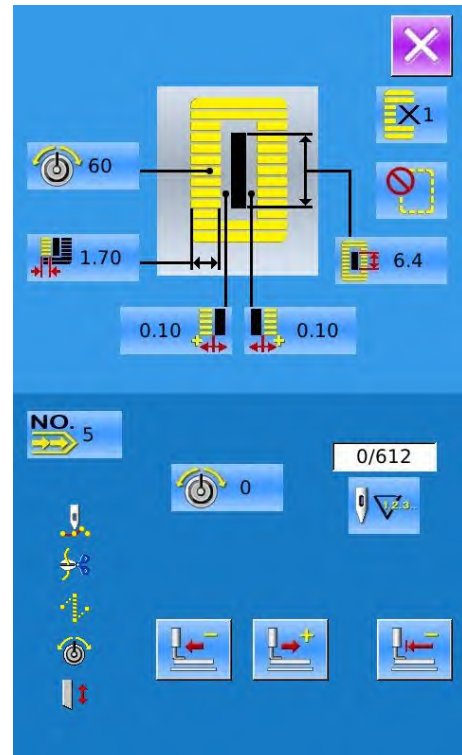
At data input interface, press , the background of screen will change to blue, and the system enters the interface of sewing.



(2) Display of Trial Sewing

In the sewing interface. Press  to enter the trial sewing interface (As Shown at Right):

-  : Return to Origin
-  : Return
-  : Forward
-  : Tension at Stitch Point
-  : Current/ Total Stitch Number
-  : Sewing Order
-  : Thread Trimming Order
-  : Jump Feed Order
-  : Thread Tension Order



 : Knife Driving Order

(3) Begin trial sewing

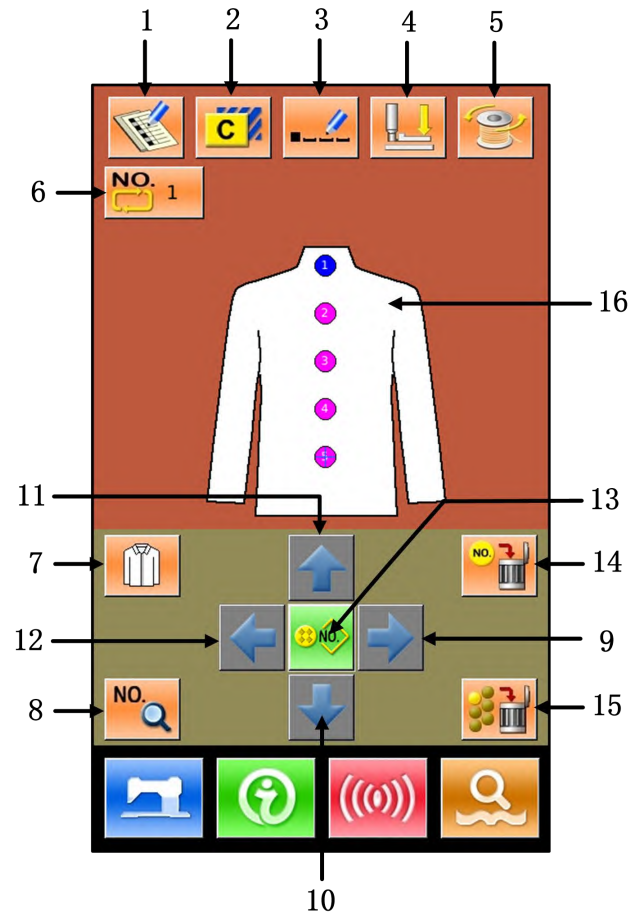
By using ,  and  to start trial sewing. Under this mode, step on the pedal switch to start the machine for sewing the leftover stitches

(4) End trial sewing

Press  to quit the interface of trial sewing and return to the sewing interface.

6 Cyclic Sewing

This function is used to sew several patterns in a cyclic order. User can input as many as 30 shapes within a cyclic sewing pattern. At most, 50 cyclic sewing patterns can be registered.



6. 1 Function List

No	Figure	Function	Remarks
1		New Pattern Registration	
2		Pattern Copy	
3		Pattern Naming	
4		Threading	
5		Winding	
6		Select Pattern for Cyclic Sewing	

No	Figure	Function	Remarks
7		Selection of Fabric	
8		Sewing Data Change	
9~12		Direction Key	
13		Pattern Selection	
14		Delete Sub-pattern	Delete the sub-pattern covered by icon
15		Delete All Sub-pattern	Enable to delete the entire sub-pattern within the current cyclic sewing
16		Sewing Order	

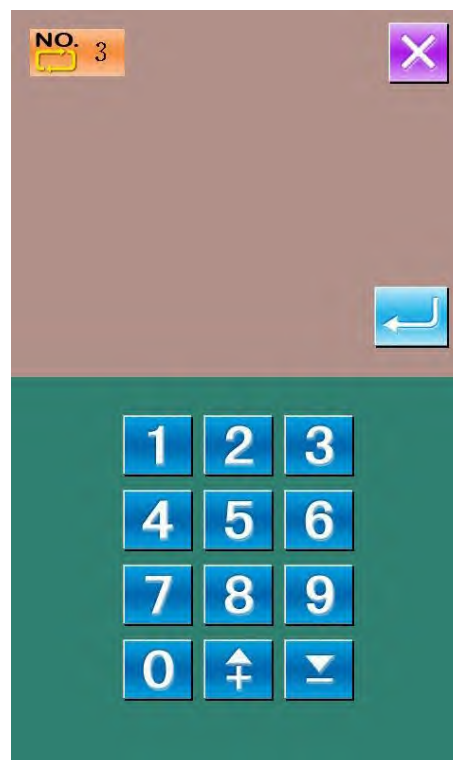
6. 2 Edition of Cyclic Sewing

6. 2. 1 Pattern Registration

Input the pattern number via number keyboard

Press  to end selection

Press  to quit selection



6. 2. 2 Pattern Copy

① Select the target pattern

Press  to enter the interface of pattern copy (as shown at right). Among the registered patterns, select the pattern number of the copied one and

press .

Press  to quit the copy operation.

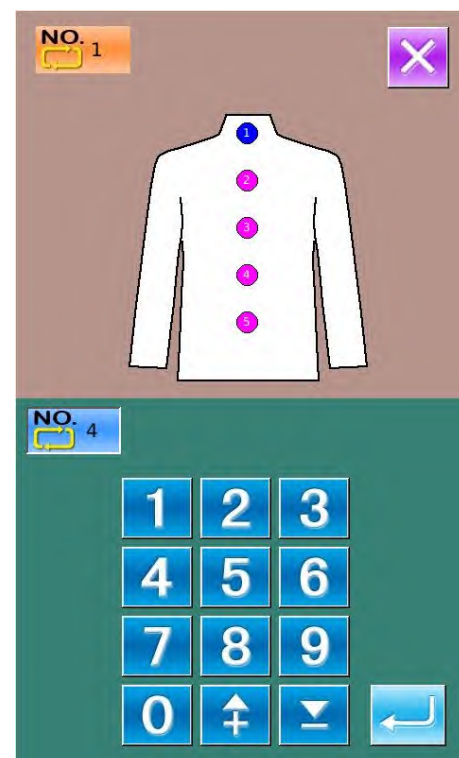


② Input the newly registered pattern number

In the interface, the upper area displays the shape and relevant sewing data of the copied pattern. The user can select the unregistered pattern number via the numeral keys. But the registered pattern number cannot be registered again.

Press  to finish the pattern copy operation

Press  to quit

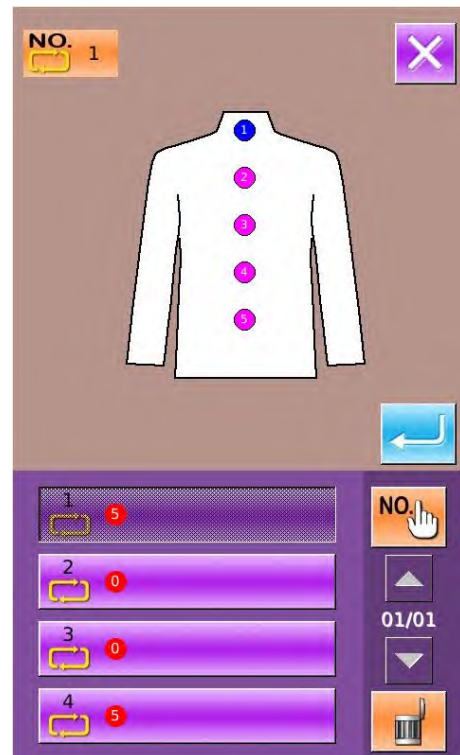


6. 2. 3 Selection of Cyclic Sewing Pattern

Press  to enter the interface for selecting the cyclic sewing pattern (as shown in right).

The operation is same to the operation of normal pattern selection.

Press  to quit the pattern selection



6. 2. 4 Edition of Cyclic Sewing Pattern

① Start Edition

Press the direction key  to select the position wanted, press  to enter the interface of pattern selection (as shown in right figure).



② Pattern Selection



: Input number to inquire patterns



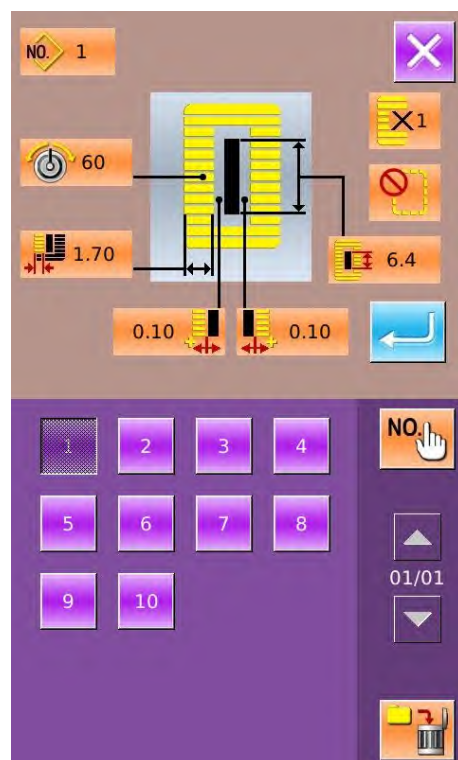
: Delete the pattern



: Shift to selection of patterns for continuous sewing

Select the proper pattern and press  to end the selection.

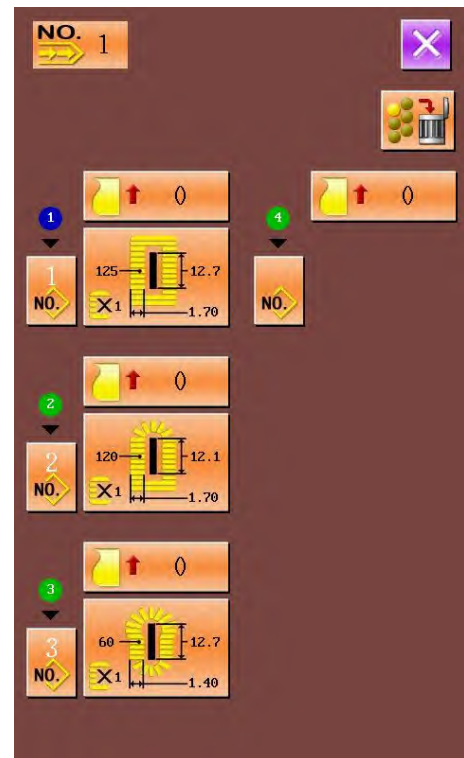
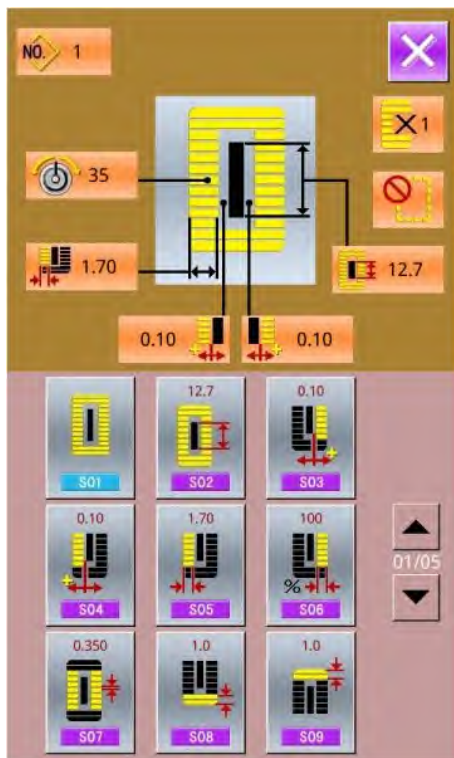
Press  to quit directly.



③ Change Sewing Data

Move the icon to the target position, press  to enter the interface for sewing data setting (as shown the

figure below). Press  to quit the relating sewing data change interface.



6. 2. 5 Change Fabric

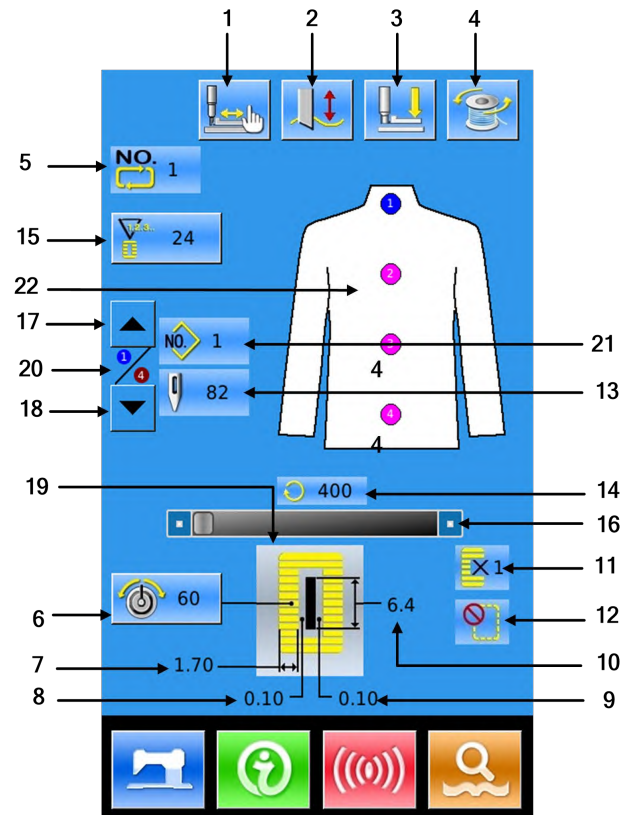
Press  to enter the interface for selecting the fabric (as shown in right figure). In this section, the user can modify the reference design in the interface of sewing data input.

Press  to quit; Press  to confirm the selection



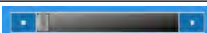
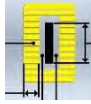
6. 3 Cyclic Sewing Interface

Press  to enter the sewing interface (as shown in right)



6. 3. 1 Function List

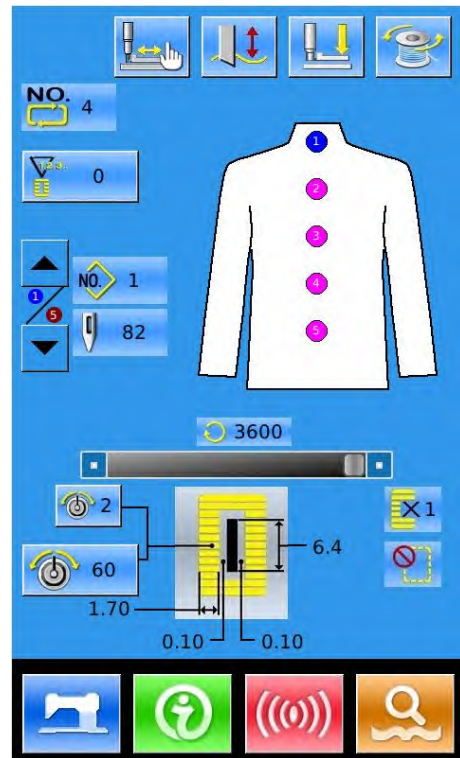
No.	Figures	Functions	Remarks
1		Trial Sewing	
2		Knife Function	Shift the knife activation
3		Threading (Presser Down)	
4		Winding	
5		Pattern Number Display	
6		Needle Thread Tension Setting	
7		Left Over-edging Width	
8		Left Width of Knife Groove	

No.	Figures	Functions	Remarks
9		Right Width of Knife Groove	
10		Length of Cloth Cutting	
11		Single Sewing/ Double Sewing	
12		Number of Basting	
13		Stitch Number	
14		Current Sewing Speed	
15		Counter Value  : Sewing Counter  : No. of piece counter	
16		Speed Setting	
17		Sewing Order Reverse	Return to the previous sewing order
18		Sewing Order Forward	Go to next sewing order
19		Sewing Shape	
20		Sewing Order at Work	
21		Pattern Number at Current Sewing	
22		Sewing Order	

6. 3. 2 Trial Sewing at Cyclic Sewing

(1) Display Sewing Interface

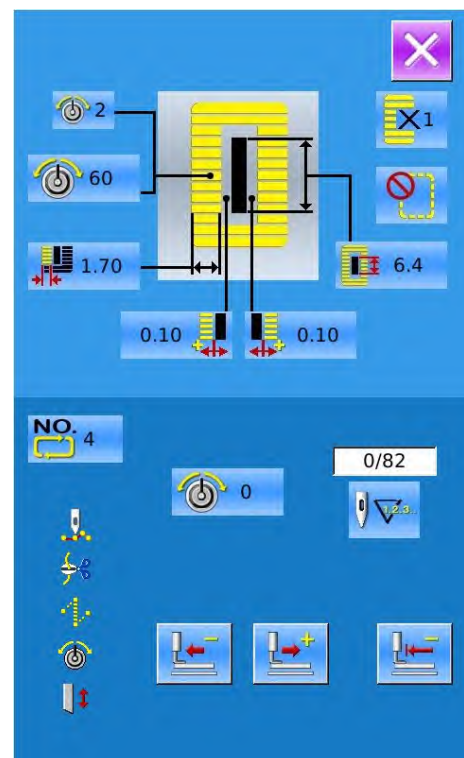
At data input interface, press , the background of screen will change to blue, and the system enters the interface of sewing.



(2) Display of Trial Sewing

In the sewing interface. Press  to enter the trial sewing interface (As Shown at Right):

-  : Return to Origin
-  : Return
-  : Forward
-  : Tension at Stitch Point
-  : Current/ Total Stitch Number
-  : Sewing Order
-  : Thread Trimming Order
-  : Jump Feed Order
-  : Thread Tension Order



 : Knife Driving Order

(3) Start Trial Sewing

By using ,  and  to start trial sewing. Under this mode, step on the pedal switch to start the machine for sewing the leftover stitches

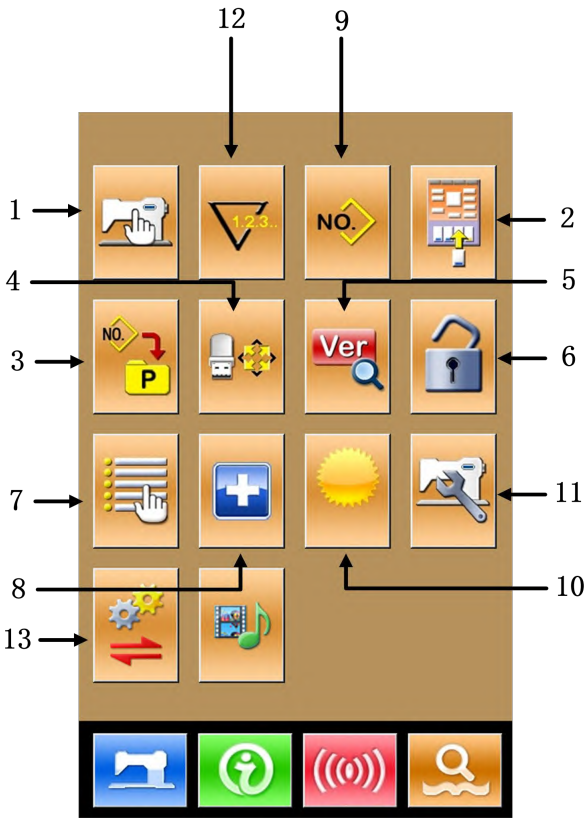
(4) End Trial Sewing

Press  to return to the sewing interface from trial sewing interface

7 Mode Setting

Press  to shift between the Data Input Interface and Mode Interface (as shown in the right figure), and the detailed edition and setting can be carried out under this interface.

Note: For some button, user has to hold  to open them.



7. 1 Function List

No	Figure	Function	Remarks
1		Level 1 Parameter Setting	
2		Sewing Data Edition	
3		P Pattern Setting	
4		Initialization	
5		Software Version Inquiry	
6		Keyboard Lock	
7		User Management Setting	
8		Test Mode	
9		Sewing Type Setting	
10		Brightness Adjustment	
11		Level 2 Parameter Setting	
12		Counter Setting	
13		Parameter Back-up & Recovery	

7.2 Level 1 Parameter Setting

① Set Parameter

Select  to enter the interface of Level 1 parameter setting (shown as the figure at right).

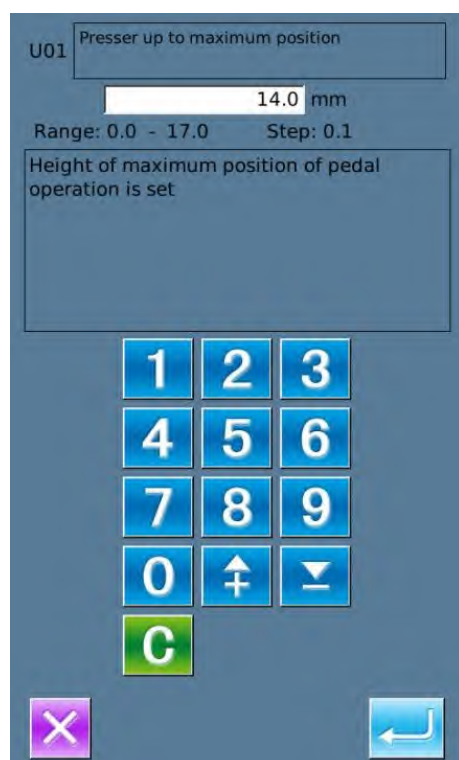
Press  to quit the setting interface

When some parameters are changed, the system will display the “Modified” in the parameter setting interface.

Select the parameter for changing; Then the system will enter the setting status. The parameters are separated as “Data Input Type” and “Selection Type”. Please refer to the example at below:



Select U01 and enter the interface below



Select U19 and enter the interface below:



② Parameter Encryption

A、Press “Encryption” to enter the password input interface.

Press  to clear all the content

Press  to erase one figure at each pressing

B、Input the right password to enter the interface for parameter encryption

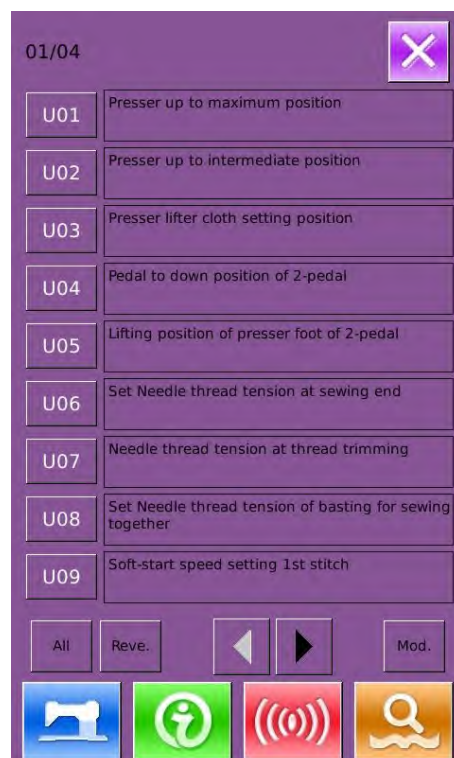
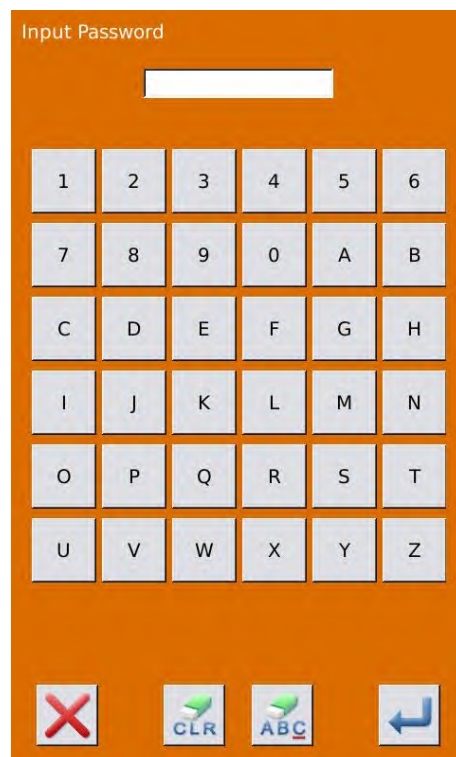
Select the parameter for encryption

Press **【Select All】** to attach password to all the parameters

Press **【Reverse】** to select parameter for encryption in reverse way

Press **【Change】** to change the password, the default is the manufacturer ID

Press  to quit the encrypting function



③ Check the changed parameters

A、When parameter is changed, the system will display “Modified” key at parameter setting interface.

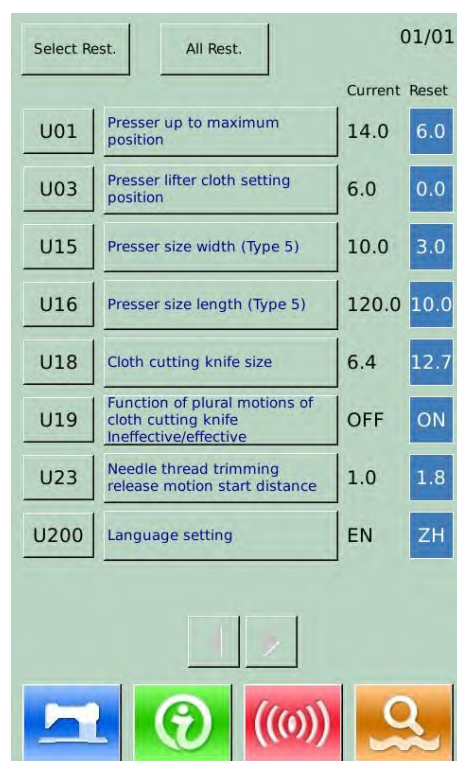
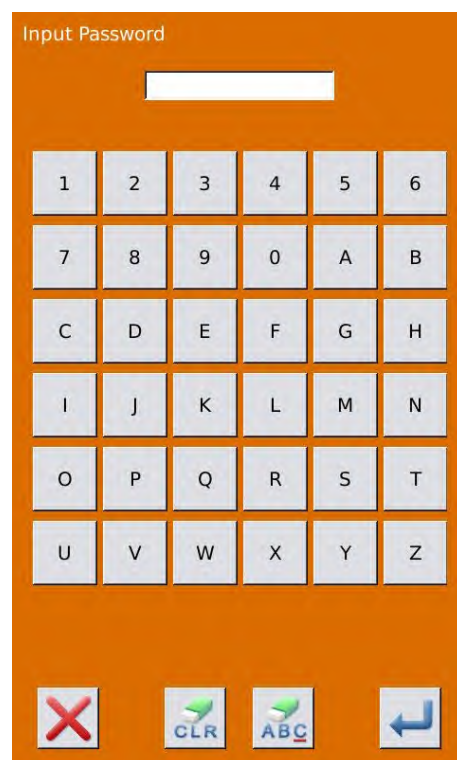
B、In the parameter setting interface, press **【 Modified 】** to check the changed parameters.

At first, the system will ask user to input the password. For the operation at password input interface, please refer to the “A” at ②. After inputting the right password, user can enter the interface for inquiring changed parameters.

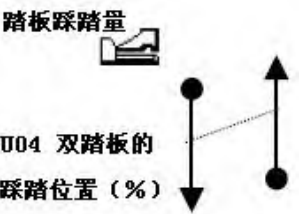
C、Under the interface of changed parameter inquiry, user can find the list containing all the changed parameters with their current value and default value.

In that interface:

- Press **【 All Rest 】** will restore all the changed parameters to their default values
- Click Parameter Name, like **【 Presser Type 】** and then press **【 Select Rest. 】** to restore this parameter to the default value. User can select many parameters at here.
- Press Parameter Number, like **【 U14 】** to enter the parameter setting interface, where user can reset the parameter value.
- When the pages are more than one, user can use arrow key to turn the page.
- Press  to quit the interface.



List of Level 1 Parameters

No.	Parameter	Range	Unit	Default value
U01	Presser up to maximum position Height of maximum position of pedal operation is set.	0~17.0	0.1mm	14.mm
U02	Presser up to intermediate position Height of intermediate position of pedal operation is set.	0~14.0	0.1mm	6.0mm
U03	Presser lifter cloth setting position Height of cloth at of pedal operation is set.	0~14.0	0.1mm	0
U04	Down position of 2-pedal (%) Set the operation of the 2-pedal	5~95	1%	80%
U05	Lifting position of presser foot of 2-pedal Operation of 2-pedal is set 踏板踩踏量  U04 双踏板的 踩踏位置 (%)	5~95	1%	50%
U06	Set needle thread tension at sewing end	0~200	1	10
U07	Needle thread tension at thread trimming	0~200	1	40
U08	Needle thread tension at basting	0~200	1	60
U09	Soft-start speed setting 1st stitch	400~4200	100rpm	800rpm
U10	Soft-start speed setting 2nd stitch	400~4200	100rpm	800rpm
U11	Soft-start speed setting 3rd stitch	400~4200	100rpm	2000rpm
U12	Soft-start speed setting 4th stitch	400~4200	100rpm	3000rpm
U13	Soft-start speed setting 5th stitch	400~4200	100rpm	3600rpm
U14	Type of presser (Type 1, 2, 3, 5) 1: 25 x 4 2: 35 x 5 3: 41 x 5 5: User Defined	1, 2, 3, 5		Type 1
U15	Presser size width (Type 5) When U14 is set at type 5, user can input the width.	3.0~10.0	0.1mm	3.0mm
U16	Presser size width (Type 5) When U14 is set at type 5, user can input the length.	10.0~120.0	0.5mm	10.0mm
U17	Sewing start position (Feeding direction) Set the sewing start position to the presser. Set this item when starting position needs to move due to overlapped section or the like	2.5~110.0	0.1mm	2.5mm
U18	Cloth cutting knife size	3.0~32.0	0.1mm	12.7mm
U19	Function of plural motions of cloth cutting knife	ON、OFF		ON
U20	Thread Breakage Detection	ON、OFF		ON
U21	Selection of presser position at the time of	UP、DN		UP

No.	Parameter	Range	Unit	Default value
	ON of READY key Set presser foot position when READY key is pressed UP: Up DN: Down			
U22	Selection of presser position at sewing finish. Set presser foot position when sewing is completed. (only effective at single pedal type) UP: Up DN: Down	UP、DN		UP
U23	Needle thread trimming release motion start distance Input the distance for needle thread trimmer motor to release the trimmer at sewing start.	0~15.0	0.1mm	1.5mm
U24	Bobbin thread trimming release motion start distance Input the distance for bobbin thread trimmer motor to release the trimmer at sewing start.	0~15.0	0.1mm	1.5mm
U25	Counter updating unit Update Unit in sewing counter	1~30	1	1
U26	Forbid Changes at Counter	ON、 OFF		OFF
U27	Operation of machine at counter reaching set value	ON 、 OFF		OFF
U49	Light Brightness Adjustment	0-5	1	0
U50	Voice of Buzzer OFF: Buzzer off PAN: Control Panel Voice available ALL: Voice of Control Panel and buzzer available	OFF、 PAN、 ALL		ALL
U100	Back Light Auto Off OFF: No Auto Off ON: Auto Off	ON、 OFF		OFF
U101	Back Light Off Wait Time	1~9	1	3s
U102	Volume	30-63	1	50
U200	Language Setting	Chinese, English, Turkish 、 Vietnamese, Spanish, Korean		Chinese
U201	Select Language at Power-on	ON、 OFF		OFF
U210	Press cylinder operating time	0~30	1	0
U211	Feeding cylinder operating time	0~200	1	0
U220	Tension control mode	0~3	1	1
U221	Seam tension adjustment	0~200	1	0
U222	AT synchronous adjustment	0~200	1	0

No.	Parameter	Range	Unit	Default value
U223	Press foot drop pedal stroke adjustment	-100~100	1	0
U224	Presser foot running pedal formation adjustment	-100~100	1	0
U298	DIP1	-100~100	1	0
U299	DIP2	-100~100	1	0

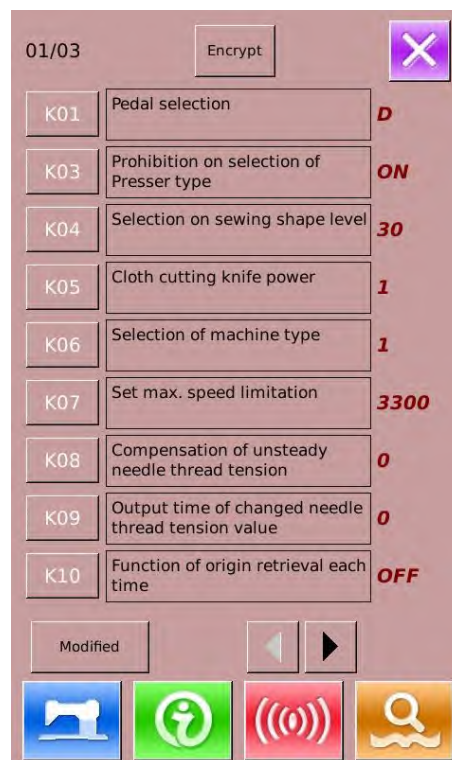
7.3 Level 2 Parameters Setting

① Set Parameter

In the interface of Mode Setting Level 3, press  to enter the interface for setting parameters of Level 2 (as shown in the right figure). For the operation methods, please take the description in 7.2 Level 1 Parameter Setting for reference

When some parameters are changed, the system will display the “Modified” in the parameter setting interface.

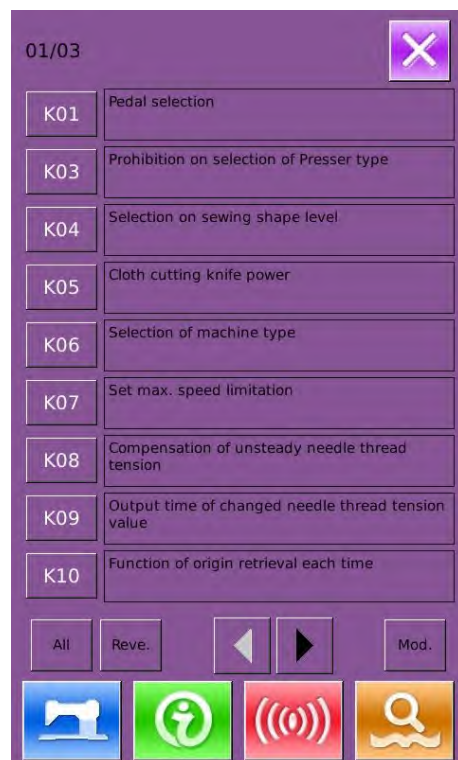
Press  to quit the parameter setting interface



② Parameter Encryption

For the steps of the parameter encryption, please refer to “7.2 Level 1 Parameter Setting”.

Press  to quit the parameter encryption interface.



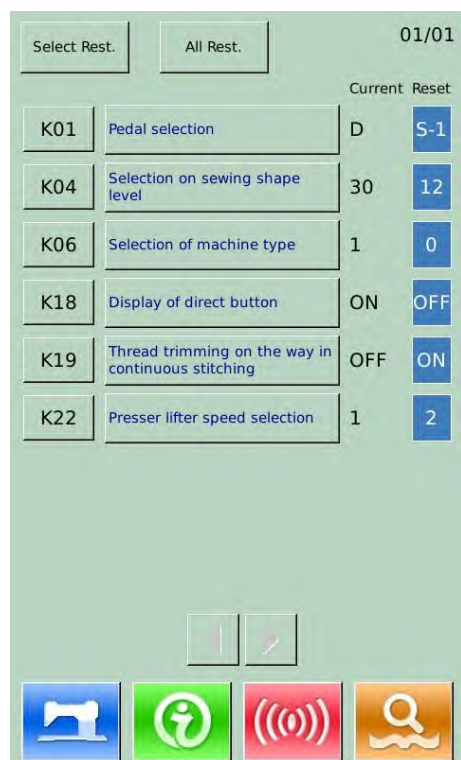
③ Check the changed parameters

When parameter is changed, the system will display “Modified” key at parameter setting interface

In the parameter setting interface, press **【Modified】** to check the changed parameters.

User can also reset the parameters here.

For the specific operation, please refer to “7.2 Level 1 Parameter Setting”



List of Level 2 Parameter

No.	Parameter	Range	Unit	Default value
K01	Pedal Selection D: Double Pedal S-1: Single Pedal (No middle position) S-2: Single Pedal (With middle position) S-3: Analog single pedal (no middle position) S-4: Analog single pedal (with middle position) S-5: Simulated single pedal (with return pedal) S-6: Digital dual pedal S-7: Simulated single pedal (with anti-pedal emergency stop)	D、 S-1、 S-2 S-3 S-4 S-5 S-6 S-7		S-3
K03	Prohibition on selection of Presser type OFF: Prohibit to change ON: Permit to change	ON、OFF		ON
K04	Selection on sewing shape level (12/20/30)	12/20/30/31		0
K05	Cloth cutting knife power Set output power of cloth cutting knife	0~10	1	1
K06	Selection of machine type (0-Standard type, 1-Non-oil Type)	0~1	1	0
K07	Set max. speed limitation When K06 Selection of machine type is set to non-oil type, max speed is automatically limited to 3,300 rpm. ※Protected by password	400~4200	100rpm	3600rpm
K08	Compensation of unsteady needle thread tension Output value of needle thread tension is wholly compensated.	-30~30	1	0
K09	Output time of changed needle thread tension value When data related to needle thread tension is changed, the changed value is output only at the set-up time.	0~20	1s	0
K10	Search origin at each time Search origin at each sewing end OFF: NO 1: After Sewing End 2: After Cycle End 3: Bottom cut to find the origin	OFF、1、2、3		OFF
K11	Needle up by reverse run When U01 Presser lifter maximum position is set to 14.0 mm or more, needle can be lifted by reverse run automatically and the machine stops. Prohibition of the motion can be set OFF: Forbidden ON: Permitted	ON、OFF		ON
K12	Set knife solenoid lowering time	25~100	5ms	35
K15	Y-feed motor origin compensation	-120~400	1 Pulse	0
K16	Needle-rocking motor origin compensation	-10~10	1 Pulse	0
K17	Presser lifter motor origin compensation	-100~10	1 Pulse	0

No.	Parameter	Range	Unit	Default value
K18	Display of direct button OFF: Not Display ON: Display	ON、OFF		OFF
K19	Thread trimming on the way in continuous stitching In case of prohibited, jump feed setting becomes invalid, and the registered pattern is sewn at the same position. Then multi-sewing is possible OFF: Prohibition ON: Permission	ON、OFF		ON
K20	Change of cloth cutting knife return power This item sets output power at the time of returning the cloth cutting knife.	0~3	1	0
K21	Release amount of bobbin thread trimmer at the start of sewing This item sets the amount of releasing the bobbin thread trimmer at the start of sewing。	1~15	1	8
K22	Presser lifter speed selection	1~3	1	1
K24	Shearing power	0~10	1	0
K25	Cutting Origin Adjustment	-100-100	1	0
K28	Transfer Speed Setting	1-5	1	3
K29	Upper Thread Trimming Speed Setting	0-4	1	1
K30	Abnormal detection position of the presser foot	0~10	1	7.5
K32	Bottom line cut speed selection	0~3	1	1
K150	Safety Switch	0-1	0	1
K189	Adjustment of Thread-breakage Detection Sensitivity	1~10	1	3
K190	Adjustment on sensitivity of button	1~5	1	3
K200	Restore to original parameters ※ Protected by Password			
K202	Machine Type Setting	0~4	1	0
K227	Spindle motor type 0: 0830-F11 1: 0830-F01 2: 0830-F21	0、1、2		2
K228	Stepper motor type 0: 400 1: 1000	0、1		1

7. 4 Counter Setting



Press  to enter the interface for counter setting(as shown in the right figure)

Operation Steps:

① Select Sewing Counter Type

Select Sewing Counter or No. of Pcs Counter

② Set the Current Value and Setting Value

At the selected type, press the “Current” or “Setting” to perform the relating operation.

③ Select Up Counter or Down Counter

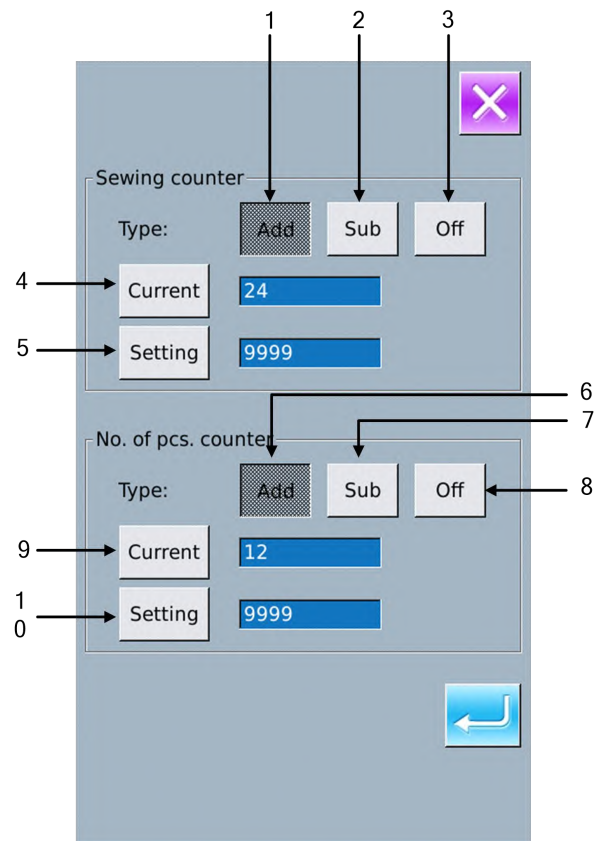
At the selected type, please press “Up” and “Down” to perform the relating operations.



Press  to quit counter setting interface



Press  to finish setting and quit.



Sewing UP Counter :

Every time the sewing of one shape is performed, the existing value is counted up 1. When the existing value is equal to the set value, the interface of counter exceed warning will be displayed. Press  to restore the existing value to 0

Sewing DOWN Counter :

Every time the sewing of one shape is performed, the existing value is counted down 1. When the existing value is reached to "0", the interface of counter exceed warning will be displayed. Press  to restore the existing value to the set value.

No of piece UP counter :

Every time a cyclic sewing or a continuous sewing is performed, the existing value is counted up 1. When the existing value is equal to the set value, the interface of counter exceed warning will be displayed. Press  to restore the existing value to 0

No of piece DOWN counter:

Every time a cyclic sewing or a continuous sewing is performed, the existing value is counted down 1. When the existing value is reached to "0", the interface of counter exceed warning will be displayed. Press  to 91

restore the existing value to the set value.

④ **Turn Off Counter**

At the selected counter type, press “Off” to turn off the counter

7. 4. 1 Functions

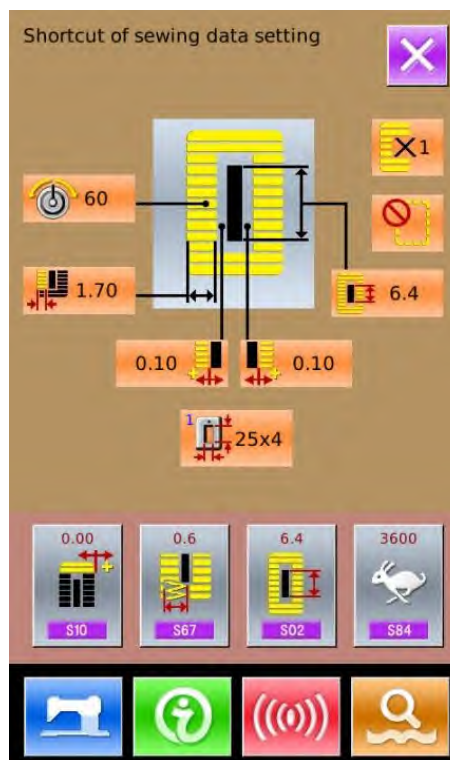
No.	Function	Remarks
1	Sewing Add Counter	
2	Sewing Down Counter	
3	Sewing Counter Off	
4	Set Current Sewing Counter Value	
5	Set the Setting Value of Sewing Counter	
6	No.of Pcs Add Counter	
7	No.of Pcs Down Counter	
8	No.of Pcs Counter Off	
9	Set Current No.of Pcs Counter Value	
10	Set the Setting Value of No.of Pcs Counter	

7. 5 Settings on User Management

Register parameters which are frequently used to Management button and use them.



Press  to enter user management setting interface (shown as the right figure)



① Register to Management Button

The management buttons can be registered up to four buttons. Four management register buttons are displayed on the screen. When the button located on the position you desire to register is pressed, the sewing data selection screen is displayed. (as shown in right figure)

Press  to quit the interface for setting the customer management.

Select the sewing data you wish to register,

press  to end the operation of registration. The newly registered sewing data will be displayed on the user management button

② Original State of Registration

The following items have been registered in order (from the left to the right) at the time of your purchase





: Pitch at parallel section;



: Compensation of bar-tacking width, left



: Compensation of bar-tacking width,
right;



: Setting of needle thread tension at the
start of sewing

7. 6 Edition of Sewing Data

Some sewing data can be set to be opened, press



to enter the interface of sewing data edition under the
Mode Setting Level 2 (as shown in the right figure)



: Sewing data is opened

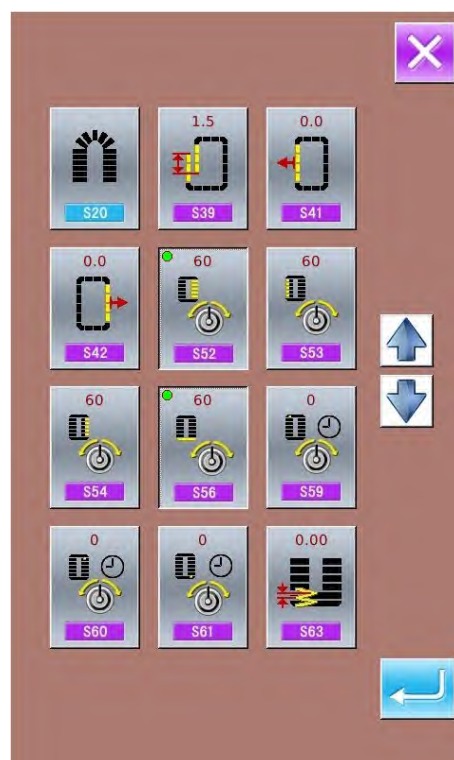


: Sewing data is closed

Select the sewing you wish to edit. When the button is
pressed, the interface will be shifted between reverse

display/non- display. After pressing  , the user
can confirm whether the sewing data item is in state of
opening

Press  to quit the Sewing Data Edition
Interface.



7.7 Change Sewing Mode



Press  to enter the interface of sewing type selection (as shown in the right figure).



: Normal Sewing



: Continuous Sewing

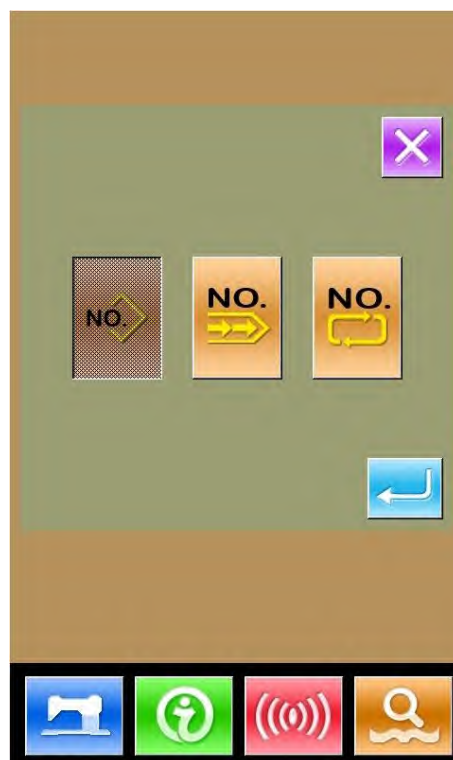


: Cyclic Sewing

After confirming the sewing type, press  to end the

operation. Press , then the data input interface of the selected sewing type is displayed.

Press  to quit and the original sewing remains.



7.8 Register Pattern to Direct Button

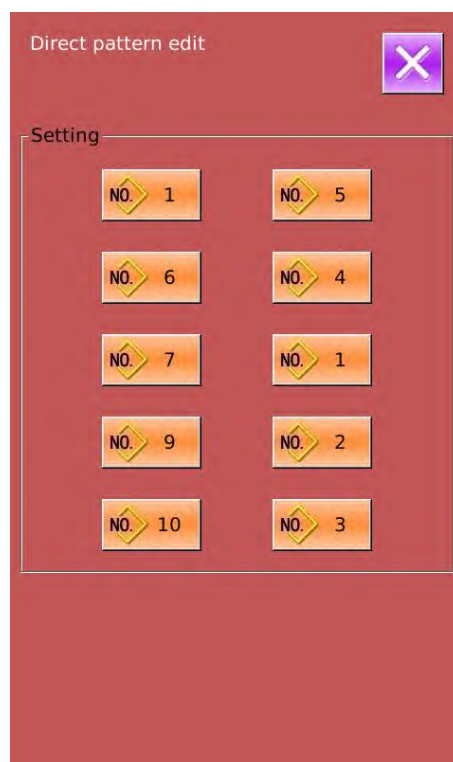
Register the pattern numbers which are frequently used with the direct buttons for use.



Press  to enter the interface of direct button registration (as shown in right figure).



Press  to quit the Pattern Registration Function



10 pattern numbers can be registered to the direct buttons at most. On 10 displayed direct buttons, the user presses the button he wishes to register, and then enters the pattern select interface. (as shown in the right figure)

The file in blue is the file in VDT format



: Pattern Inquiry



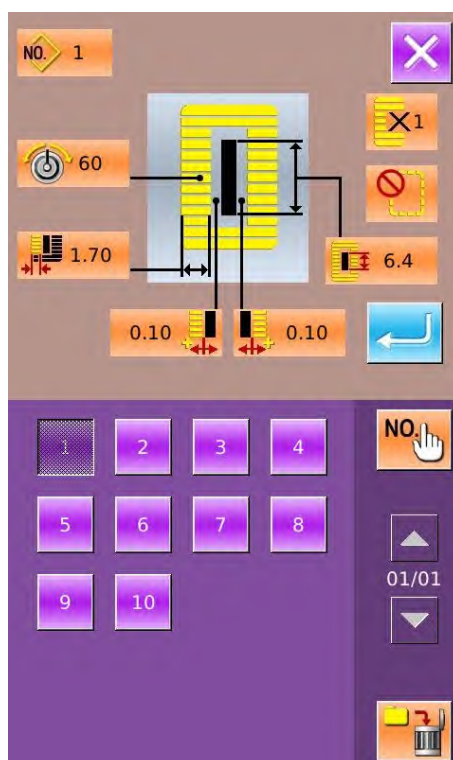
: Delete Current Registered Pattern



: Confirm



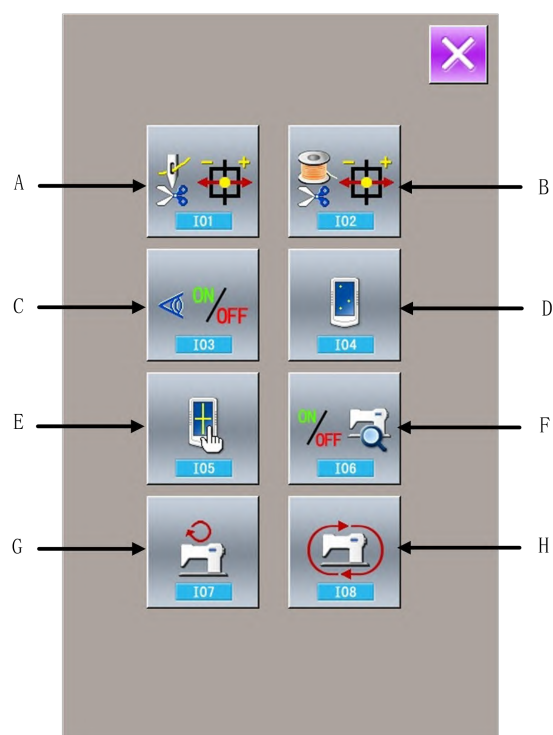
: Quit



7.9 Test Mode

In the Mode Setting Level 2 interface, press  to enter the interface of Test Mode (as shown in right). The function of each figure is shown as below:

No.	Name
A	I01 Needle thread trimming
B	I02 Down thread trimming
C	I03 Input inspection
D	I04 Inspection of LCD display
E	I05 Correction of touch panel
F	I06 Output inspection
G	I07 Speed test
H	I08 Continuous running



Press  to quit Test Mode

(1) Adjustment of Needle Thread Trimming

① Adjusting Method

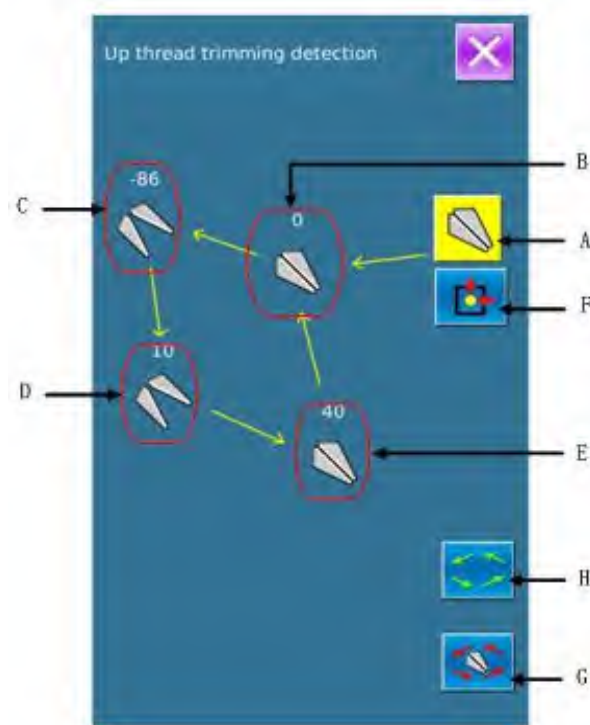
In the interface of Test Mode, press  (I01 Needle thread trimming) to enter the adjustment interface of needle thread trimming (as shown in the right figure):

Needle Thread Trimming:

No.	Name	Range	Initial value
A	Origin position		
B	Initial position	-10~10	0
C	Releasing position	-95~80	-86
D	Position for trimming	0~20	10
E	Post-trimming position	30~50	40

② Select the mode position you wish to adjust

Press  G to select the positions (A, B, C, D)



for adjustment, then press the  /  key to
adjust the necessary value, at last press  F to
return to the origin.

- ④ Press  to return to the Test Mode Interface

(2) Adjustment of Down Thread Trimmer

① Adjusting Method

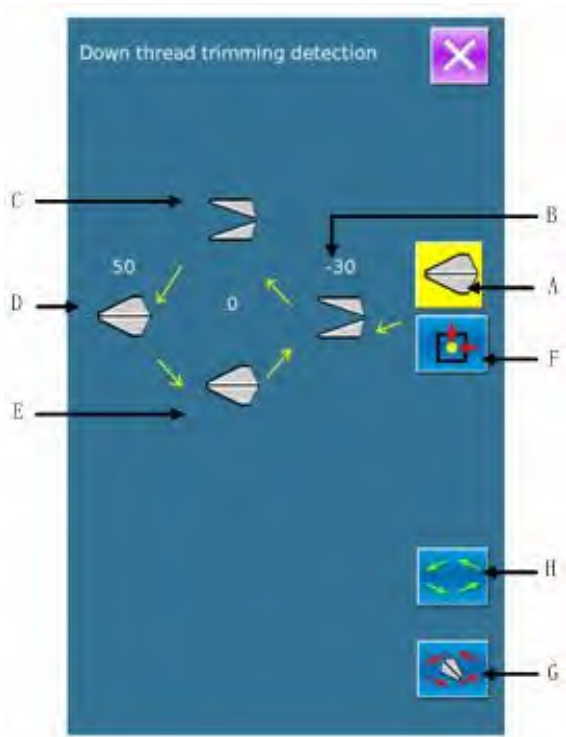
In the interface of Test Mode, press  (I02 Down thread trimming) to enter the adjustment interface of Down thread trimming (as shown in the right figure):

Down Thread Trimming:

No.	Name	Range	In
A	Origin position		
B	Releasing position	-40~-15	
C	Position for trimming	-10~10	
D	Post-trimming position	40~60	
E	Initial Position	-10~15	

④ Select the mode position you wish to adjust

Press  G to select the positions (A, B, C, D)
for adjustment, then press the  /  key to
adjust the necessary value, at last press  F to
return to the origin
Press  to return to Test Mode Interface.



(3) Input Signal Test Method

In the interface of Test Mode, press  (IO3 Input Inspection) to enter the interface of input inspection interface (as shown in right). Users can confirm the input status of each switch and sensor.

ON: Turn On

OFF: Turn Off

A: mount of pedal pressed

B: Pedal Sensor

C: Thread-breakage Detection

D: Knife Sensor

E: Head Tilt Sensor

F: Stop Switch

G: Needle Rocking Sensor

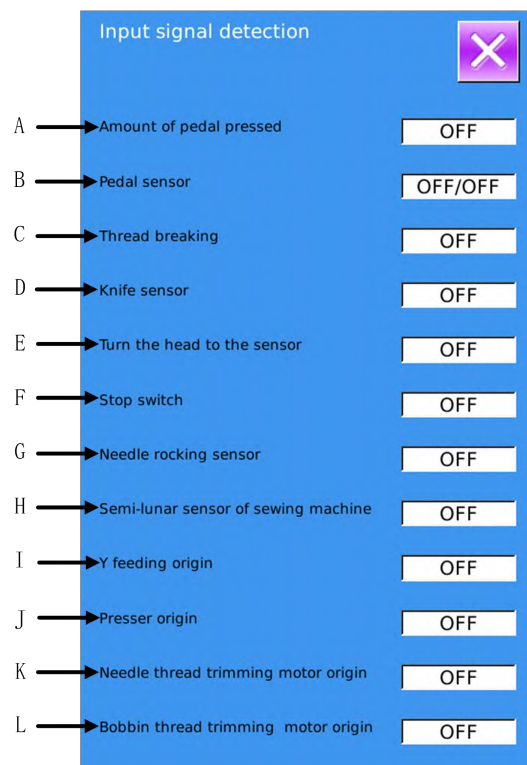
H: Semi-lunar Sensor of Sewing Machine

I: Y Feeding Origin

J: Presser Origin

K: Needle Thread Trimming Motor Origin

L: Bobbin Thread Trimmer Motor Origin



(4) Inspection of LCD Display

In the interface of Mode Inspection, press  (IO4 Inspection of LCD Display) to enter the interface of LCD Display Inspection (as shown in right figure). Check whether the LCD fades in that status.

Touch the panel to have the screen display in the cycle of “Blue — Black — Red — Green — White”.

Press  to quit the interface of LCD Display Inspection



(5) Correction of Touching Panel

A、 In the interface of Mode Inspection, Press

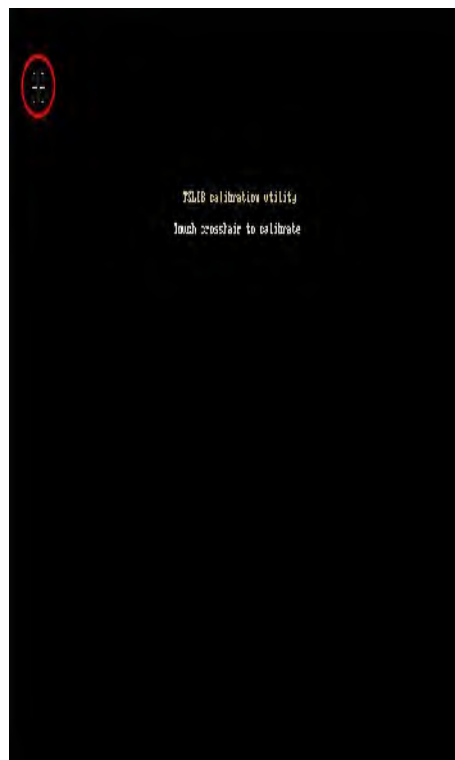


(I05 Correction of Touch Panel). Then system will hint user

【 Enter Touching Panel Correction Mode? 】. Press  to enter the interface for Touch Panel Correction (as shown in right figure). Press  to quit the correction status.

B、 Because the corrections for five spots are needed, the user had better click the cross icon on the screen with tools like touching pen. After the correction, the system will tell user that this operation is successful or not.

※ During the correction, please do perform the operation according to the positions of crosses. Otherwise, the touching panel will be unable to work normally after the correction.



(6) Output Inspection

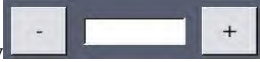
In the interface of Mode Inspection, Press



(I06 Output Inspection) to enter the interface of Output Inspection (as shown in the right figure). The following output status of the solenoid can be checked under that interface.:

- A: Needle-rocking Motor Test
- B: Presser Motor Test
- C: Bobbin Thread-trimming Motor Test
- D: Cloth-feeding Motor Test
- E: Needle Thread Motor Test
- F: Tension Solenoid
- G: Knife Solenoid

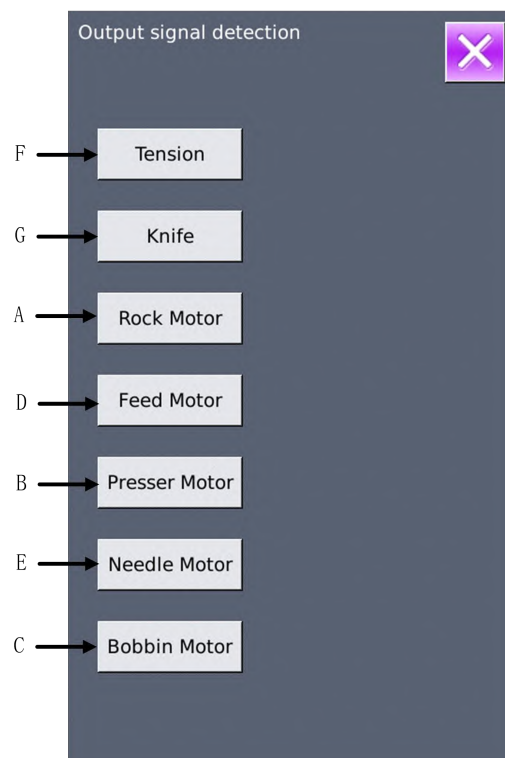
■ When user presses A~E, the system will

display . Press 【+】 and 【-】 to display the motor origin test status.

■ At user pressing F~G, the corresponding solenoid will move

■ Press  to quit output inspection interface

※ Attention: Sewing machine will perform relating actions.



(7) Speed Test

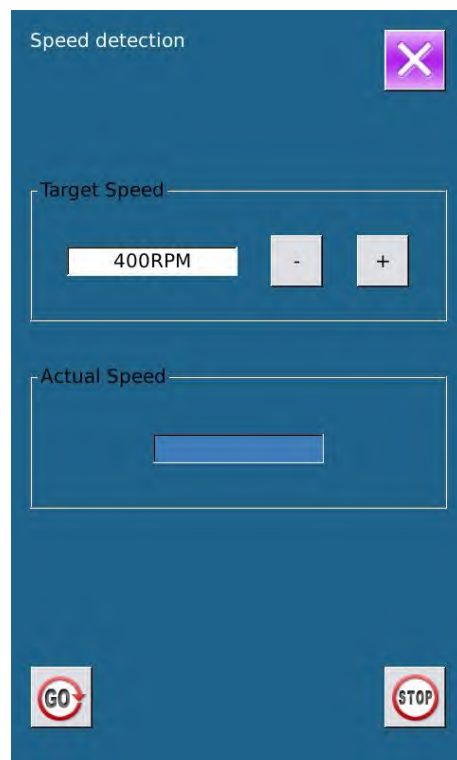
① Interface for Speed Test

In the interface of Mode Inspection, Press  (I07 speed test) to enter the interface for Speed Test (as shown in right figure). The speed of main shaft motor can be tested in that interface.

Press  to quit the speed test interface.

② Continuous running setting

Press “+” & “-” to set the speed of the main shaft motor. Press , then the motor will run at the set speed. At this moment, the actual tested speed is displayed in the interface. Press  to stop the machine.



(8) Continuous Running

① Display the interface for continuous running

In the interface of Mode Inspection, Press  (I08 continuous running) to enter the interface of continuous running (as shown in right figure).

A: Action interval

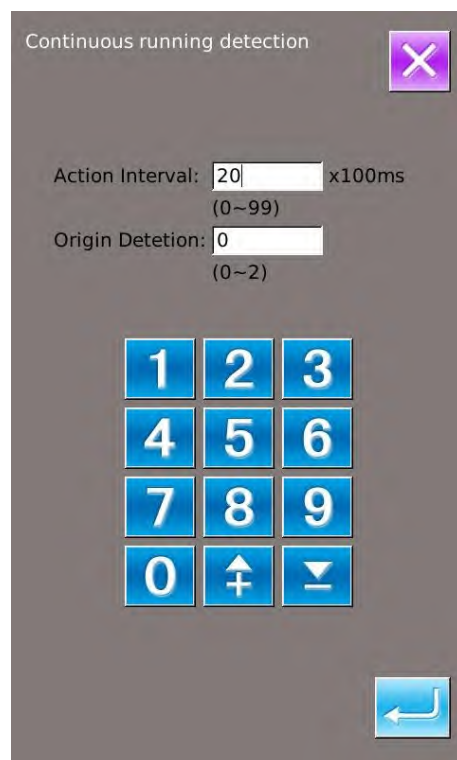
B: Origin Detection

Press  to quit that interface.

② Continuous running setting

Click the columns under the interface of Continuous Running to set the Action interval and Origin Detection. Set the value with the number keys.

Press  and step the pedal to start the continuous running. During the running, user can use the pause switch to stop machine or he can stop machine by stepping the pedal or pressing pause switch at action end



7. 10 Brightness Adjustment

In the Mode Setting Level 2 interface, press  to enter the interface for brightness adjustment (as shown in right figure), the brightness value can be adjusted

from 20 to 100 by pressing  or , it also can be adjusted by inputting the value via keyboard. Press

 to finish the input. Press  to quit that interface



7. 11 Operation of Keyboard Lock

In the Mode Setting Level 2 interface, press  to enter the interface of Keyboard Lock Setting.

① Lock the keyboard



: Keyboard unlocked



: Keyboard locked

Press  and  to lock the keyboard. Press  to quit this interface

② Display of locking keyboard status

Close the interface of parameter setting mode, and return to the data input interface, like right figure. We

can see there is a figure to show the locking status  under the pattern number. Only can the available figures shown under the status of keyboard locking.

③ Scope of locking keyboard

1. Normal sewing data input interface:

- 1)Pattern Registration
- 2)Pattern Copy
- 3)Pattern Naming
- 4)Customer Management
- 5)Presser Selection
- 6)Shape and Relevant Sewing Data

2. Normal Sewing Interface:

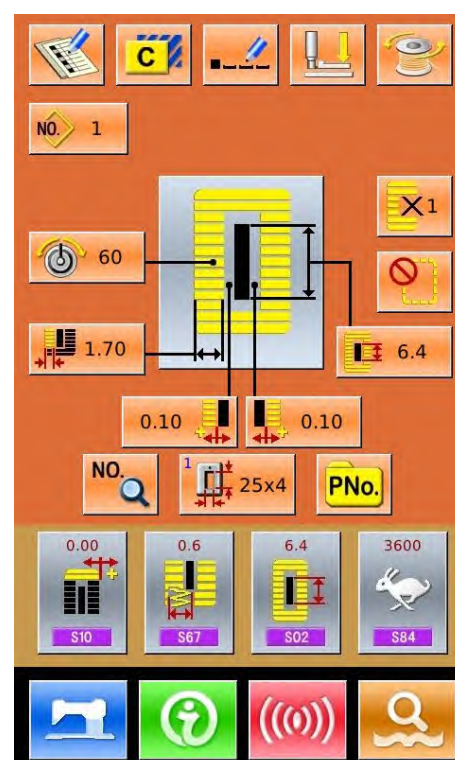
- 1)Counter Setting
- 2)Needle Thread Tension Setting

3. Continuous Sewing data input interface:

- 1)Pattern Registration
- 2)Pattern Copy
- 3)Pattern Naming
- 4)Cloth Feeding Amount
- 5)Deletion
- 6)Pattern Sewing Data

4. Continuous Sewing Interface:

- 1)Counter Setting
- 2)Needle Thread Tension Setting



5. Cyclic Sewing Data Input Interface:

- 1)Pattern Registration
- 2)Pattern Copy
- 3)Pattern Naming
- 4)Deletion
- 5)Delete All
- 6)Sewing Fabric
- 7)Sub-pattern Registration

6. Cyclic Sewing Interface:

- 1)Counter Setting
- 2)Needle Thread Tension Setting

7.Parameter Setting Mode:

- 1)Parameter Level 1
- 2)Parameter Level 2
- 3)P Pattern Edition
- 4)Customer Management
- 5)Sewing Data Edition
- 6)Inspection Mode
- 7)Counter Edition

7. 12 Initialization

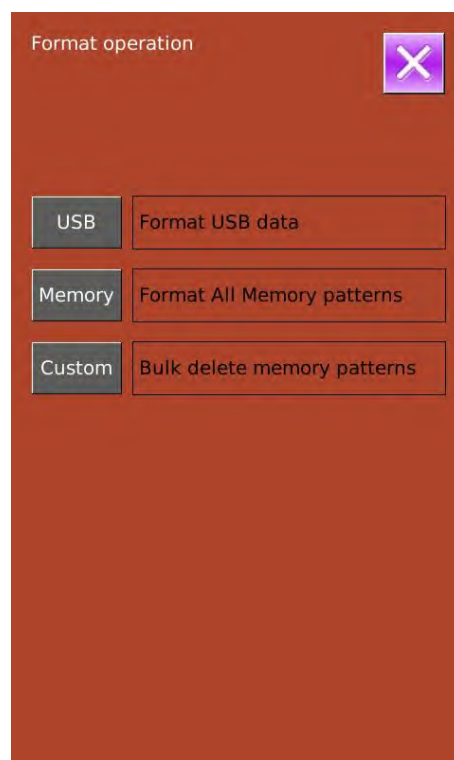
Press  to enter the interface for setting the keyboard lock.

In this interface, user can operate:

- U Disk Initialization
- Memory Initialization
- Customized Initialization

Press the relating functions keys and enter the corresponding interface.

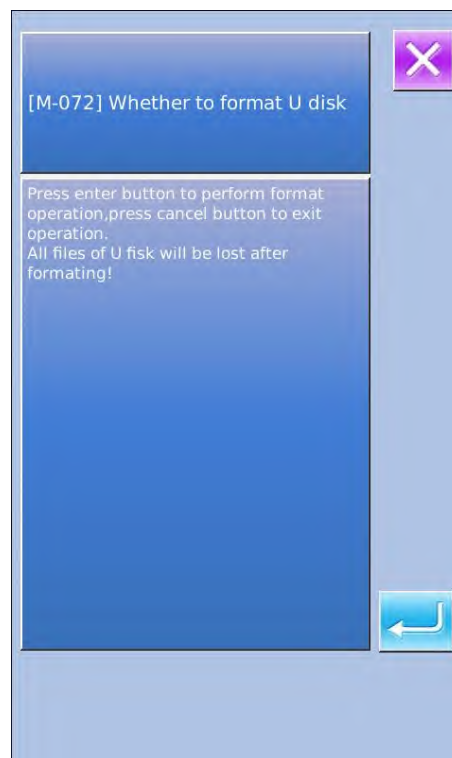
Press  to quit.



① Press “USB” to Initialize U Disk Files

Press  to initialize all the U disk files

Press  to quit U disk initialization



② Press “Memory” to initialize memory patterns

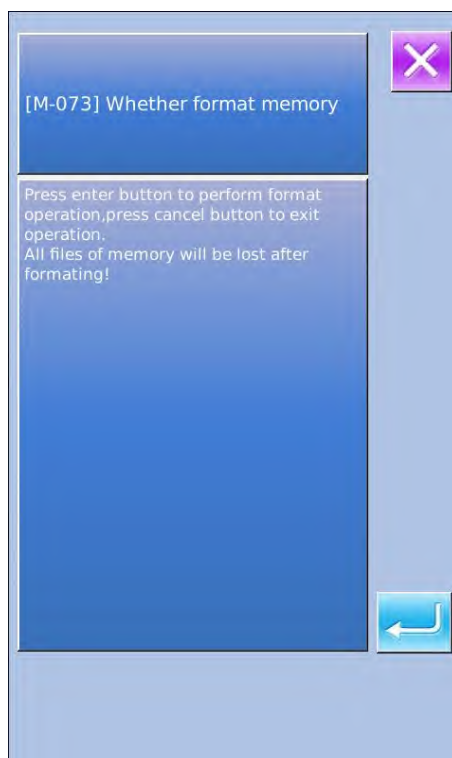
The following patterns can be initialized:

- Normal Pattern
- Continuous Sewing Pattern
- Cyclic Sewing Pattern
- Registered P Pattern

Press  to initialize all the files in memory

Press  to quit

※ **Caution! This operation will delete all the patterns within the memory!**



③ Press “Custom” to perform the batch deletion

In this interface, the system will display all the pattern files within the memory. Click the corresponding button to perform the batch deletion.

Operations at this function:

A. Use “Up Arrow”, “Down Arrow” to turn the page

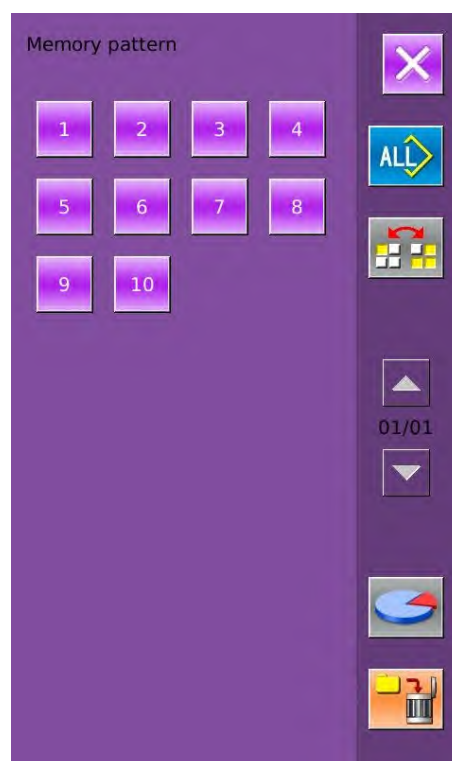
B. Use the following three operations to select patterns

- Press  to select all the patterns
- Press  to select pattern in contrary way
- Input pattern number

C. Press  to delete the patterns in batch

D. Press  to quit Initialization Interface

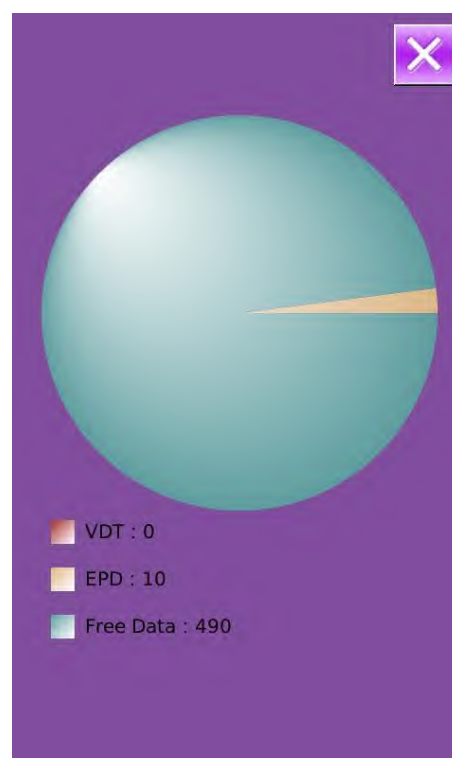
※The files with blue mark are in vdt format.



④ Under the Interface of Custom Initialization,

press  to display the free room of the memory and the number of patterns in each format.

Press  to return to the upper interface.



7. 13 Parameter Back-up & Restoration

In order to use in future, user can save 8 groups of U level parameters according to needs

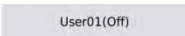
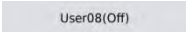


In setting mode level 2, press  to enter the interface of parameter back-up & restoration, as shown in right:

Clear: Clear all the customized parameters that are saved.

Save: Save current parameters

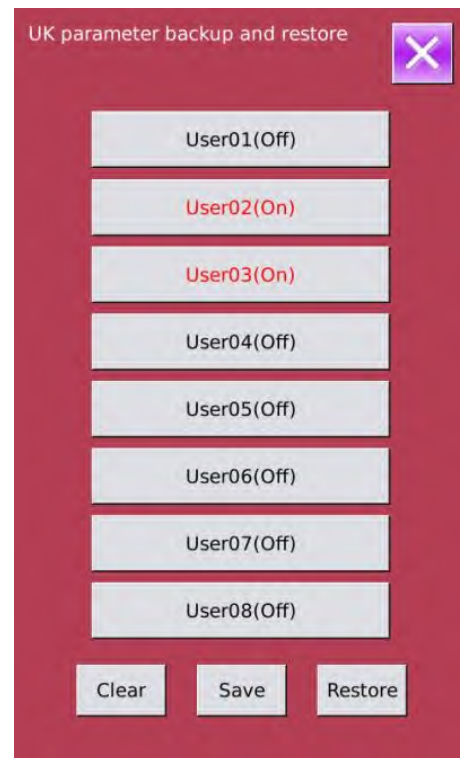
Restore: Restore the current parameters

① Click and key among  ~  to set the position for saving the parameter. And then press 「 Save 」 to save that parameter.

② Check the content on「 User xx (On/Off) 」。 If 「 On 」 is displayed in bracket, that means this position has the user parameter, for an example .

③ Select the button with parameters, press 「 Restore 」 to reload the corresponding parameter values

④ Press 「 Clear 」 to delete all the saved parameters.



8 Communication

At Communication, user can perform the following functions:

- Download the sewing data made at other sewing machines or produced by the pattern-designing software to the sewing machine;
- Load sewing data to U disk or computer
- Load parameters from U disk
- Input the parameters within the operation panel to U disk
- Update the software within the operation panel

8.1 About the Available Data

The following two kinds of sewing data are available for operation; please check their formats in the form below:

Name	Suffix	Content
Vector Data	[0-9][0-9][1-9].vdt	Needle entry point data
Parameter Data	[0-9][0-9][1-9].epd	Sewing shape designed in sewing machine。

When saving data to the U disk, user needs save it to the DH_PAT folder. Otherwise, the file is unable to be read.

8.2 Operations

① Display the Communication Interface

In the data input interface, press  to display the communication interface.

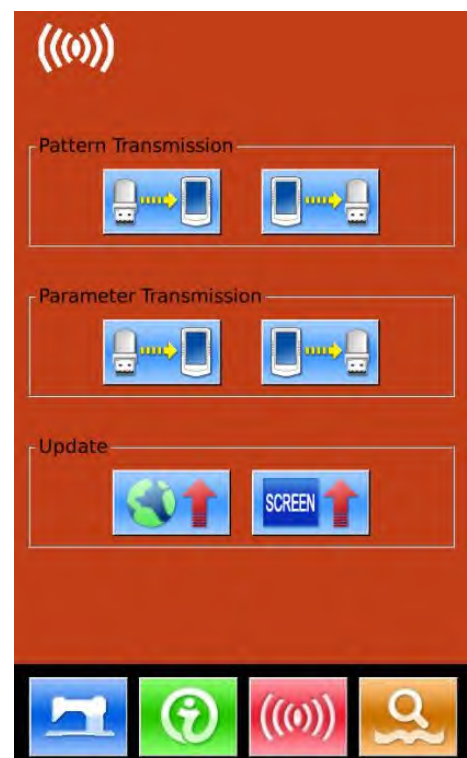
② Select the relating operations

The following three kinds of functions can be selected in this interface:

- Pattern Transfer
- Parameter Transfer
- Software Update

Click the corresponding figure to perform the operations

③ Press to quit the Communication



8.3 Pattern Transfer

① Display the Communication Interface

In communication interface, press:

A: Input patterns from U Disk to Operation Panel

B: Output patterns from Operation Panel to U Disk

Path of U Disk: DH_PAT

※ When inputting patterns from U disk, user has to save the pattern into the DH_PAT in the U disk.

※ When outputting patterns from operation panel, user has to save the pattern into the DH_PAT in the U disk

※ Naming Method of Patterns within U Disk

When inputting patterns from U disk, user needs follow the naming rule at below::

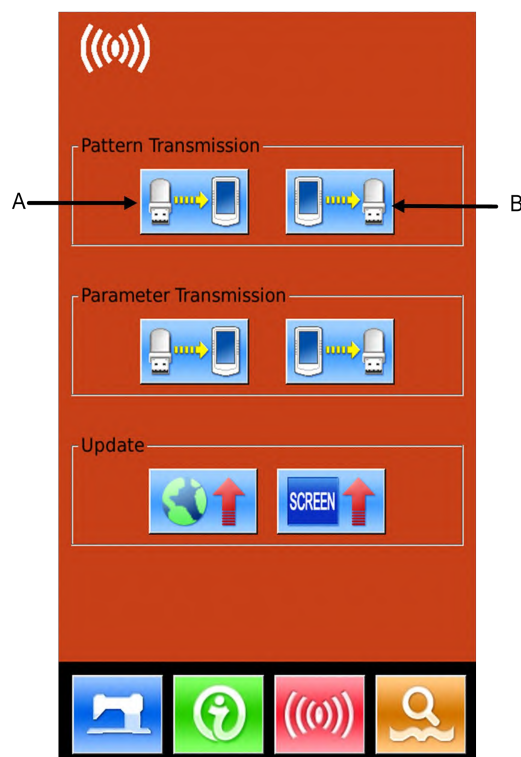
File Name: 3 figures, 001~500

Suffix: epd、vdt

Example:

Right Names: 001.epd、100.vdt、003.EPD、102.VDT

Other naming methods are wrong, which can not be recognized by machine



② Press button A to enter the interface for inputting patterns from U Disk

A、Use【Up Arrow】,【Down Arrow】to turn the page

B、Use these three methods to select patterns

➤ Press  to select all the patterns

➤ Press  to select in contrary way

➤ Input Pattern Number

C、Press  to finish pattern input

D、Press  to delete the selected pattern

E、Press  to quit Communication Interface

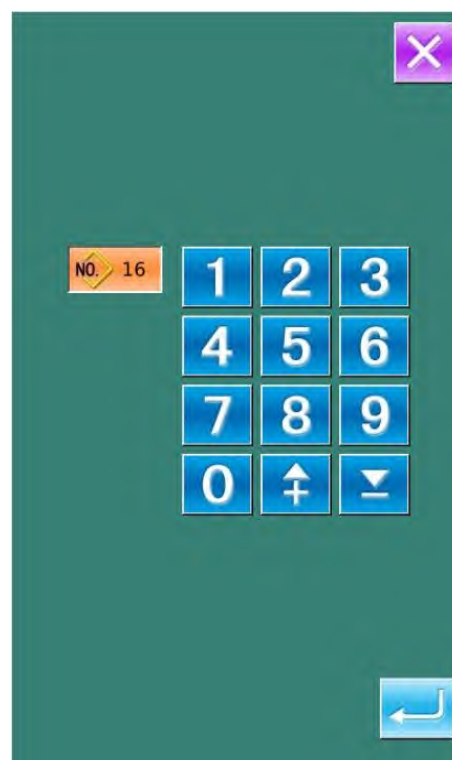


F、Press  to display the interface shown at right.

Input the pattern number for saving;

Press  to copy the selected pattern within U Disk and save it to the pointed pattern number and return to the upper interface

Press  to quit.



③ **Press Button B to enter the interface for inputting patterns to U Disk.**

A、Use **【Up Arrow】** , **【Down Arrow】** to turn the page

B、Use these three methods to select patterns

- Press  to select all the patterns
- Press  to select in contrary way
- Input Pattern Number

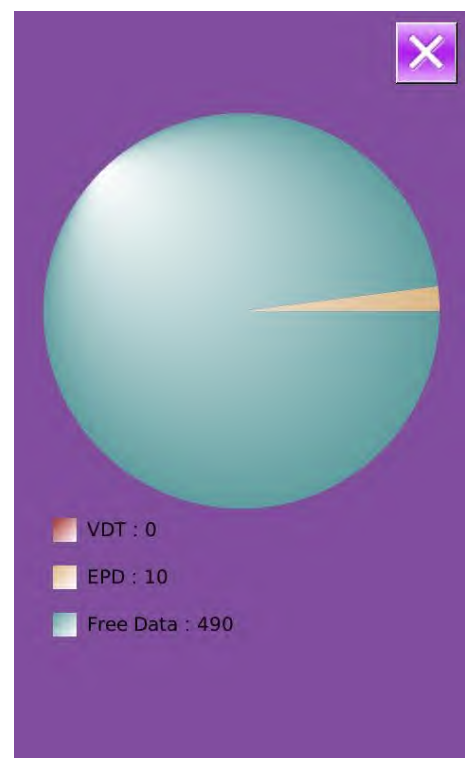
C、Press  to delete the selected pattern

D、Press  to finish pattern output

E、Press  to quit Communication Interface

F、In this interface, press  to display the free room of the memory and the number of patterns in each format.

※ **The files with blue mark are in vdt format**



8.4 Parameter Transfer

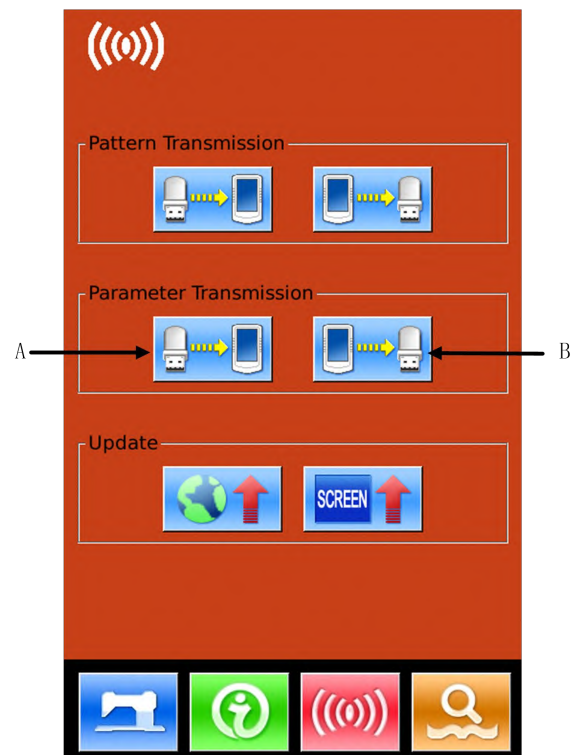
① Display the Communication Interface

In communication interface, press:

A: Input parameters from U Disk to Operation Panel

B: Output parameters from Operation Panel to U Disk

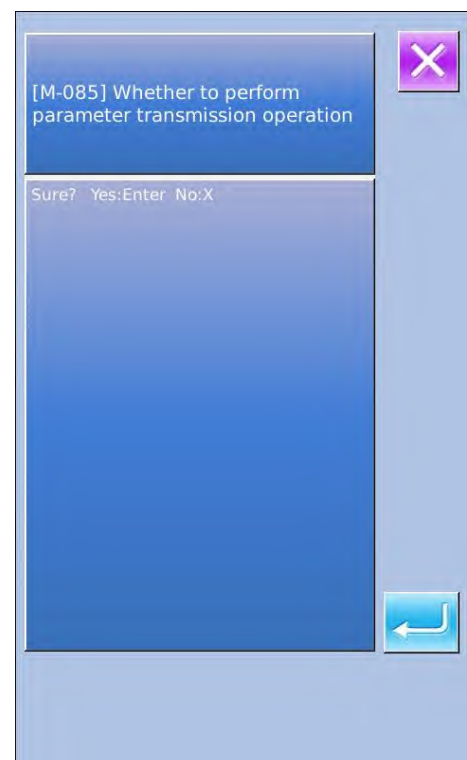
- ※ When inputting patterns from U disk, user has to save the parameters into the DH_PARA in the U disk with name PS_Param.
- ※ When outputting patterns from operation panel, user has to save the parameters into the DH_PARA in the U disk with name PS_Param.
- ※ The parameter file is the binary file, which is operated on the control panel. User can not change that file manually on PC, or the file may be damaged.



② Press Button A to Input Parameters from U Disk to Operation Panel

A、 Press  to input the parameters and quit

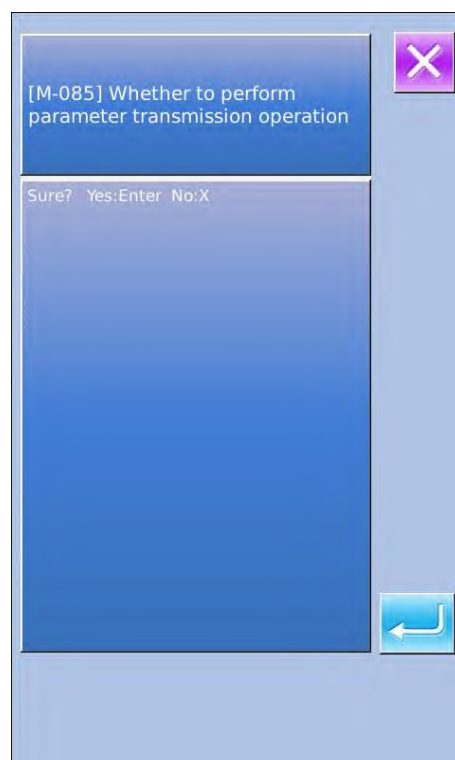
B、 Press  to quit directly.



③ Press Button B to Output Parameters to U Disk

A、Press  to output parameters from operation panel to U disk and quit

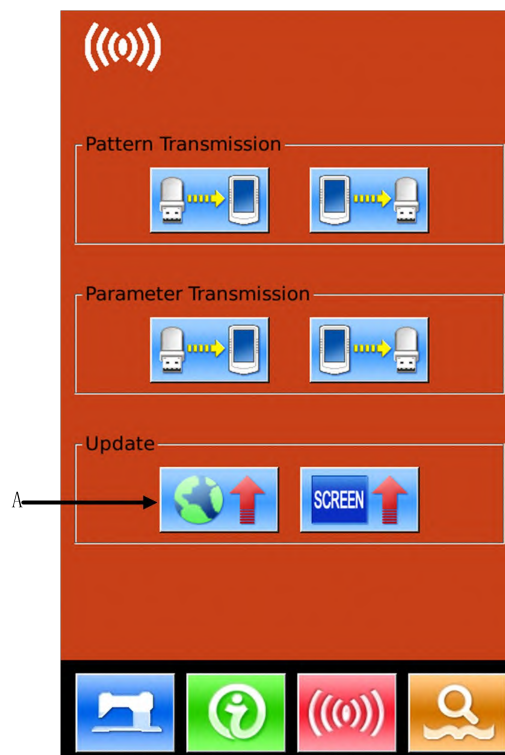
B、Press  to quit directly



8.5 Software Update

① Display the Interface

In Communication interface, press A to enter Software Update Interface



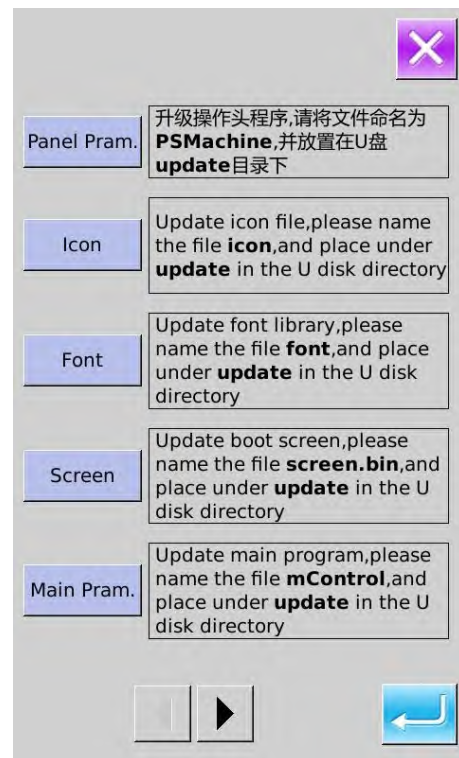
② Update Selection

The software update contains:

- ◆ Operation Panel Software
- ◆ Icon
- ◆ Font
- ◆ Power-on Screen

Press  and  to turn the page

- A、Press  to finish the selected update and quit
- B、press  to quit directly
- C、User can select several items for update at same time. The system will perform the update according to the order
- D、After the update, please restart the machine



9 Information

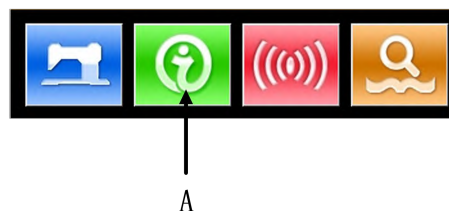
There are three functions in the information function as below

- 1) Oil replacement time, needle replacement time, cleaning time and so on, are designated and the warning notice is performed when the designated time has passed;
- 2) Speed can be checked at a glance, and the target achieving consciousness of group is increased as well, by using the function to display the target value and the actual value.
- 3) Display the threading

9.1 Check the Maintenance Information

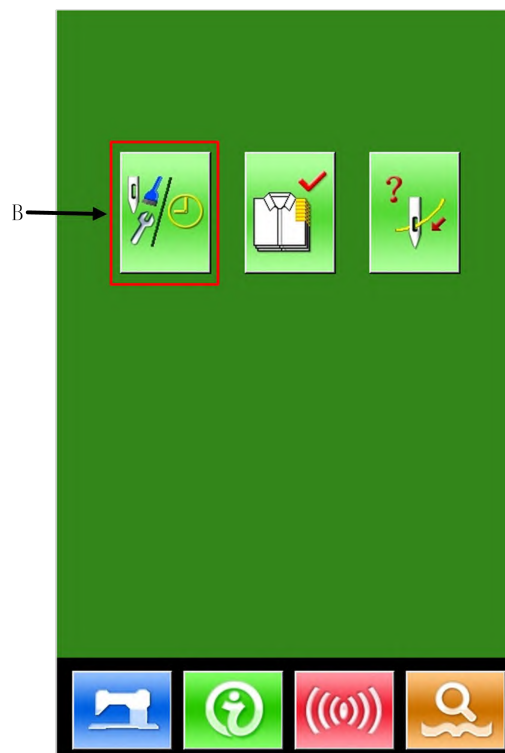
① Display the information interface

In the data input interface, press the information key (A) the interface of information will be displayed.



② Display the maintenance interface.

Please press button  (B) .



Information on the following three items is displayed in the maintenance information interface.



: Needle replacement (1,000 stitches)



: Cleaning time (hour)

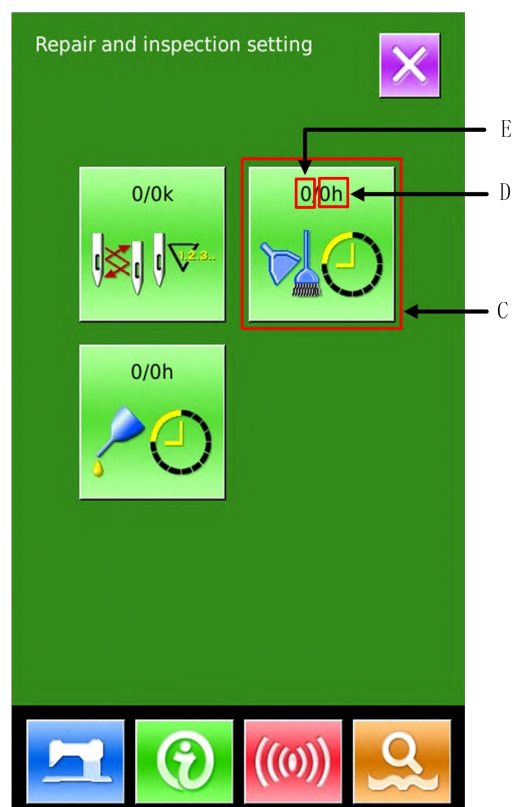


: Oil replacement time (hour)

Each item is displayed as C. The time interval is displayed at D, while remaining time is displayed at E

The remaining time can be cleared, by pressing the corresponding button.

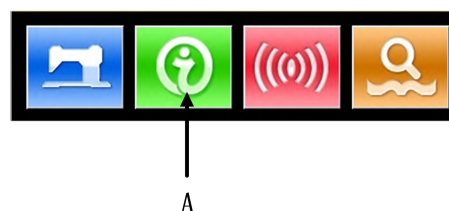
Press  to quit to information interface



9. 2 Set the Maintenance Time

① Display the information interface (maintenance personnel level)

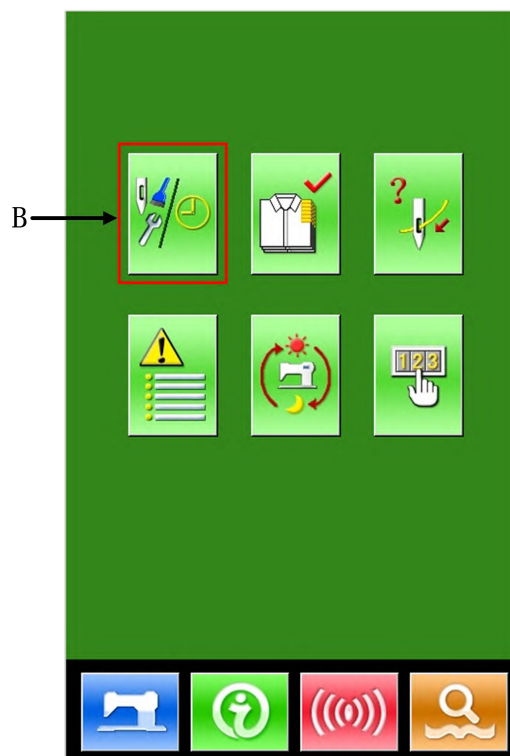
In the data input interface, hold the information key (A) for 3 second, the interface of information (maintenance level) will be displaced. In the interface, 6 keys are displayed.



② Functions Displayed

At maintenance level, 6 functions are displayed

-  : Maintenance
-  : Production Control
-  : Threading
-  : Warning Record
-  : Running Record
-  : Periodical Password



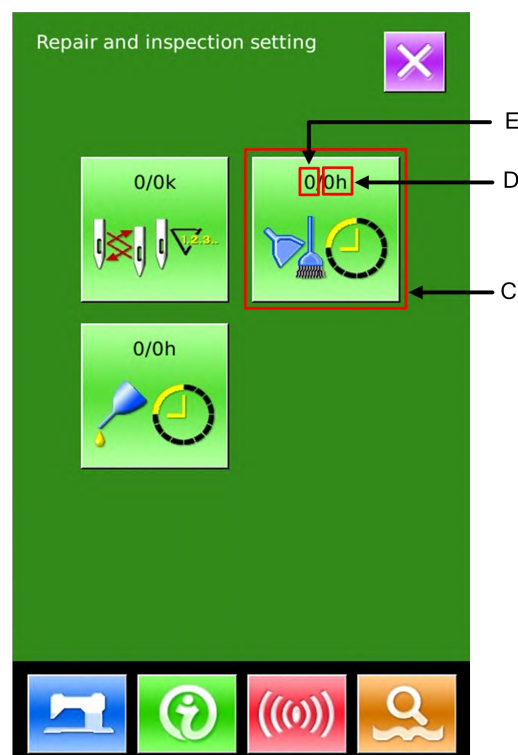
Please press the Maintenance Button  (B) to enter the maintenance interface.

③ Maintenance Setting

In the maintenance information interface, the same information as that in the normal maintenance interface is displayed. Press button (C) to activate the relating input interface.

Press  to set the time for cleaning.

Press  to quit to information interface



④ Set item for maintenance

Set the set value of the maintenance item at 0, the system will stop the function of maintenance.

The items of maintenance include:

- ◆ Needle Replacement Time
- ◆ Cleaning Time
- ◆ Oil Replacement Time

Press the figure to enter the relating interface:

A、 Use number keys to input the set value of these items.

B、 Press  to confirm the input.

C、 Press  to quit to maintenance interface.



9.3 Method to Release the Warning

When the designated inspection time is reached, the warning interface is coming out. Press  to release the warning. Before releasing the maintenance and repair time, the information warning interface will come out upon the complete of each stitch.

The following are the warning code for each item:

- Needle Replacement : M031
- Oil Replacement Time: M032
- Cleaning Time : M033

9.4 Information of Production Control

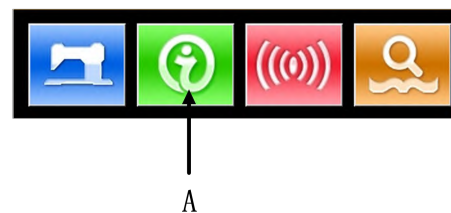
In the production control interface, the system can display the number of production from the start to present and the target number of production, as long as, receiving the start order. There are two ways to enter the interface of production control as below::

- Via Information Interface
- Via Sewing Interface

9.4.1 Via Information Interface

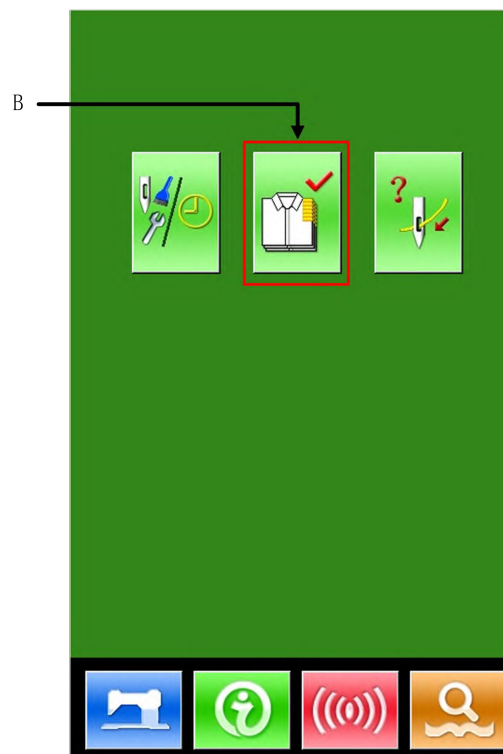
① **Display of information interface**

Press the Information Key (A) locating at the switch part in the data input interface, then the system will display the information interface.



② **Display of production control interface**

Press the production control interface display key (B) in the information interface to enter the interface of production control (as shown in right figure).



There are five items displayed on the interface of production control as below:

A : Existing Target Value

The number of current target pieces is automatically displayed according to the pitch time.

B : Actual Result Value

The number of the finished pieces is displayed automatically.

C : Final Target Value

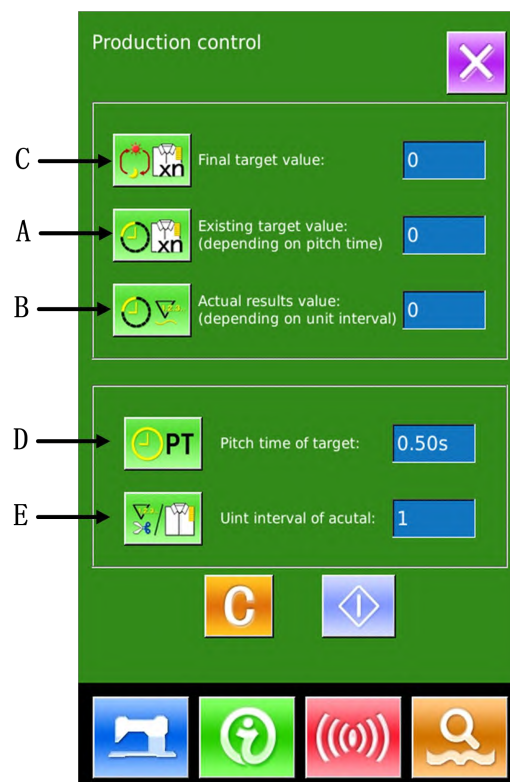
Set the final target number of products

D : Pitch Time of Target

Time (second) needed for setting one progress.

E : Unit Interval of Actual

Time actually needed for completing a process.



9. 4. 2 Via Sewing Interface

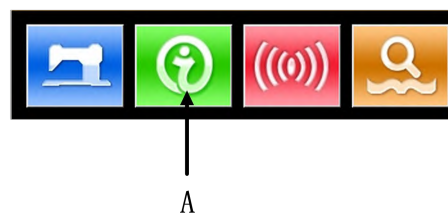
① Display the sewing interface

Press the Ready Key  in the data input interface to show the sewing interface.

② Display the production control interface

Press Information Key (A) in the sewing interface to enter the interface of production control.

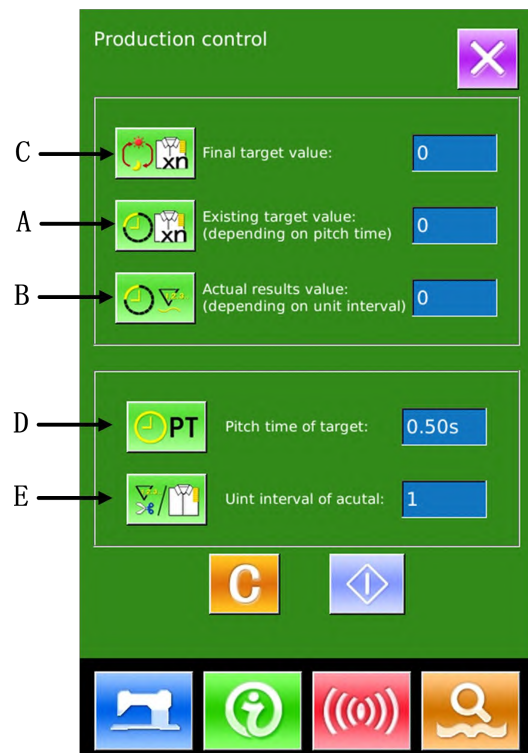
The contents displayed and functions are the same to the description in 9.4.1.



9. 4. 3 Setting of Production Control Information

① Display the production control interface

Press  to display the production control interface



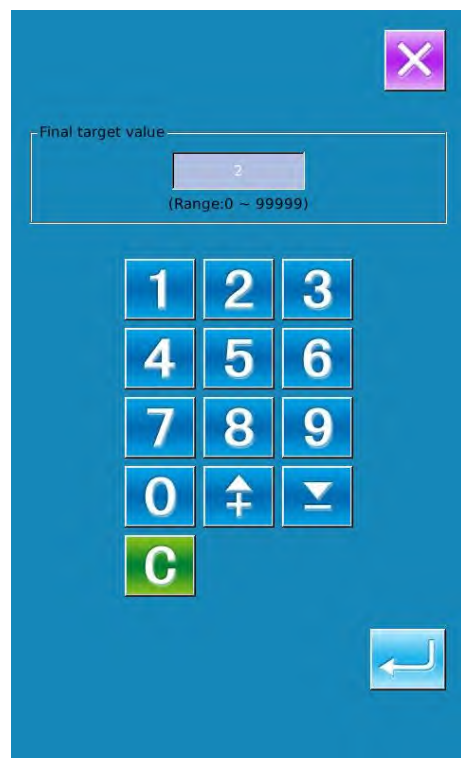
② Input the Final Target Value

At first, please input the number of production target pieces in the process to which sewing is performed from now on. Press the Final Target

Value Key  (C) to enter the interface of final target value.

Press the number keys or the “+” button and “-” button to input the figure you want, and then

press  for confirmation. Press  to quit



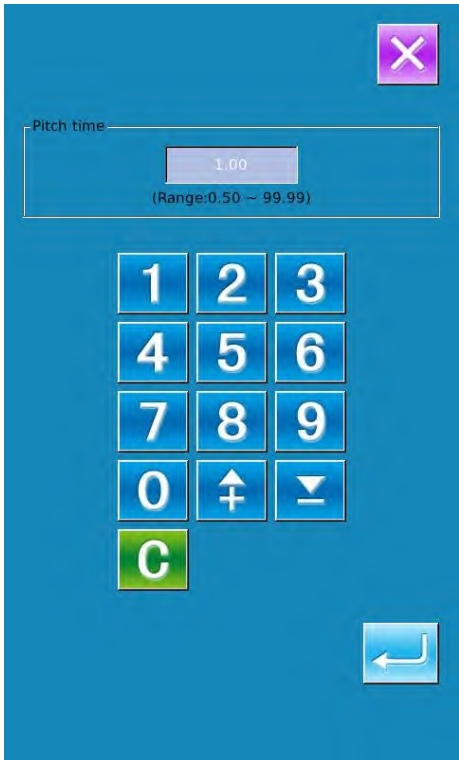
③ Input Pitch Time

Then please input the pitch time needed in one

process. Press the Pitch Time Key  (D) in the former page to enter the interface for inputting the pitch time.

Press the number keys or the “+” button and “-” button to input the figure you want, and then

press  for confirmation. Press  to quit



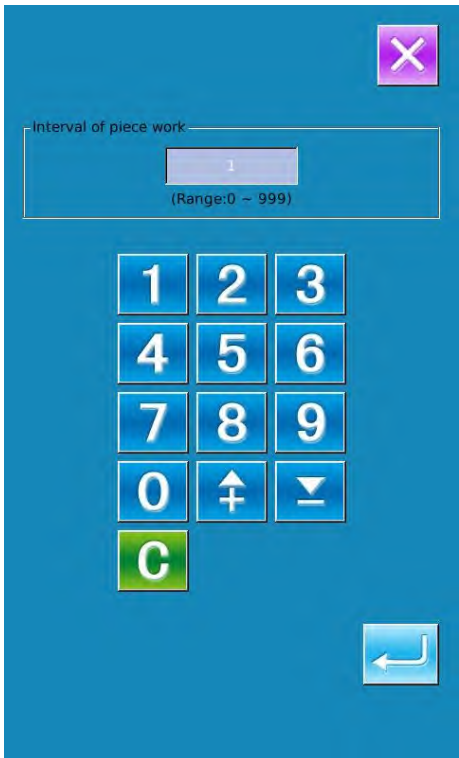
④ Input the Unit Interval of Actual

Then we need input the average number of thread trimming in one process. Press the Unit

Interval of Actual  (E) in former page to enter the interface for inputting number of thread trimming.

Press the number keys or the “+” button and “-” button to input the figure you want, and then

press  for confirmation. Press  to quit



⑤ Start to count number of production pieces

Press  (I); then the **【Final Target Value】**, **【Existing Target Value】** and **【Actual Result Value】** will go dark and the system will start counting the number of the production pieces.

Final Target Value: can be used as the reference of time

Existing Target Value: According to the set value at Pitch Time of Target, the machine begin timing and add one to this value after a set time pitch

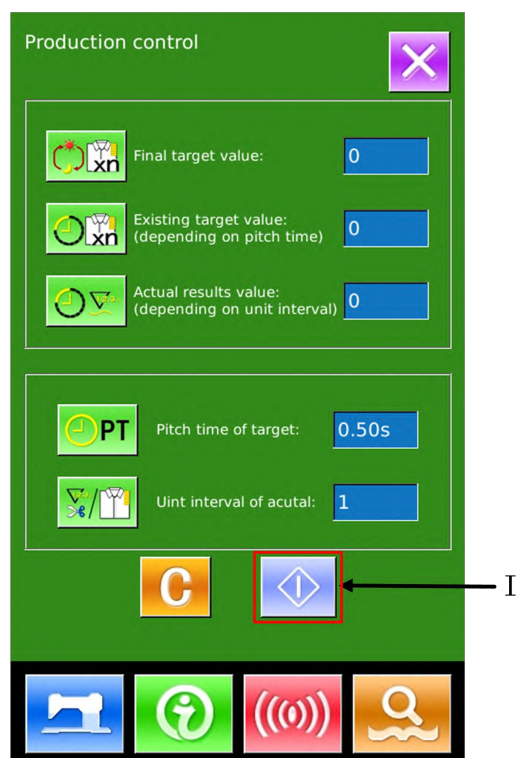
Actual Result Value: When entering via “9.4.2 Via Sewing Interface”, the Actual Result Value will start counting according to the value set at **【Unit Interval of Actual】** and add one to this value at each finish of a piece

By setting the Existing Target Value and the Actual Result Value, user can find out whether the productivity of one piece is increased or decreased.

⑥ Stop counting

Under the counting status, the Stop Key  is displayed. Press the Stop Key  to stop counting. After the counter stops, the Counting Key  is displayed at the position of the Stop Key. If needing to continue counting, please press the Counting Key . The counted value will not be cleared until the Clear Key  is pressed.

Press  to quit directly



⑦ Clear the counted value

When clearing the counted value, make sure the counter is stopped, and then press Clear Key .

The present target value  and the actual value  can be cleared.

(Note: The Clear Key can only be displayed at the counter stopping.)

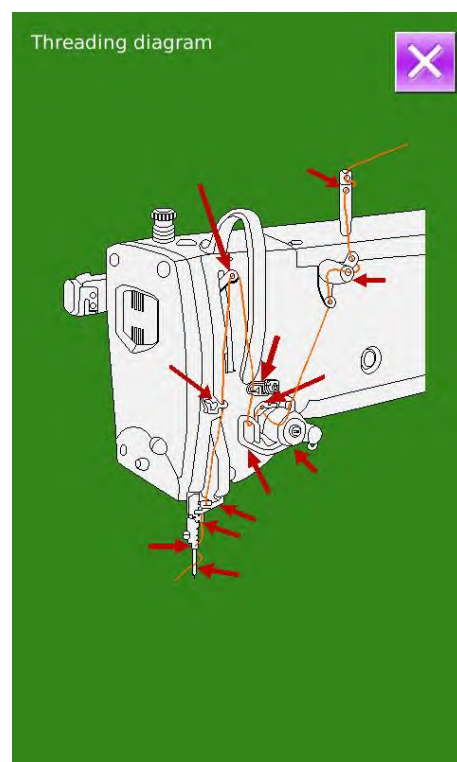
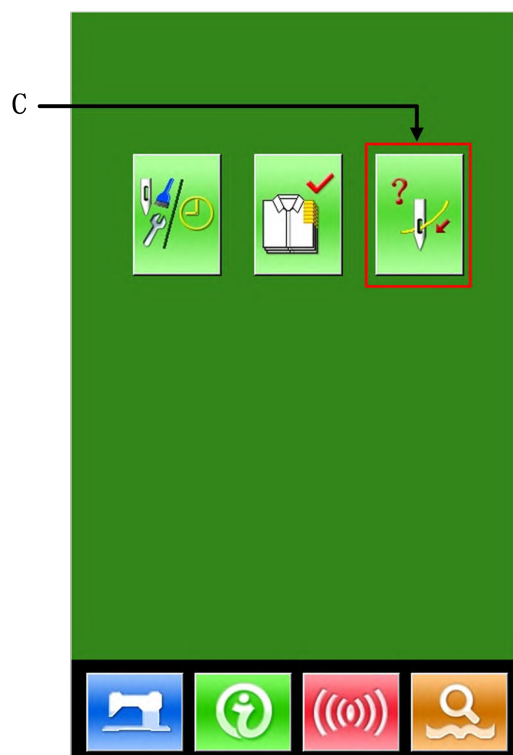
Press the Clear Key  to enter the interface for confirming the clearing.

In the interface of clearing confirmation, press the  to confirm the clearing. Press  to quit,



9.5 Threading Figure

In information interface, press  (C) to display the threading figure for your reference.



9.6 Warning Record

- ① In the interface of maintenance level, press

the  to inquire the warning records.

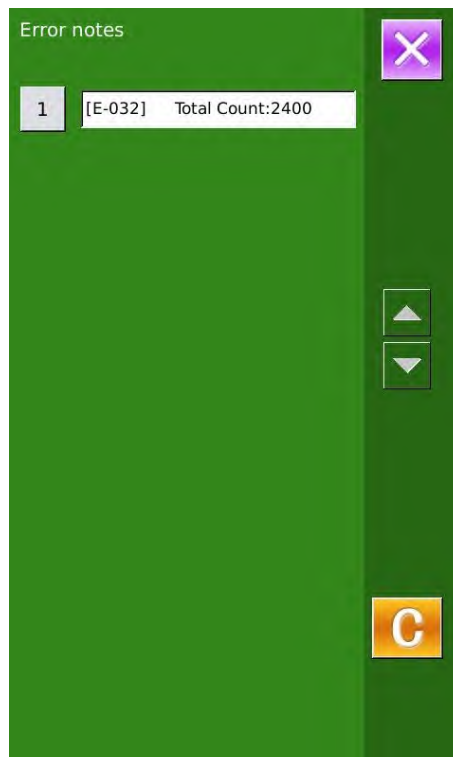


- ② Press  to check the records

As in the picture, the warning information and the times of occurrence are displayed

Function of Keys:

- A、 Press  or  to turn pages
- B、 Press  to quit the inquiry
- C、 Press  to clear the saved record



- ③ Press the number key at the left of the column to display the details of the warning records

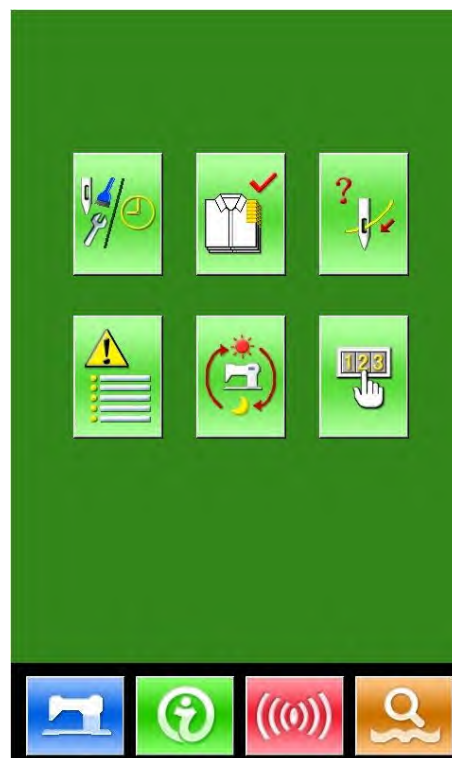
Press “” to hint the information at right

A、Press  to quit



9.7 Running Record

- ① In the interface of maintenance level, press  to check the running information of the machine.



② The Running records contain:



: Accumulated running time (Hour)



: Accumulated times for thread trimming



: Accumulated time of power-on (Hour)



: Accumulated number of stitch
(1000stitch)

A. Press  to quit

B. Press  to clear the record

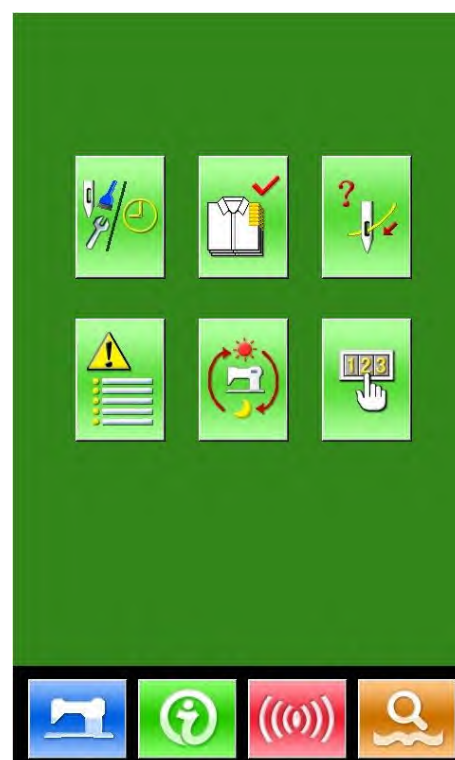


9.8 Setting of Periodical Password

① In maintenance level, Press  to set periodical password

In this interface, the system will ask user to input the User ID. Input the right manufacturer ID to enter the password management mode, where user can set and manage the periodical passwords.

- ◆ At most ten periodical passwords with different activation dates can be set
- ◆ The system will display the information of passwords set by manufacturer.



② Press  To input User ID

Input User ID

1	2	3	4	5	6
7	8	9	0	A	B
C	D	E	F	G	H
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z



③ Input the Correct Factory ID to enter the password setting interface

Procedure for setting the periodical password:

A、Continue inputting other periodical passwords

Factory

No.



④ Input Board Number

Press **【Board Number】** to enter the board number input interface. Input the board number and press



to finish the input

※ The board is a four-figure number, from 0~9999

Input Board No.

1	2	3	4	5	6
7	8	9	0	A	B
C	D	E	F	G	H
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z

⑤ Input System Clock

Press **【Clock】** to enter the interface for setting the system clock. And set the time

14:36

May 2013

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
18	28	29	30	1	2	3	4
19	5	6	7	8	9	10	11
20	12	13	14	15	16	17	18
21	19	20	21	22	23	24	25
22	26	27	28	29	30	31	1
23	2	3	4	5	6	7	8

⑥ **Input the super password**

Press the **【Super Password】** to enter the interface for setting super password

- ※ **At most, nine super passwords can be input**
- ※ **At the password confirmation, make sure the two input passwords are same**

Input Super-Password

Input:

1	2	3	4	5	6
7	8	9	0	A	B
C	D	E	F	G	H
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z

⑦ **Input periodical password**

Press **【Password-1】** to enter the first password date, where user can input the first date for activation. After selecting the proper date, user can

press  for confirmation. Then enter the password setting interface to input the password.

- ※ **The date should not be earlier than the system date**
- ※ **At the password confirmation, make sure the two input passwords are same**

June 2013

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
22	26	27	28	29	30	31	1
23	2	3	4	5	6	7	8
24	9	10	11	12	13	14	15
25	16	17	18	19	20	21	22
26	23	24	25	26	27	28	29
27	30	1	2	3	4	5	6

Input Password-1

Input:

1	2	3	4	5	6
7	8	9	0	A	B
C	D	E	F	G	H
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z






⑧ Input other periodical password

The setting of other periodical password is same to that in step ⑦. Please take the reference to that

※ The next activation date shall be later than the previous date.

Factory	*****
No.	0001
Clock	3-05-27 14:39
S-Pw	**
Pw-1	2013-06-18
Pw-2	




⑨ Save Password

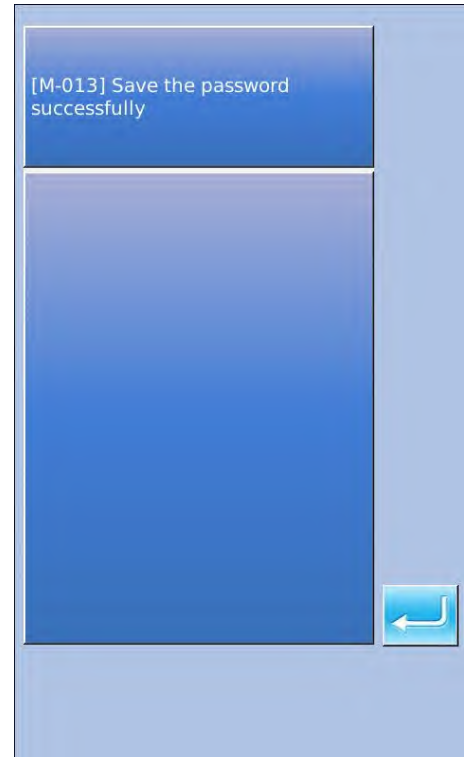
A、 After inputting the password, please press



to save it.

B、 After the password is saved, the system will display **【 Save the password successfully 】** .

Press  to finish the operation and return to the **【main interface of information】** .



⑩ Clear Password before Activation

It is to clear the passwords before its activation.

A、 The method for entering the password interface is same to that of the password setting

B、 Input the right factory ID to activate the right interface.

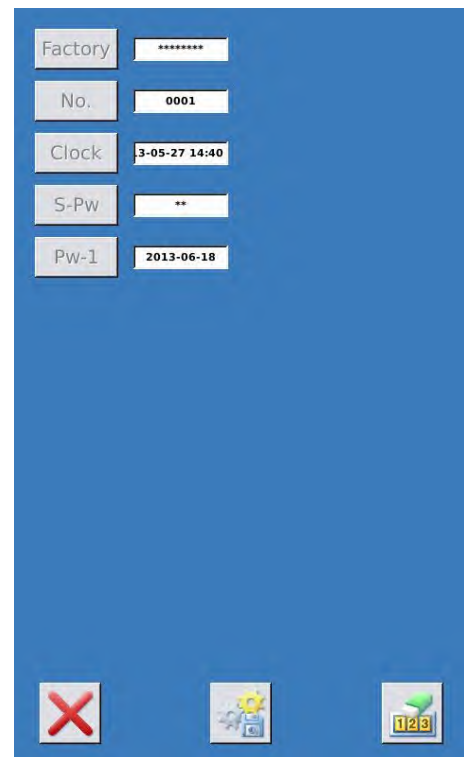
C、 The system will display current clock and the activation dates

D、 Press  to delete the password orderly

Input the right periodical password to clear the current password. If the super password is input, all passwords will be cleared;

After the deletion of the password, the date of that password will be displayed in red.

If all the passwords are cleared, the system will automatically quit to the main interface of information.



Clear Password1

1	2	3	4	5	6
7	8	9	0	A	B
C	D	E	F	G	H
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z

--	--	--	--

⑪ Clear Password at Activation

If the system has password and that password is still effective, it will be activated at the activation day.

If user wants to use the machine he should input the right password.

A 、 The effective passwords include current password and super password

B 、 If the current password is input, the current password will be deleted. After user clears the current password, if it is the last password in machine, no more activation of password will happen in future.

C、 If the super password is input, all the periodical passwords will be deleted.

10 Appendix 1

10.1 Warning List

No.	Name of Problem	How to recover
E-001	The foot pedals are not in the center position	Shutdown
E-002	The machine enters an emergency stop	Shutdown
E-006	IPM overcurrent	Shutdown
E-007	Abnormal current	Shutdown
E-008	Auxiliary equipment voltage (24V) overcurrent	Shutdown
E-010	Abnormal spindle speed (exceeding maximum speed)	Shutdown
E-011	Spindle overload	Shutdown
E-012	IPM overcurrent	Shutdown
E-013	The encoder is faulty or not connected	Shutdown
E-014	Spindle parking timeout	Shutdown
E-015	Beyond the sewing range	Shutdown
E-016	The position on the pin shaft is abnormal	Shutdown
E-017	Abnormal detection of broken wires	Click Enter
E-018	The position of the knife is abnormal	Shutdown
E-019	The emergency stop switch is not in its normal position	Shutdown
E-020	Confirm that the head of the machine is down	Turn off the head tip switch, or turn the head upside down
E-022	The pendulum pin (DSP2 axis 1) command calibration error	Shutdown
E-023	Spindle encoder exception	Shutdown
E-025	Pendulum needle origin detection anomalies	Shutdown
E-026	The origin of the feed is detected abnormally	Shutdown
E-027	The pin origin detection is abnormal	Shutdown
E-028	The origin of the face shear detects abnormalities	Shutdown
E-029	The bottom shear origin detects abnormalities	Shutdown
E-030	The bottom shear (DSP1 Axis 1) command	Shutdown

No.	Name of Problem	How to recover
	check error	
E-031	The sending (DSP1 axis 2) command check error	Shutdown
E-032	The cutter (DSP1 Axis 1) command calibration error	Shutdown
E-033	The moving frame angle is calculated incorrectly	Shutdown
E-034	The presser foot (DSP2 axis 2) command calibration error	Shutdown
E-035	The slice line motor is abnormal	Shutdown
E-036	Cut bottom line motor abnormal	Shutdown
E-039	Spindle zero angle error	Shutdown
E-040	The face shear (main motor) command is incorrect	Shutdown
E-041	The stepping software does not match the model	Shutdown
E-042	Pattern transfer error	Shutdown
E-043	Incorrect pattern parameter	Shutdown
E-044	Head board EEPROM read and write errors	Shutdown
E-045	Onboard Flash write error ---- 6G	Shutdown
E-046	Spindle position is out of balance	Shutdown
E-047	Electronically controlled storage data read error	Shutdown
E-048	DSP2 phase seek error	Shutdown
E-049	DSP1 phase seeking error	Shutdown
E-050	Write master stepper parameter error	Shutdown
E-051	Write master stepper curve error	Shutdown
E-052	Write master ID error	Shutdown
E-053	Face shear motor overcurrent	Shutdown
E-054	Face shear motor overstepping	Shutdown
E-055	Bottom shear motor overcurrent	Shutdown
E-056	Bottom shear motor overshoot	Shutdown
E-057	Master SPI check error	Shutdown
E-058	The master SPI command is incorrect	Shutdown
E-060	Pendulum needle motor overcurrent	Shutdown

No.	Name of Problem	How to recover
E-061	The knife motor is overcurrent	Shutdown
E-062	Stepping overspeed 1	Shutdown
E-063	Step overdrive 2	Shutdown
E-064	Pendulum pin (X) motor out-of-balance	Shutdown
E-065	The cutter motor is out of balance	Shutdown
E-067	The cutter motor is out of balance	Shutdown
E-068	MD1 communication error	Shutdown
E-069	MD1 communication error	Shutdown
E-077	Flash write error	Shutdown
E-078	The model does not match the software	Shutdown
E-079	Mechanical parameters are incorrect	Shutdown
E-090	Over current feed motor	Shutdown
E-091	The pin motor over currents	Shutdown
E-094	Cloth feed (Y) motor is out of balance	Shutdown
E-095	The foot motor is out of balance	Shutdown
E-096	DSP2 validation error	Shutdown
E-097	DSP2 illegal command or configuration	Shutdown
E-098	MD2 read error	Shutdown
E-099	MD2 communication error	Shutdown
E-100	Spindle zero timeout	Shutdown
E-101	The electric control box cooling fan is abnormal	Shutdown
E-102	The position of the foot cylinder 1 is abnormal	Shutdown
E-103	The position of the foot cylinder 2 is abnormal	Shutdown
E-104	USB upgrade step error: Data length is abnormal	Shutdown
E-105	USB upgrade step error: File validation error	Shutdown
E-106	USB upgrade step error: Packet self-check error	Shutdown
E-107	USB upgrade stepping error: SPI communication check error	Shutdown
E-108	USB upgrade stepping error: Flash erase error	Shutdown

No.	Name of Problem	How to recover
E-109	USB upgrade step error: Flash flashing error	Shutdown
E-110	USB upgrade step error: Flash check error	Shutdown
E-111	USB upgrade step error: Packet crc check error	Shutdown
E-112	USB upgrade step error: Unlock error	Shutdown
E-113	USB upgrade step error: eeprom write error	Shutdown
E-114	USB upgrade step error: Data function code error	Shutdown
E-115	USB upgrade stepping error	Shutdown
E-116	USB upgrade stepping error	Shutdown
E-117	USB upgrade stepping error	Shutdown
E-118	USB upgrade stepping error	Shutdown
E-119	USB upgrade stepping error	Shutdown
E-130	Bottom shear software over current	Shutdown
E-131	Over current of the distribution software	Shutdown
E-132	Cutter software over current	Shutdown
E-133	Pendulum pin software over current	Shutdown
E-134	Foot presser software over current	Shutdown
E-135	Face scissor software over current	Shutdown
E-136	Bottom shear plugs the over current	Shutdown
E-137	Send cloth to block the flow	Shutdown
E-138	The knife blocks the over current	Shutdown
E-139	The pendulum needle is blocked by over current	Shutdown
E-140	Foot presser plugs the over current	Shutdown
E-141	Face shear plugging over current	Shutdown
E-142	Face scissors over speed	Shutdown
E-143	Bottom shear overs peed	Shutdown

10. 2 Hint List

No.	Name	Content
M-001	Set value too large	Please input value within range
M-002	Set value too small	Please input value within range

M-003	Parameter save error	Press Enter to recover default setting
M-004	Communication error	Communication error between operation panel and control box
M-005	Operation head not match to control box	Please check the model and the software version
M-006	Clock error	The hardware clock is down, please contact manufacturer for repair
M-007	Wrong password	Input again
M-008	Wrong user ID	Input again
M-009	Fail to confirm password	Input password again
M-010	Can not change system time	Periodical password has been set, can not change system time
M-011	Password file input error	
M-012	Password file load error	
M-013	Password save successful	
M-014	Clear all password failed	Can not delete password file
M-015	Fail to clear password	After clearance of password, the input of file has problem
M-016	Password file is deleted without authorization	Password file is deleted without authorization, please turn off machine
M-017	Can not input blank	Input password again
M-018	Current password not match	Input current password again
M-019	New password not match	Input new password again
M-020	Periodical password is same to super password error	Input password again
M-021	Enter touching panel correction mode	Are You Sure? Yes: enter No: X
M-022	Correction successful	Correction is successful, please restart machine
M-023	Correction failed	Please perform correction again
M-024	SRAM initialization	Clear all the data within SRAM, please turn off machine and restore the DIP switch
M-025	Turning off	
M-026	No warning record	
M-027	Clear warning record	Are You Sure? Yes: enter No: X
M-028	USB is pulled out	USB is pulled out
M-029	Can not find pattern in U disk	
M-030	Save software version successful	Software version is saved to the root directory of U disk
M-031	Replace needle	Needle replacement set value is reached, please replace needle
M-032	Replace oil	Oil replacement set value is reached, please replace oil
M-033	Clean machine	Cleaning machine set value is reached, please clean machine
M-034	Clear needle replacement set value	Are You Sure? Yes: enter No: X

M-035	Clear oil replacement set value	Are You Sure? Yes: enter No: X
M-036	Clear cleaning time value	Are You Sure? Yes: enter No: X
M-037	Clear production control value	Are You Sure? Yes: enter No: X
M-038	Over sewing range	Please make sure the pattern is within the sewing range
M-039	Stitch number over range	Please reduce patter stitch number
M-040	Load default patterns	No pattern in memory, please load default patterns
M-041	Patter data not exist	Reload or input from pattern-design software
M-042	Pattern data error	Current pattern data error, it will be replaced by default patterns
M-043	Pattern information file open failed	Restore to default pattern configuration
M-044	Pattern is existed	Can not repeat the pattern
M-045	Memory full	Please delete the unused patterns
M-046	Cover the pattern	Are You Sure? Yes: enter No: X
M-047	Continuous sewing pattern open error	Pattern file has mistake, it will be deleted
M-048	Cyclic sewing pattern open error	Pattern file has mistake, it will be deleted
M-049	Delete pattern data	Press Enter to delete; Press ESC to quit
M-050	Delete the selected pattern	Are You Sure? Yes: enter No: X
M-051	Pattern is used, can not delete	Please release the quotation at other pattern type
M-052	Save at least one pattern	Can not delete last pattern
M-053	Number not exist	Input again
M-054	Sewing counter reaches set value	Please pres Enter to cleat it
M-055	No.of pcs counter reaches set value	Please pres Enter to cleat it
M-056	Pattern-designing calculation error	
M-057	Knife size error	
M-058	Sewing code created at pattern-designing error	
M-059	Over max stitch interval	
M-060	Pattern file type error	
M-061	Delete the selected sub-pattern	Are You Sure? Yes: enter No: X
M-062	Delete all sub-patterns	Are You Sure? Yes: enter No: X
M-063	Restore to default setting	Press Enter to perform operation; Press ESC to quit
M-064	EEPROM knife parameter error	Press Enter to recover default setting
M-065	Restore all the settings	Are You Sure? Yes: enter No: X
M-066	Restore the selected items	Are You Sure? Yes: enter No: X
M-067	Not select an item	Please select one or several parameters
M-068	Clear running records	Are You Sure? Yes: enter No: X
M-069	Successful	Current operation is successful
M-070	Failed	Current operation is failed
M-071	Current cyclic sewing pattern is empty or the quoted continuous sewing pattern is empty	Edit again
M-072	Initialize U disk	Press Enter to perform operation; Press ESC to quit. The initialization will delete all the files in U

		disk
M-073	Initialize memory	Press Enter to perform operation; Press ESC to quit. The initialization will delete all the files in memory
M-074	Please turn off machine	Current operation is finished, please restart machine
M-075	Parameter restoration successful	Parameter restoration successful, please restart machine
M-076	Fail to open file	Fail to open file
M-077	Not select update item	Please select at least one item for update
M-078	Selected item for update is not existed	If the item has no update file, the system will cancel the selection. If user wants to update the rest, please confirm again
M-079	Update successful	Update successful, please restart machine
M-080	Copy failed, please check memory room	Check the room of memory
M-081	Copy failed, please check U Disk	Check whether the U disk is pulled out
M-082	File I/O error	File I/O error
M-083	Verification failed at updating main software	
M-084	Can not delete pattern data	The selected sewing data is in use
M-085	Perform parameter transfer	Are You Sure? Yes: enter No: X
M-086	Can not open changed pattern	Please confirm pattern file
M-087	Changed pattern format error	Please confirm pattern file
M-088	Changed pattern data is too long	Please confirm pattern file
M-089	Pattern-designing data error	EPD parameter is abnormal
M-090	Can not change counter	At changing, please turn off the setting
M-091	Verification failed at updating main software	Please reselect
M-092	The shape of the needle eye changes	Change the shape of the needle eye, pay attention to modify the S parameter data of the shape of the needle eye, so as not to affect the playing board!
M-093	Whether to clear all custom parameters	Are you sure? Yes:Enter No:X
M-094	The USB flash drive does not exist	Please insert a USB drive containing mp3 files
M-095	There is no video file video .avi	Please store the video .avi file in the update directory of the USB stick, and enter the upgrade interface to upgrade the video file
M-096	THE UK parameter exception	Press Enter to restore the default parameters
M-097	The number entered is abnormal	Please enter a number in the number range
M-098	Upgrade step end check error	
M-099	The bottom seam function is not turned on	
M-100	QR code display failed	
M-101	The system is set to no network mode	Detection can be performed after the networking function is turned on
M-102	Join failed	
M-103	Punch card successful	

M-104	Punch failed	
M-105	The bottom line is insufficient	The bottom line is insufficient, please replace the shuttle heart

10.3 Common Problems and Solutions

No.	Name	Solutions and Steps
E-002	The machine enters an emergency stop	Press the Reset key
E-004	The main voltage (300V) is too low	Shutdown
E-008	Auxiliary equipment voltage (24V) overcurrent	1. Check whether the air valve cable has a short circuit phenomenon. 2. Replace the electronic control
E-025	Pendulum needle origin detection anomalies	1. Check whether the mechanical installation is abnormal. 2. Check whether the pin motor encoder (X18) cable and plug are normal. 3. Replace the foot motor. 4. Replace the electronic control.
E-026	The origin of the feed is detected abnormally	1. Check whether the cable (X48) of the sending sensor is abnormal. 2. Input detection to observe whether the sensor signal is normal. 3. Replace the cloth feeding sensor.
E-028	The origin of the face shear detects abnormalities	1. Check whether the face scissor sensor cable (X44) is normal. 2. The input detection mode detects whether the face shear sensor signal is normal. 3. Replace the face scissor sensor. 4. Replace the electronic control.
E-029	The bottom shear origin detects abnormalities	1. Check whether the bottom shear sensor cable (X47) is normal. 2. The input detection mode detects whether the face shear sensor signal is normal. 3. Replace the face scissor sensor. 4. Replace the electronic control.
E-055	Bottom shear motor overcurrent	
E-056	Bottom shear motor overshoot	
E-060	Pendulum needle motor overcurrent	
E-061	The knife motor is overcurrent	
E-064	Pendulum pin (X) motor out-of-balance	
E-065	The cutter motor is out of balance	

E-090	Overcurrent feed motor	
E-091	The pin motor overcurrents	

10. 4 Default Values of Sewing Shapes

The following are the Default Values of sewing shape

No.	Item	Unit															
S01	Sewing Shape	mm															
S02	Length of cloth cutting	mm	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
S03	Knife groove width, right	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S04	Knife groove width, left	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
S05	Over-edging width, left	mm	1.70	1.70	1.70	1.70	1.70	1.70	1.40	1.40	1.40	1.40	1.70	1.70	1.70	1.70	1.70
S06	Ratio of right and left shapes	%	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
S07	Pitch at parallel section	mm	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
S08	2nd bar-tacking length	mm	1.0	—	1.0	—	1.5	3.0	1.0	—	1.5	3.0		1.0	1.0	1.5	3.0
S09	1st bar-tacking length	mm	1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S10	Compensation of bar-tacking width, right	mm	0	—	0	—	0	—	0	—	0	—	—	0	0	0	—
S11	Compensation of bar-tacking width, left	mm	0	—	0	—	0	—	0	—	0	—	—	0	0	0	—
S12	Left Taper Bar-tacking	mm	—	—	—	—	—	0.85	—	—	—	0.85	—	—	—	—	0.85
S13	Right Taper	mm	—	—	—	—	—	0.85	—	—	—	0.85	—	—	—	—	0.85

	Bar-tacking																
S14	Eyelet shape length	mm	—	—	—	—	—	—	2.0	2.0	2.0	2.0	—	—	—	—	—
S15	Number of stitches of eyelet shape	Stitch	—	—	—	—	—	—	3	3	3	3	—	—	—	—	—
S16	Eyelet width	mm	—	—	—	—	—	—	1.0	1.0	1.0	1.0	—	—	—	—	—
S17	Eyelet length	mm	—	—	—	—	—	—	3.0	3.0	3.0	3.0	—	—	—	—	—
S18	Round type shape length	mm	—	2.0	2.0	2.0	2.0	2.0	—	2.0	—	—	2.0	2.0	2.0	2.0	2.0
S19	Number of radial shape stitches	Stitch	—	—	3	3	3	3	—	3	—	—	—	—	—	—	—
S20	Radial bar-tacking	—	—	—	No	No	No	No	—	No	—	—	—	—	—	—	—
S21	Pitch at bar-tacking section	mm	0.30	0.30	0.30	-	0.30	0.30	0.30	-	0.30	0.30	0.25	0.30	0.25	0.25	0.25
S22	1 st clearance	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
S23	2nd clearance	mm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
S31	Single/ Double Sewing	—	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e
S32	Select Cross at Double Sewing	—	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
S33	Compensation of Double Sewing Width	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S34	Number of Basting Times	Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S35	Basting Pitch	mm	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
S36	Rolling Length of Basting	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

S37	Rolling Pitch of Basting	mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
S38	Rolling Width of Basting	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
S39	Lengthwise Compensation of Needle Entry at Basting	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
S40	Horizontal Compensation of Needle Entry at Basting	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S41	Compensation of Left Side Position at Basting	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S42	Compensation of Right Side Position at Basting	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S44	Basting Speed	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
S45	Pair-sewing	—	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
S46	Pair-sewing Width	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
S47	Pair-sewing Pitch	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
S51	Left Parallel Tension	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S52	Right Parallel Tension	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S53	Left Parallel Tension (1 st lap at	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60

	double sewing)																
S54	Right Parallel Tension (1 st lap at double sewing)	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S55	1 st Bar-tacking Tension	—	35	60	120	35	35	35	60	60	60	60	60	60	60	60	60
S56	2 nd Bar-tacking Tension	—	35	60	35	35	35	35	60	60	60	60	60	60	60	60	606
S57	Set Needle Thread Tension at Sewing Start	—	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
S58	Set the Needle Thread Tension at Basting	—	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
S59	ACT Timing Adjustment at 1st Bar-tacking Start	Stitch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S60	ACT Timing Adjustment at Right Over-edging Start	Stitch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S61	ACT Timing Adjustment at 2nd Bar-tacking Start	Stitch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S62	Bar-tacking Stitch Number at Sewing Start	Stitch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S63	Bar-tacking Pitch at Sewing Start	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

S64	Bar-tacking Width at Sewing Start	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S65	Vertical Adjustment of Bar-Tacking Sewing at Sewing Start	mm	0	1.5	0	1.5	0	0	0	1.5	0	0	1.5	0	0	0	0
S66	Horizontal Adjustment of Bar-Tacking Sewing at Sewing Start	mm	0	0	0	0	0	0.7	0	0	0	0.7	0	0	0	0	0.7
S67	Bar-tacking Width at Sewing End	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S68	Bar-tacking Stitch Number at Sewing End	Stitch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S69	Vertical Adjustment of Bar-Tacking Sewing at Sewing End	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S70	Horizontal Adjustment of Bar-Tacking Sewing at Sewing End	mm	0.9	0.9	0.9	0.9	0	0.7	0.9	0.9	0	0.7	0.9	0.9	0.9	0	0.7
S81	Knife motion	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
S83	Knife motion at 1st lap of double stitching	—	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
S84	Max Speed	rpm	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600

	Limitation																
S86	Pitch of Forward	mm															
S87	Width of Forward	mm															
S88	Pitch of Return	mm															
S89	Width of Return	mm															

No.	Item	Unit															
S01	Sewing Shape	mm															
S02	Length of cloth cutting	mm	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	13	19.1	19.1	19.1
S03	Knife groove width, right	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	—	—	0.10	0.10
S04	Knife groove width, left	mm	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	—	0.10	—	0.10
S05	Over-edging width, left	mm	1.40	1.40	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	—	—	—	—
S06	Ratio of right and left shapes	%	100	100	100	100	100	100	100	100	100	100	100	—	—	—	—
S07	Pitch at parallel section	mm	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	—	—	—	—
S08	2nd bar-tacking length	mm	—	—	—	—	—	1.5	3.0	—	—	—	—	—	—	—	—
S09	1st bar-tacking length	mm	—	—	1.0	1.0	1.0	1.0	1.0	—	—	—	—	—	—	—	—
S10	Compensation of bar-tacking width,	mm	—	—	0	0	0	0	0	—	—	—	—	—	—	—	—

	right																
S11	Compensation of bar-tacking width, left	mm	—	—	0	0	0	0	0	—	—	—	—	—	—	—	—
S12	Left Taper Bar-tacking	mm	—	—	—	—	—	—	0.85	—	—	—	—	—	—	—	—
S13	Right Taper Bar-tacking	mm	—	—	—	—	—	—	0.85	—	—	—	—	—	—	—	—
S14	Length of Eyelet buttonhole	mm	2.0	2.0	—	—	—	—	—	—	—	—	—	—	—	—	—
S15	Number of stitches of eyelet shape	针	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—
S16	Eyelet width	mm	1.0	1.0	—	—	—	—	—	—	—	—	—	—	—	—	—
S17	Eyelet shape length	mm	3.0	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—
S18	Round type shape length	mm	2.0	2.0	2.0	2.0	2.0	—	—	2.0	2.0	2.0	2.0	—	—	—	—
S19	Number of radial shape stitches	Stitch	—	—	3	—	—	—	—	3	3	3	—	—	—	—	—
S20	Radial bar-tacking	—	—	—	No	—	—	—	—	No	No	NO	—	—	—	—	—
S21	Pitch at bar-tacking section	mm	0.25	0.30	0.30	0.25	0.30	0.30	0.30	0.25	0.30	0.25	0.25	—	—	—	—
S22	1 st clearance	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—	2.0	2.0	2.0
S23	2nd clearance	mm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	—	2.0	2.0	2.0
S31	Single/ Double Sewing	—	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Singl e	Single	Singl e	Singl e	—	—	—	Singl e
S32	Select Cross at Double Sewing	—	<	<	<	<	<	<	<	<	<	<	<	—	—	—	<

S33	Compensation of Double Sewing Width	mm	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—
S34	Number of Basting Times	Time	0	0	0	0	0	0	0	0	0	0	0	3	2	2	—
S35	Basting Pitch	mm	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	—
S36	Rolling Length of Basting	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	—
S37	Rolling Pitch of Basting	mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	—
S38	Rolling Width of Basting	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—
S39	Lengthwise Compensation of Needle Entry at Basting	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—
S40	Horizontal Compensation of Needle Entry at Basting	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
S41	Compensation of Left Side Position at Basting	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
S42	Compensation of Right Side Position at Basting	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
S44	Basting Speed	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	—
S45	Pair-sewing	—	No	No	No	No	No	No	No	No	No	No	—	—	—	—	—

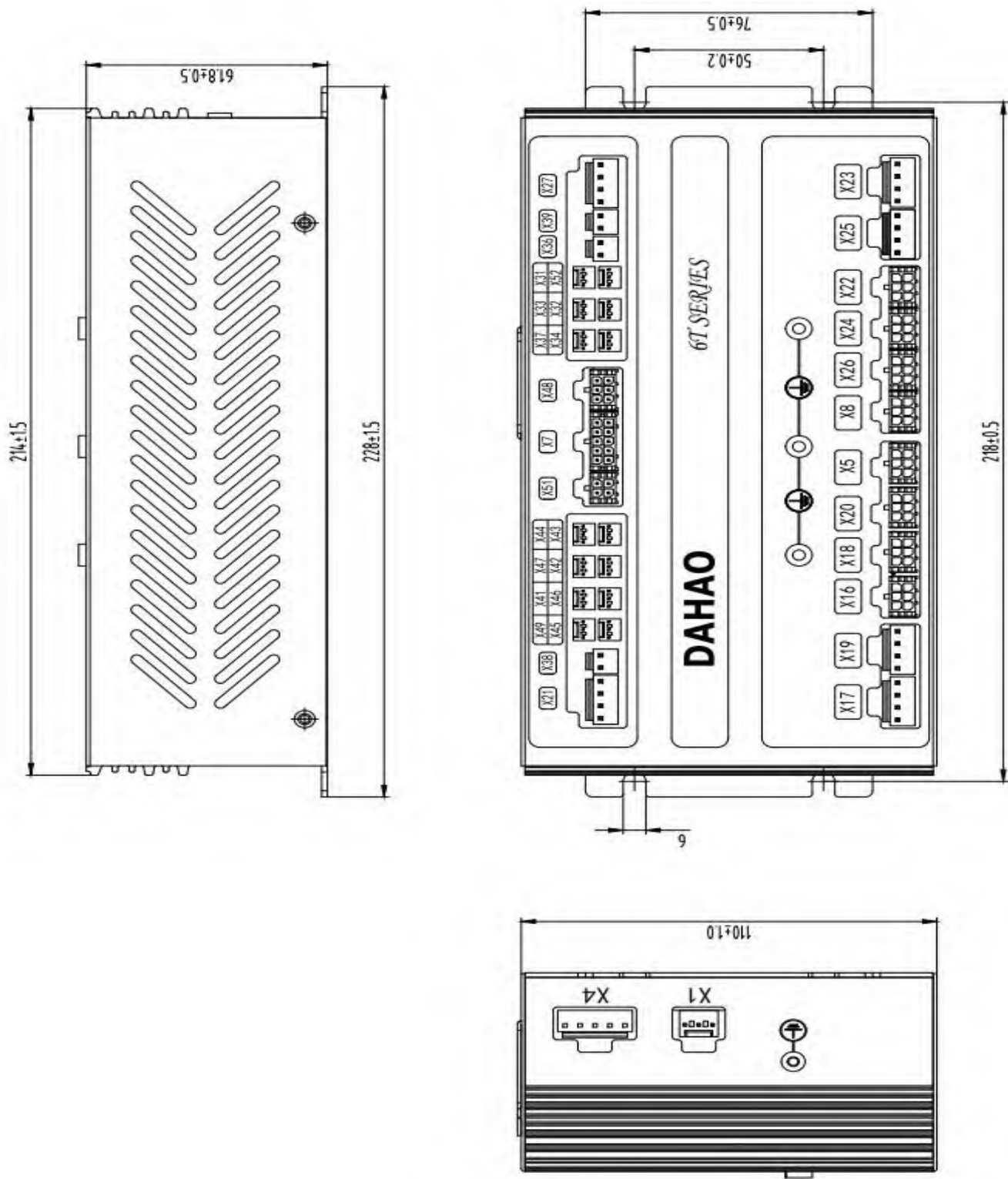
S46	Pair-sewing Width	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	—	—	—	—	—
S47	Pair-sewing Pitch	mm	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	—	—	—	—	—
S51	Left Parallel Tension	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S52	Right Parallel Tension	—	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
S53	Left Parallel Tension (1 st lap at double sewing)	—	60	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S54	Right Parallel Tension (1 st lap at double sewing)	—	60	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S55	1 st Bar-tacking Tension	—	60	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S56	2 nd Bar-tacking Tension	—	60	60	60	60	60	60	60	60	60	60	60	60	—	—	—	—
S57	Set Needle Thread Tension at Sewing Start	—	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
S58	Set the Needle Thread Tension at Basting	—	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
S59	ACT Timing Adjustment at 1 st Bar-tacking Start	Stitch	0	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—
S60	ACT Timing Adjustment at Right Over-edging Start	Stitch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

S61	ACT Timing Adjustment at 2nd Bar-tacking Start	Stitch	0	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—
S62	Bar-tacking Stitch Number at Sewing Start	Stitch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S63	Bar-tacking Pitch at Sewing Start	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S64	Bar-tacking Width at Sewing Start	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S65	Vertical Adjustment of Bar-Tacking Sewing at Sewing Start	mm	1.5	1.5	1.5	1.5	1.5	0	0	1.5	1.5	1.5	1.5	0	0	0	0	0
S66	Horizontal Adjustment of Bar-Tacking Sewing at Sewing Start	mm	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0	0
S67	Bar-tacking Width at Sewing End	mm	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
S68	Bar-tacking Stitch Number at Sewing End	Stitch	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
S69	Vertical Adjustment of Bar-Tacking Sewing at Sewing End	mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S70	Horizontal	mm	0.9	0.9	0.9	0.9	0.9	0	0.7	0.9	0.9	0.9	0.9	0	0	0	0	0

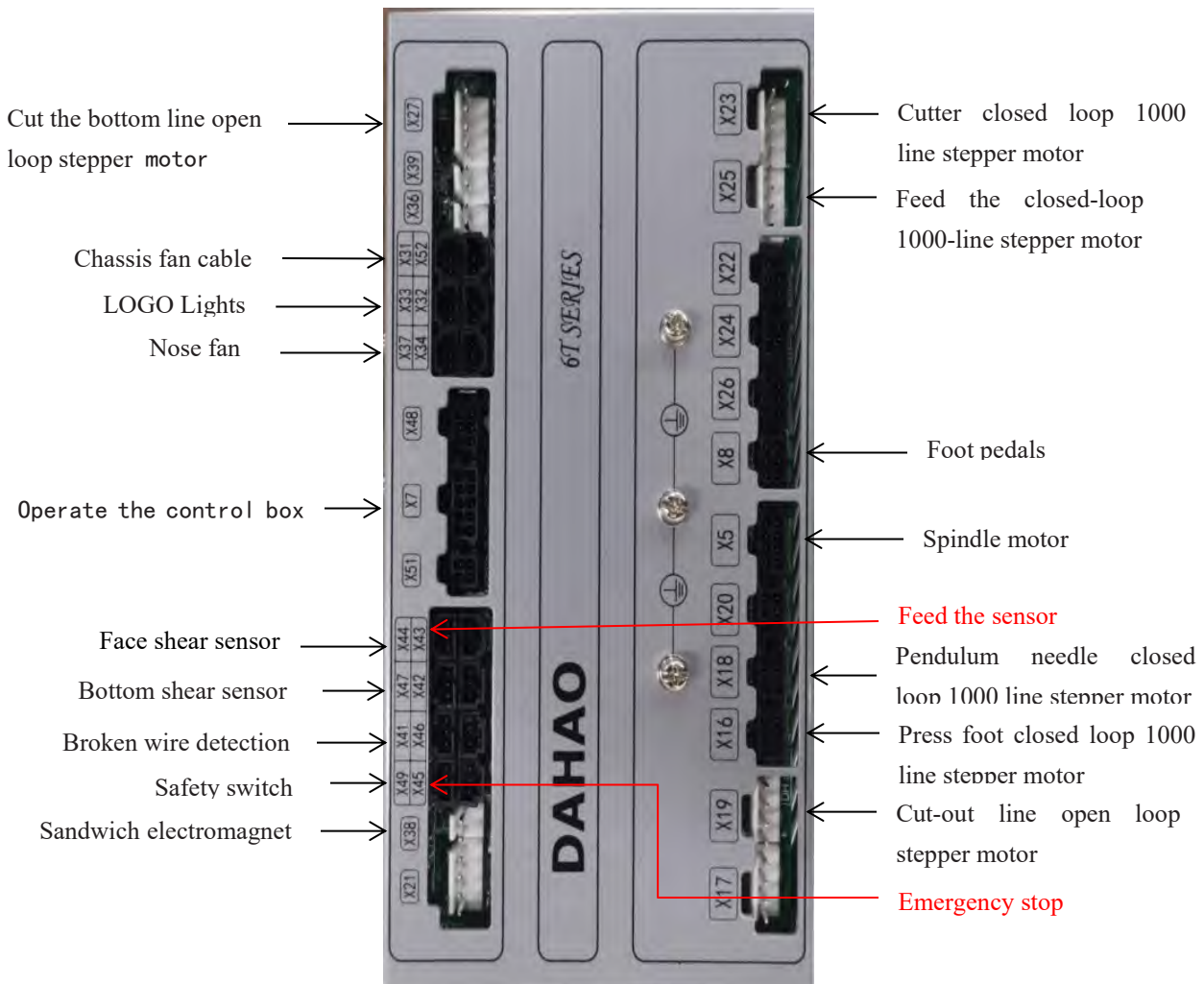
	Adjustment of Bar-Tacking Sewing at Sewing End																
S81	Knife motion	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	—	Yes	Yes	Yes
S83	Knife motion at 1st lap of double stitching	—	No	No	No	No	No	No	No	No	No	No	No	—	—	—	—
S84	Max Speed Limitation	rpm	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
S86	Pitch of Forward	mm												0.80	0.80	0.80	0.80
S87	Width of Forward	mm												1.7	1.7	1.7	1.7
S88	Pitch of Return	mm												0.80	0.80	0.80	0.80
S89	Width of Return	mm												1.7	1.7	1.7	1.7

11 Appendix 2

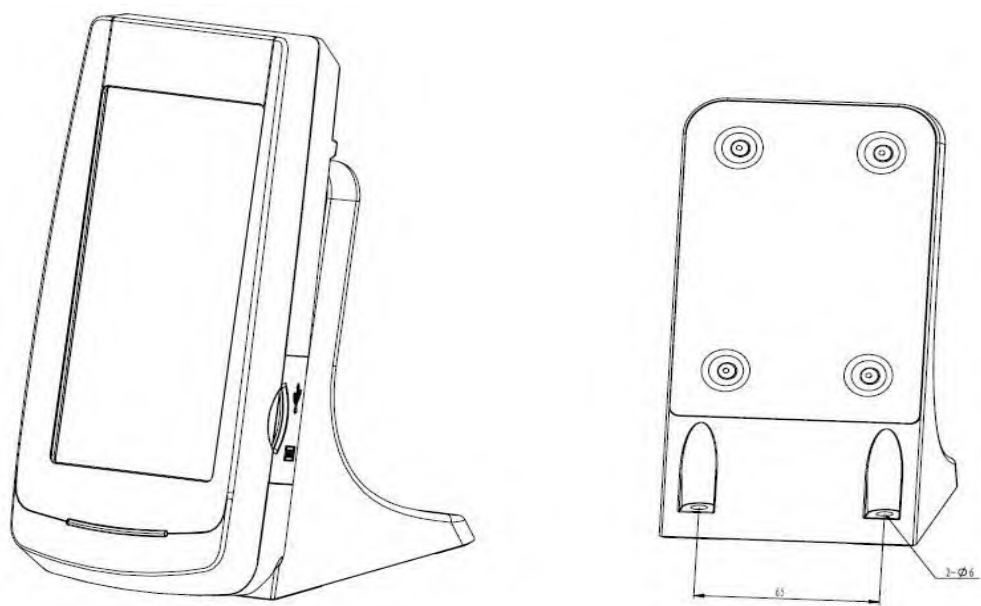
11.1 Installation Size of Control Box



11.2 External Cable Connection of Control Box

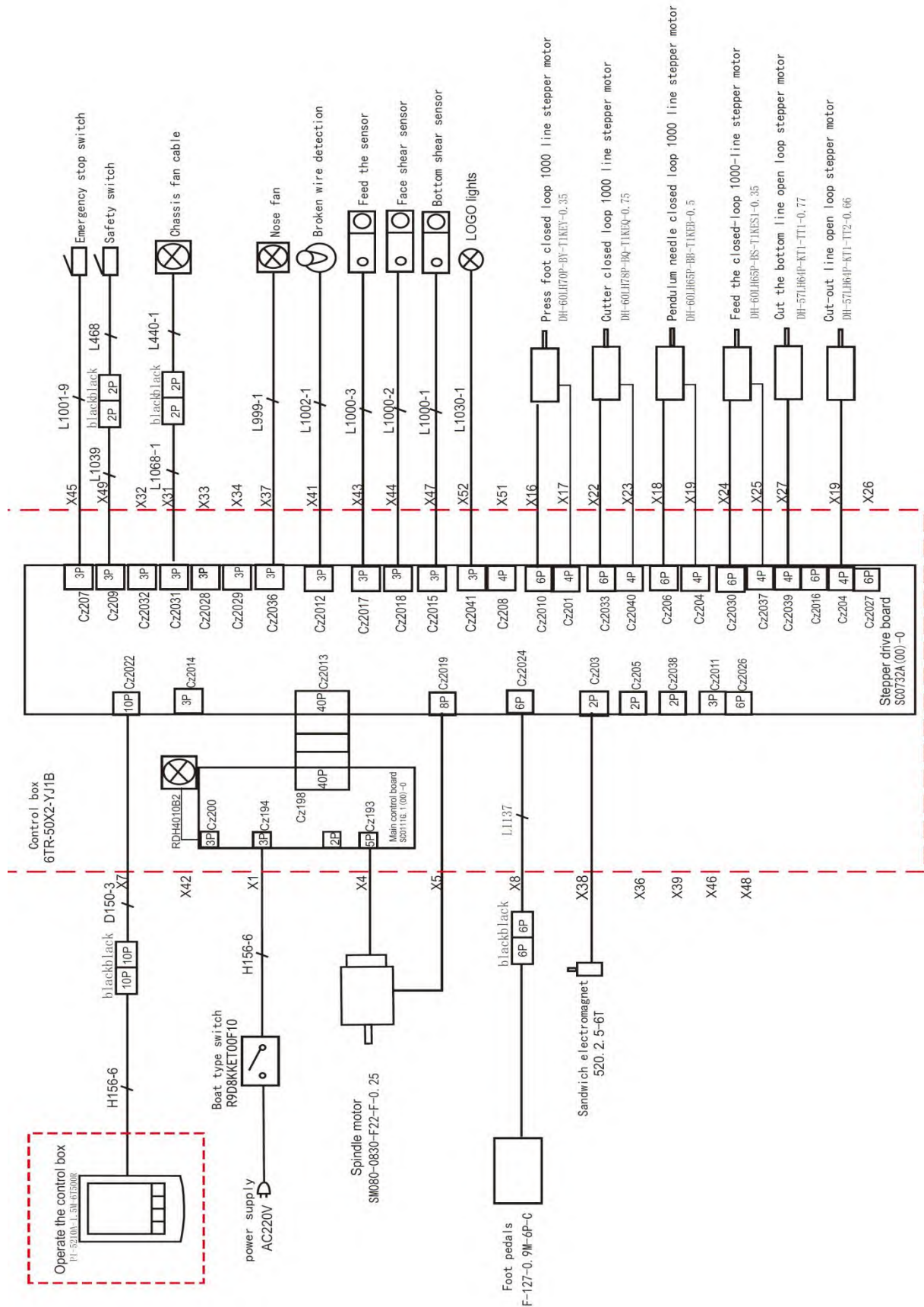


11. 3 Installation Size of Operation Panel



Installation Size of Operation Panel

11. 4 System Diagram





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