使用说明书
Operation Manual Book

质量第一
用户至上

Guality-oriented
Customer the first

拉布机 SPREADER

型号 Model No.: KT&KW

使用前应仔细阅读本说明书
Before operating this iron,Please read this instruction completely.

维修记录 SERVICE RECORD

装机 Install	日期 Date	机器编号 SER NO.	使用者编号 USER NO.	程式 Program	签名 Sign

	日期 Date	内容Subject Matter	签名 Sign
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
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19			
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21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

注意：

本机之行走距离及其位置由机器自我记忆，断电中严禁外力推动机器使其移位，以确保继续使用之准确性与安全性。

操作人员一旦离开机器再回来操作之前，请务必确认机器尚在原先停止位置未被移动，才可开始工作。

如发现机器已被移动，要重新做一次"位置归0"再继续工作（参照第17页）。
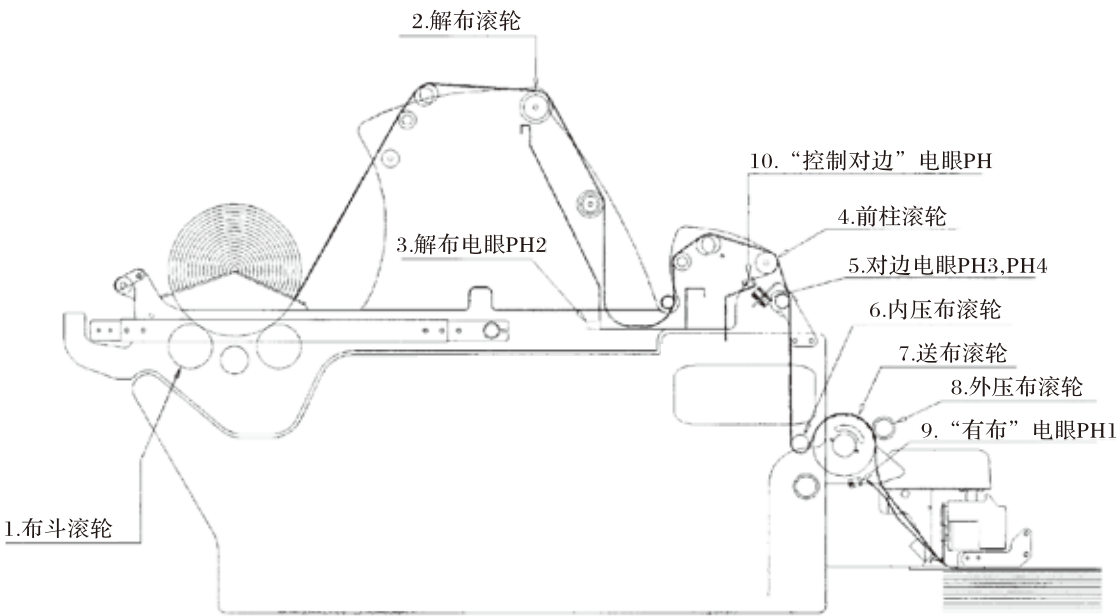
Notice:

the machine travel length and posioning are controlled by computer.It is strictly not allowed to move machine manually when machine is power off.
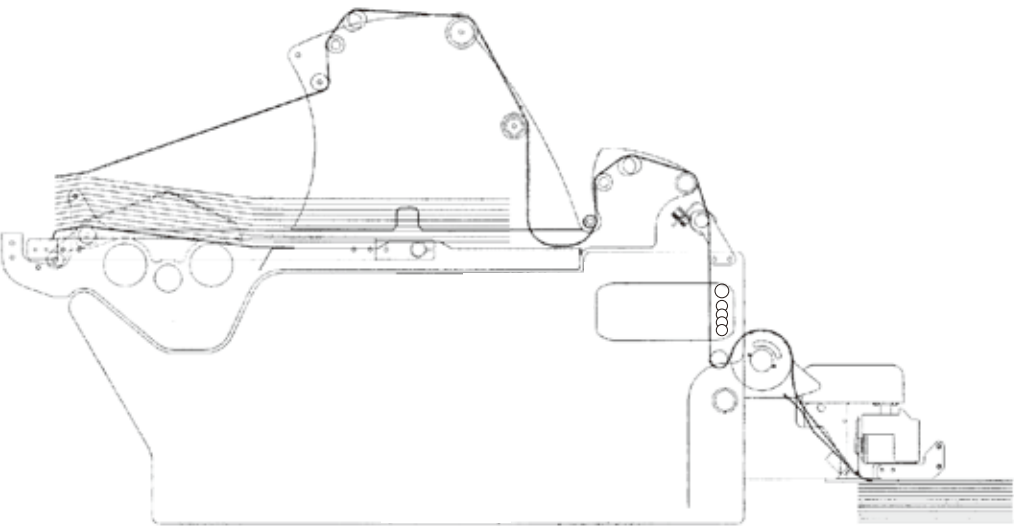
When operator resumes back to work on machine , please make sure the spreader is not moved manually by anyone during the power off.

If the machine is manually moved during power off mode , please do calibrate the machine position into origin as instruction manual (page 35).

正常操作：

2.解布滚轮

10."控制对边"电眼PH

4.前柱滚轮

3.解布电眼PH2

5.对边电眼PH3,PH4

6.内压布滚轮

7.送布滚轮

8.外压布滚轮
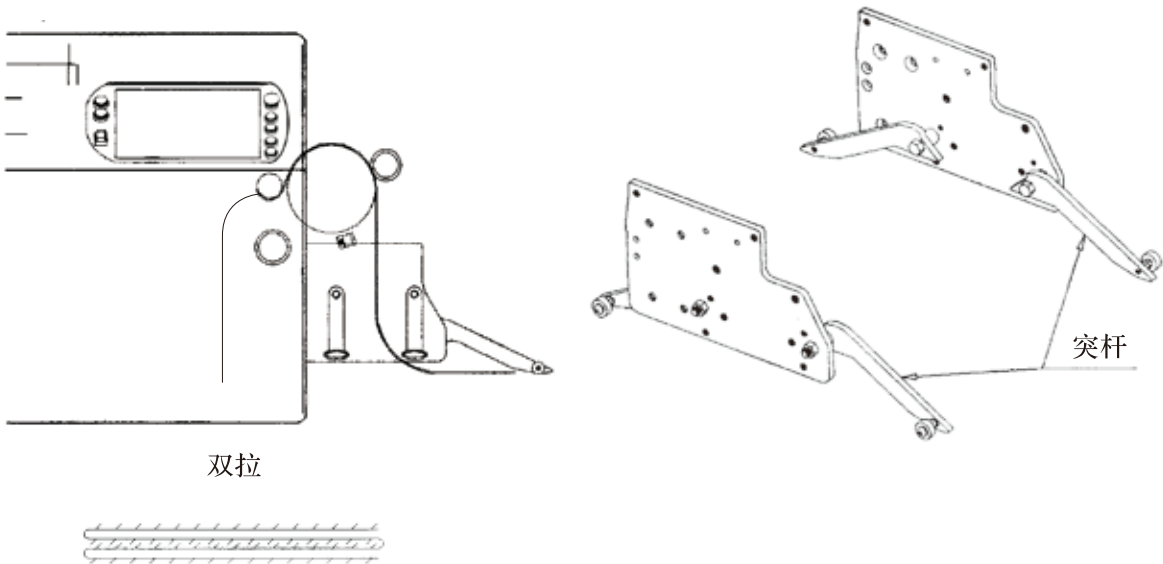
9."有布"电眼PH1

1.布斗滚轮

卷支布料：置放如上图。拉布时之必备按键：　　　　　　　或

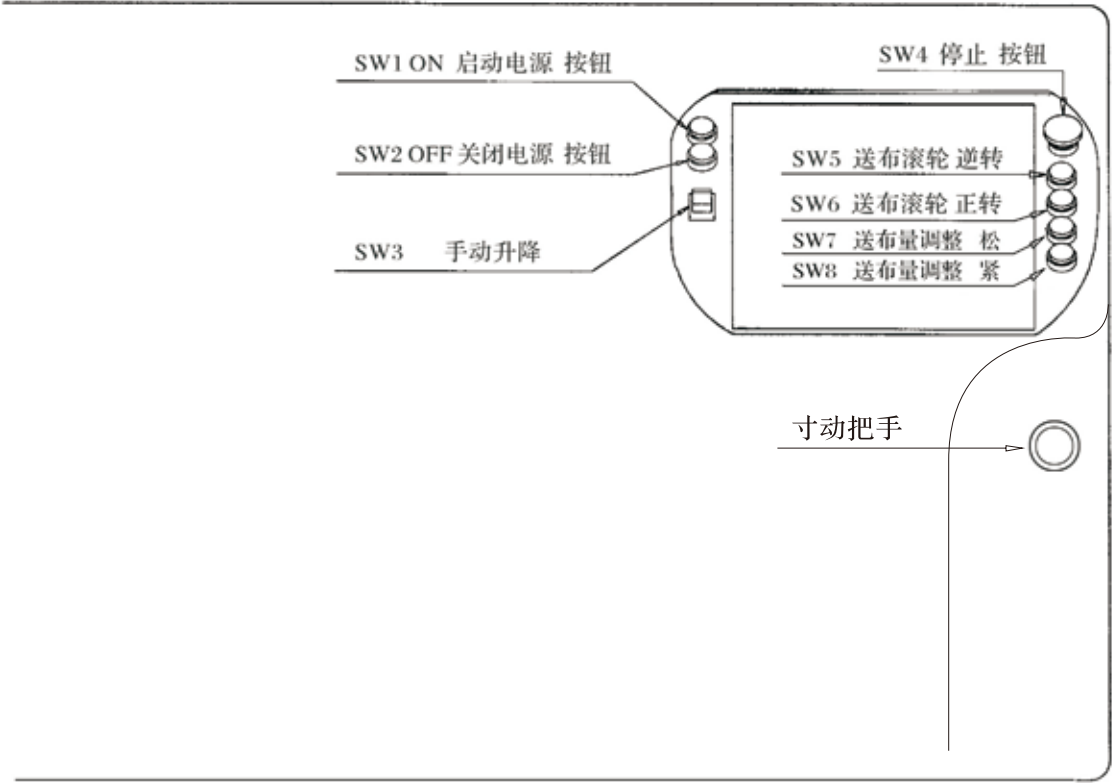
折码布料：置放如上图。拉布时之必备按键：

单拉
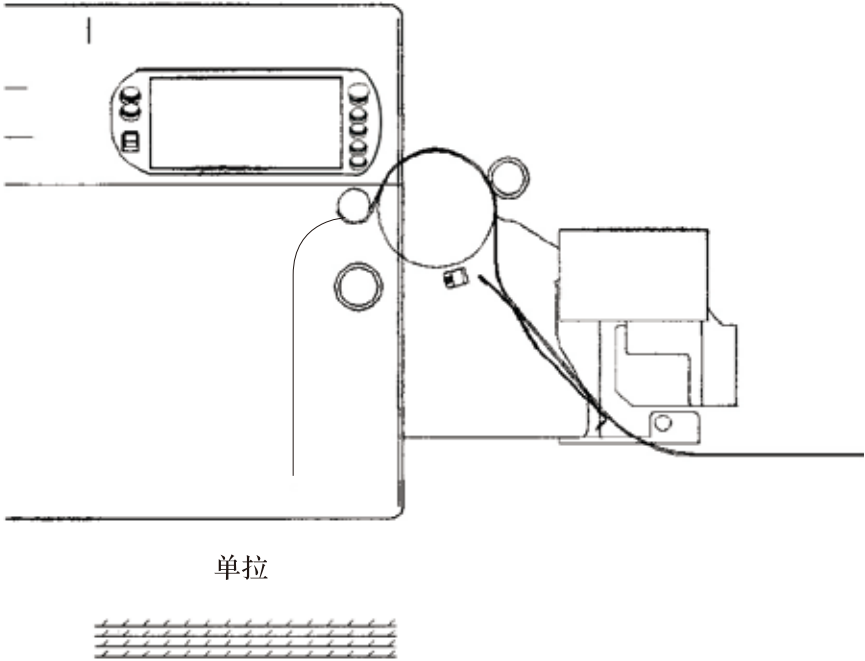
挂上切刀组，插上接头，拉布机自动进入 **单拉** 模式，不必再做其他设定。

双拉

突杆

卸下切刀组，装上突杆，拉布机自动进入 **双拉** 模式。

双拉：需要用两端扫布器，尾端扫布器要往前推，用插稍固定在前方点。（尾端扫布器 单拉
　　　　时不用，要往后拉到底，固定在后方点。）

正常操作：

SW1 ON 启动电源 按钮
SW4 停止 按钮
SW2 OFF 关闭电源 按钮
SW5 送布滚轮 逆转
SW6 送布滚轮 正转
SW3 手动升降
SW7 送布量调整 松
SW8 送布量调整 紧
寸动把手

SW1 「**启动电源按钮**」：启动电源。
SW2 「**关闭电源按钮**」：断电关机。另机器静止经过5分钟会自动断电关机。
SW3 「**手动升降**」：往上扳——上升；往下扳——下降。
SW4 「**停止按钮**」：停止按钮。
　　　　　　　　另裁床两边设有停止钢索，拉动钢索功能同停止按钮。
　　　　　　　　（停止钢索为最常用之停止装置）
SW5 「**送布滚轮**」：手动逆转按钮。
SW6 「**送布滚轮**」：手动正转按钮。
　　　　　　　　送布滚轮在拉布中随着机器移动而转动。
　　　　　　　　静止中需要转动送布滚轮时，用这两颗按钮。
SW7 「**送布量调整按钮 松**」：按压该按钮，铺布时布面将越来越松弛，
　　　　　　　　　　　　　　此按钮只有在机器运行时起作用。
SW8 「**送布量调整按钮 紧**」：按压该按钮，铺布时布面将越来越紧绷，
　　　　　　　　　　　　　　此按钮只有在机器运行时起作用。
【**寸动把手**】：　"手动"移动机器用把手。顺时针转向右行（前行）；逆时针转动向左
　　　　　　　行（后退），并以转动角度的大小控制速度。

拉布长度　现有层数 预设层数

显示现在位置
键入"拉布长度"
键入"层数"
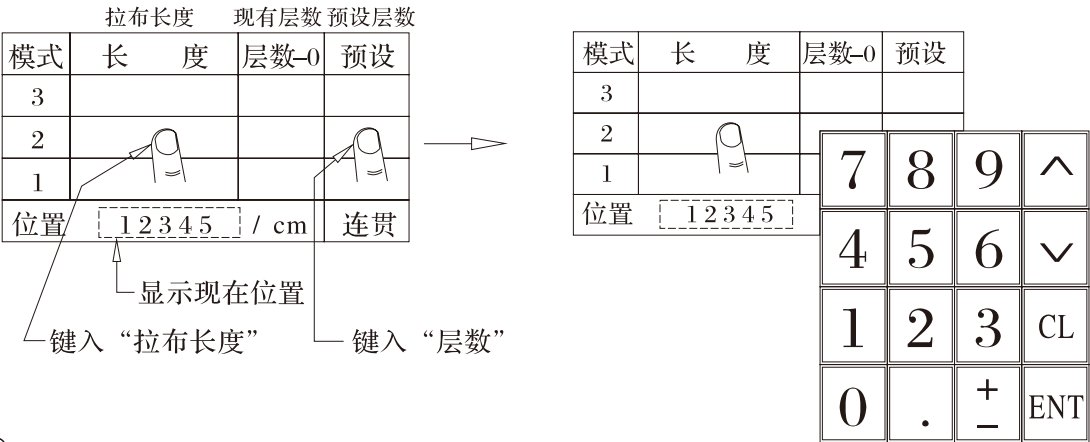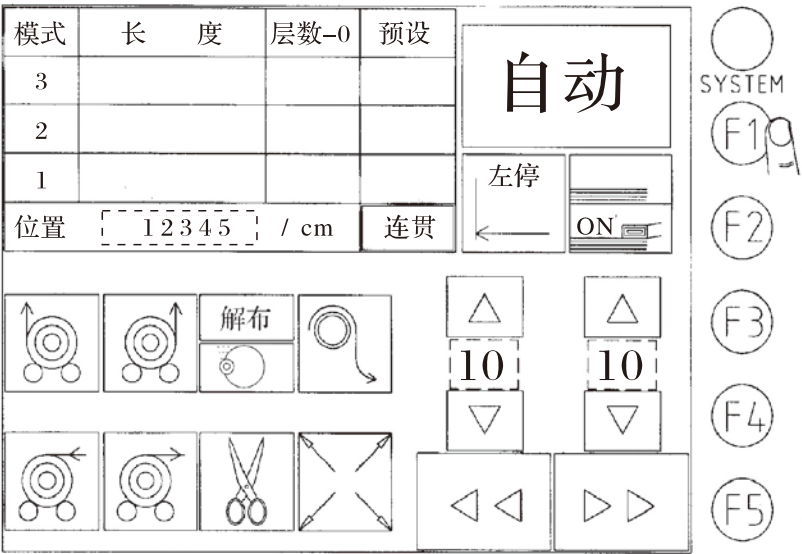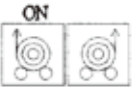
押一下，如右图出现数字键盘，键入所要数字后按 ENT
"拉布长度"单位：cm　1M=100cm　1inch=2.54cm
单一模式拉布：「层数」到达「预设」值时停机。
连贯模式拉布：所有「层数」到达所有「预设」值时停机。

押住1秒钟
现在位置
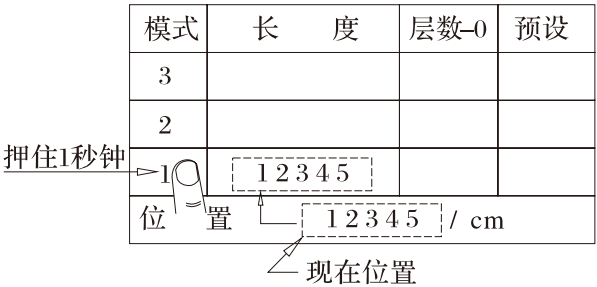
教导模式：设拉布长度：在不知道确实的拉布长度时，将机器移到所要位置后，如图，压住模式格 ① 1秒钟，现在
　　　　　位置值会被设入模式 ① 的拉布长度内。
　　　　　模式 ② 和模式 ③ 可依此方法设入拉布长度。

正常操作：

卷支布料放置布斗内，由 [图] 或 [图] 控制出布方向。

匹布料用不到布斗，押一下方向键 [图] → [图] 把ON消去，使布斗不运转。

送布键
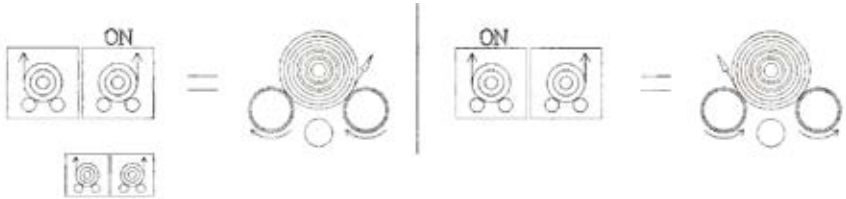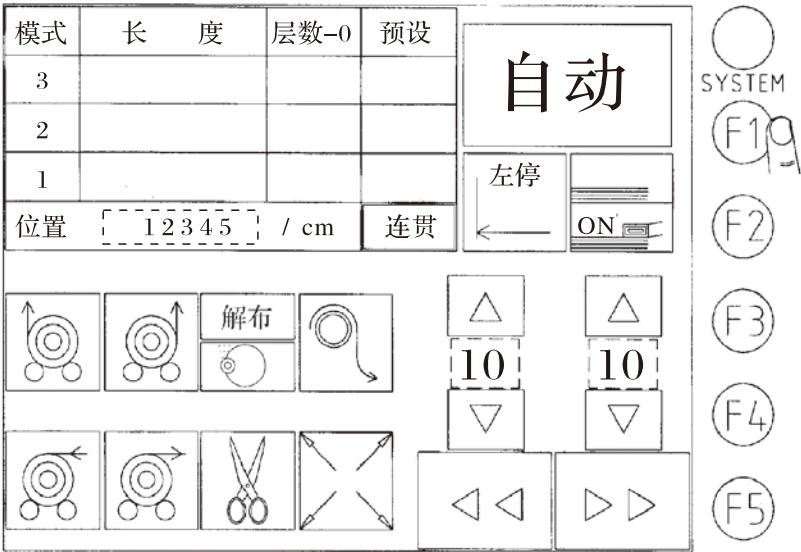
[图] → 送布状态，当机器移动时送布滚轮跟着转动把布料往下送出。

[图] → 不送布，机器虽有移动，布料不被送出。

[图] 押一下 → [图] 押一下 → [图]

自动　按此键，拉布机进入自动拉布状态。
当布料准备就绪后，确认方向正确，按此键进行拉布作业。

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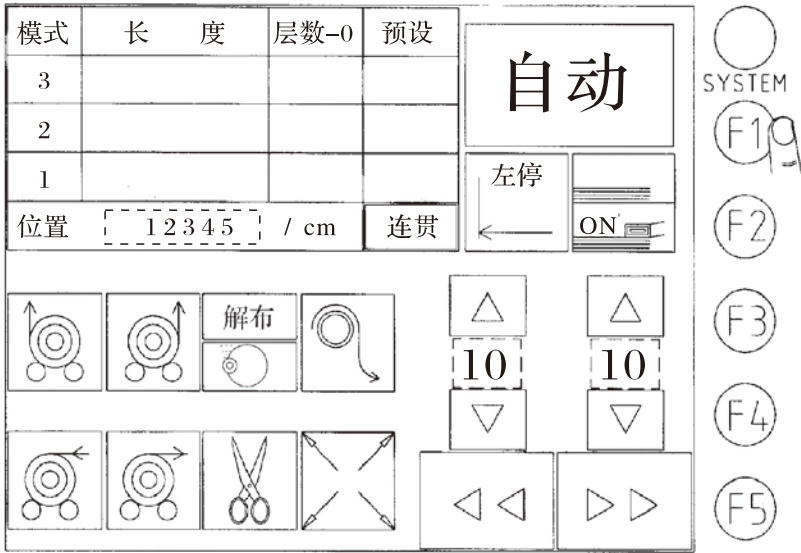
正常操作：

裁剪按钮1

当机器停止时，押一下 [图] 可进行一次裁断动作。

裁刀头如因紧急停止未停于定位时，押一下 [图] 可让裁刀头回到定位。

按此裁断按钮作手动裁断时，层数值不变。

回收　寸动
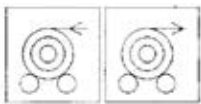
布斗滚轮"手动"键
押住 [图] 时，布料低速卷回。押住 [图] 时，布料低速卷出。

解布键　压一下 [解布] → [解布] 解布辊转动锁定。

压一下 [解布] → [解布] 解布辊停止锁定。

研磨键　押一下 [图] → [图] 刀片转动，再轻押磨石进行磨刀。
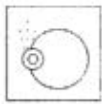
押一下 [图] → [图] 刀片停止转动。
（磨石面通常会有积尘，卸下磨石平贴于
砂纸上，可磨掉积尘）

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正常操作：

模式	长　　度	层数-0	预设
3			
2			
1			
位置　□ 1 2 3 4 5 □ / cm		连贯	

自动

左停　←　ON

SYSTEM
F1 F2 F3 F4 F5

解布　10　10

ON　单拉前端压布时，提前减速　　　ON　单拉前端无压布时，不提前减速

刹车解放键

押一下　□ → ON□　解放刹车，用手可轻推移动机器。

押一下　STOP → □　刹车锁住，要用大力才能推动机器。

自动左行速度　10　10　自动右行速度

◁◁　▷▷　　◁◁　▷▷
左方向　右方向

1.指示方向　键
2.变换方向　键
3.恢复对边功能
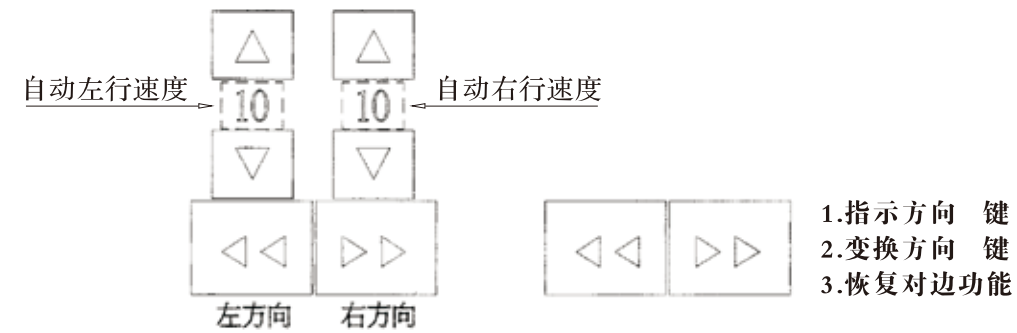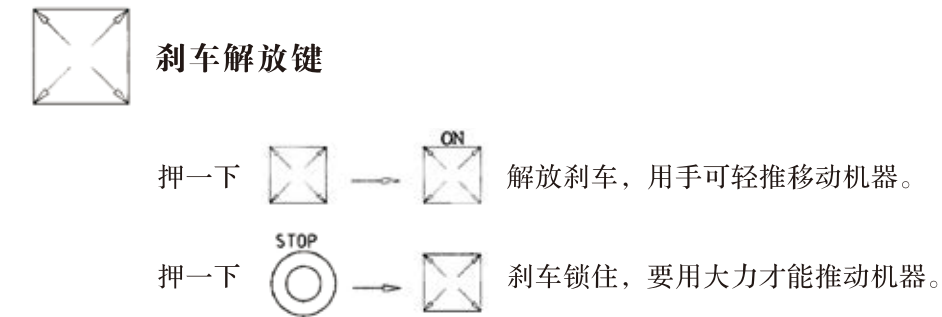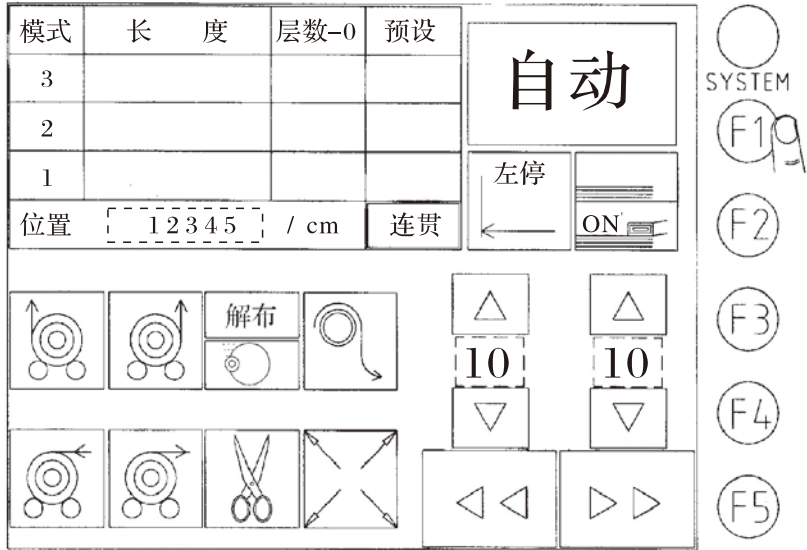
1.指示方向键：闪烁的一方代表机器要移动的方向，押 自动 时机器往该方向移动。
2.变换方向键：押一下无闪烁键，可改变指示方向。
3.恢复对边功能：机器由自动状态中停止后，会关闭对边功能，
　　　　　　　　再进入自动状态中，会恢复对边功能。
　　　　　　　　或押此任一键，也会恢复对边功能。

正常操作：

模式	长　　度	层数-0	预设
3			
2			
1			
位置　□ 1 2 3 4 5 □ / cm		连贯	

自动

左停　←　ON

SYSTEM
F1 F2 F3 F4 F5

解布　10　10

模式	长　　度	层数-0	预设
3			
2			
1			
位置　□ 1 2 3 4 5 □ / cm		连贯	
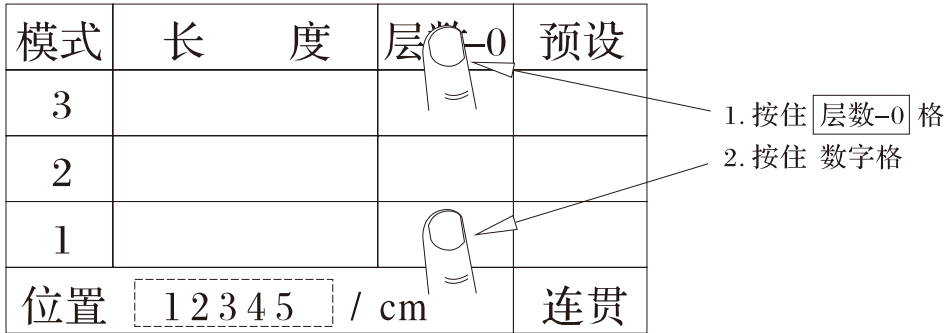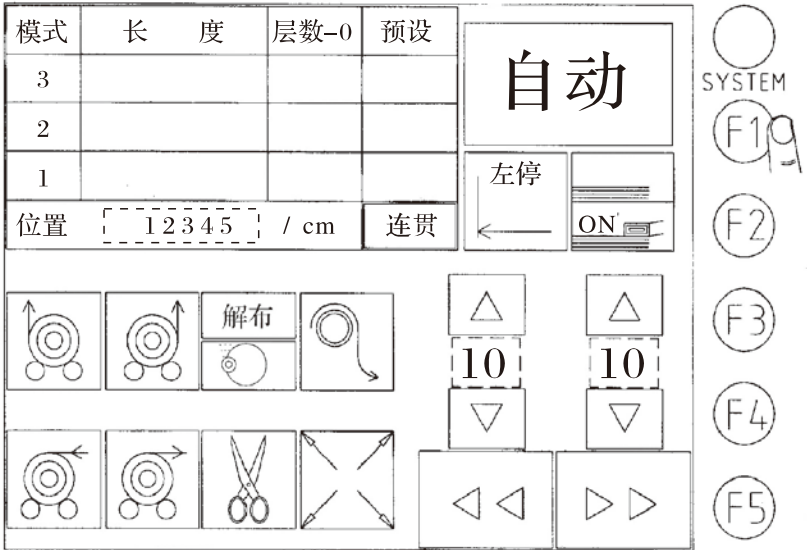
1.按住 层数-0 格
2.按住 数字格

1.按住 层数-0 格0.5秒，可让所有层数格归0。

2.按住 数字格 0.5秒，可让该数字格归0。未使用模式的预设格请键入0。

模式	长　　度	层数-0	预设
3	0	0	0
2	0	0	0
1	780.5	0	210
位置　□ 1 2 3 4 5 □ / cm		连贯	

单一模式拉布请使用1模式操作。
拉布模式：拉布长度遇有长短码时，可预设第
　　　　　2-3种长度和层数。

预设		预设
20	→	20
20		20
30		30
连贯		连贯

开启连贯拉布功能，机器依模式123顺序走完设有预设值的所有
模式后停机。

正常操作：

模式	长　度	层数-0	预设
3			
2			
1			
位置	12345	/ cm	连贯
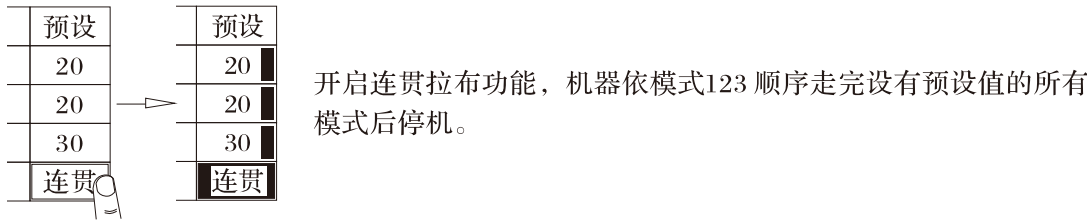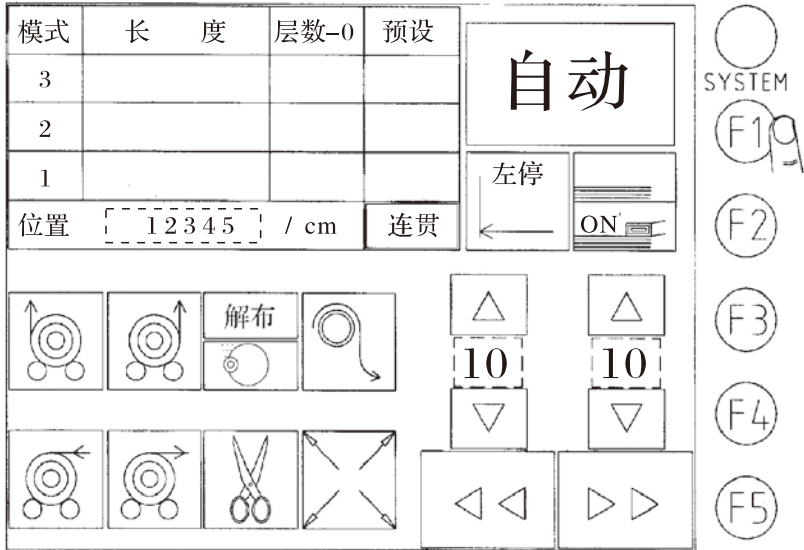
调整已拉"层数显示值"：

如有"显示值"与"实际层数"不符时，可以调整。

1	1234.5	+	123	123

↓

1		123

加 — ＋

减 — －

回主控画面
Back to control screen
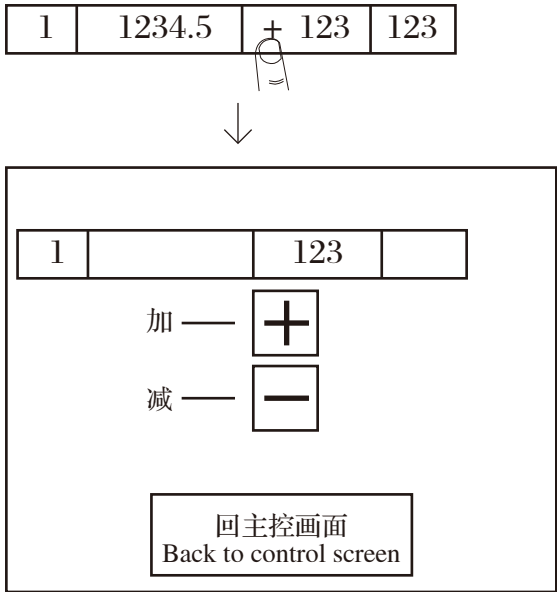
可选择以"码"或以"米"做为"长度单位"

模式	米长（码）		
3	1234.5		
2	1234.5		
1	1234.5		
位置	1234.5cm		

↓

模式	米长（米）		
3	1234.5		
2	1234.5		
1	1234.5		
位置	1234.5cm		

↓

模式	米长（码）		
3	1234.5		
2	1234.5		
1	1234.5		
位置	1234.5cm		

正常操作：

左端点停止键

当你有需要在下一张布拉完时即停止作业，押一下机器会在拉完该张布后于左端点停止。

自动上升量设定值

自动上升量
因按布料之厚度，设定自动上升量使上升高度与布料堆叠之高度趋于一致。
自动上升于自动拉布中切断完了时，自动上升一次。

裁断速度 ← 速　宽 → 裁断长度(布宽)

裁断按钮2

裁断按钮2：按此裁断按钮作手动裁断时会让层数值加1
因按布料性质与宽度，设定裁断速度与裁断长度使之良好配合。

挂引切刀组不自动切断之双向拉布模式和圆筒布使用双滚轮装置之拉布模式。

按 (F1) 回主控画面 →

← 译码器 异常
出现此画面表示 译码器 信号中断

异常：
译码器 信号中断

按 (F1) 回主控画面 →

SYSTEM
(F1)
(F2)
(F3)
(F4)
(F5)

异常：
译码器 信号中断

↓

模式	长　度	层数-0	预设
3			
2			
1			
位置	1 2 3 4 5 / cm	连贯	

自动

SYSTEM
(F1)
(F2)
(F3)
(F4)
(F5)

左停
← ON

解布

10 10

◁◁ ▷▷

可继续操作，

如能正常操作，请放心继续使用。

如持续出现此画面

应检修译码器

可能译码器故障或线路脱落。

译码器零件编号：P/04–30439

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KW 自动拉布机
SPREADING

请确认机器是否置于上次停放位置

是   否

Please confirm that the machine is placed in the last parked position

YES   NO

↓

警告：
上次开机为运转中断电
机器已经"非正常移位"，
请以手推方式做一次"位置校准"，
让"近接开关"依←方向通过"归0定规"。
完成此画面会跳至主控页。
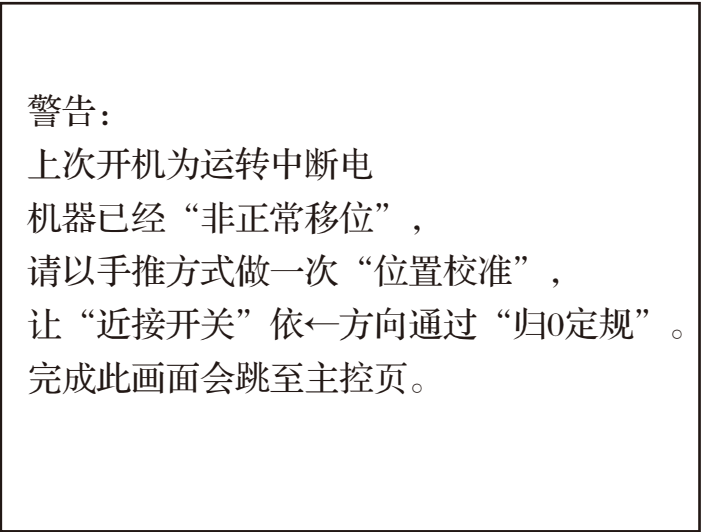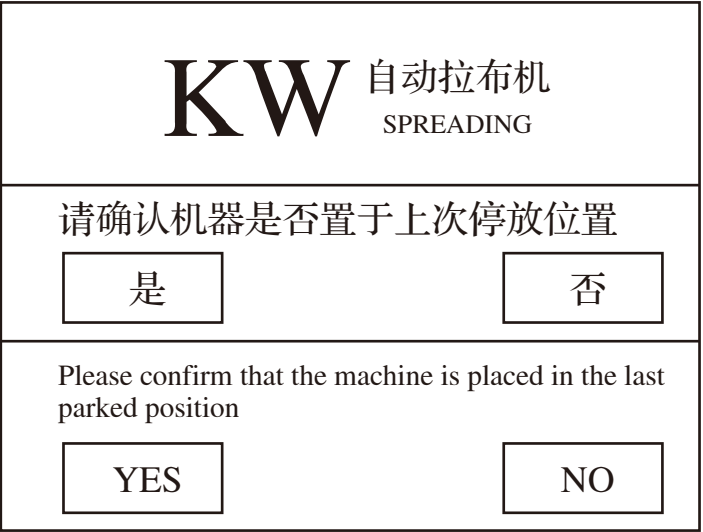
当运转中断电时，机器在无电力状态下会有短距离的惯性滑动，于是产生"基准点移位"。

重新开机后点选 是 键时会出现左列画面。

请依画面说明做"位置校准"。

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模式	长　　度	层数-0	预设
3			
2			
1			
位置	12345　/ cm	连贯	

自动

SYSTEM
F1
左停
ON
F2
F3
10　10
F4
解布
F5

同时按此二键

↓
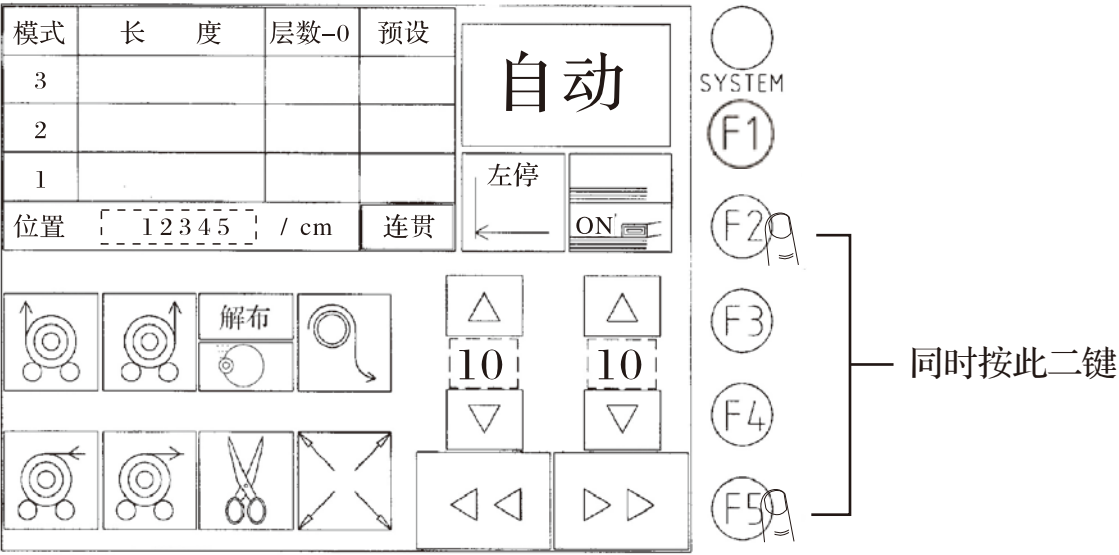
功能选择	
对边超越时停机	OFF

按此键显示ON时，
表示机器在超越对边极限时
会停机等待重新启动。
再按显示OFF时，
表示机器在超越对边极限时
不会停机。

对边超出范围

按 F1 回主控画面　→

1.先调整好原料布匹至适当位置
2.再按F1键
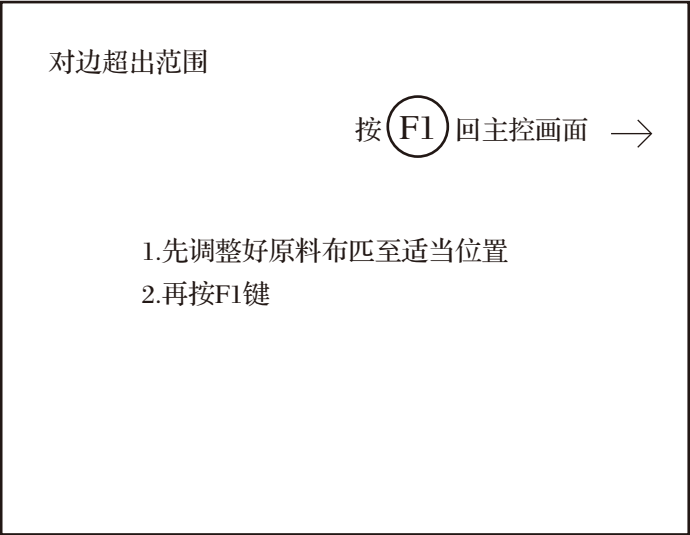
对边超出范围：

原料布匹放置原则

靠操作侧边缘对准"对准电眼"

机器对边能力两侧各13cm

原料布匹放置如偏移超过13cm

机器会停止且出现此画面

对边超出范围

按 F1 回主控画面　→

1.先调整好原料布匹至适当位置
2.再按F1键

SYSTEM
F1
F2
F3
F4
F5
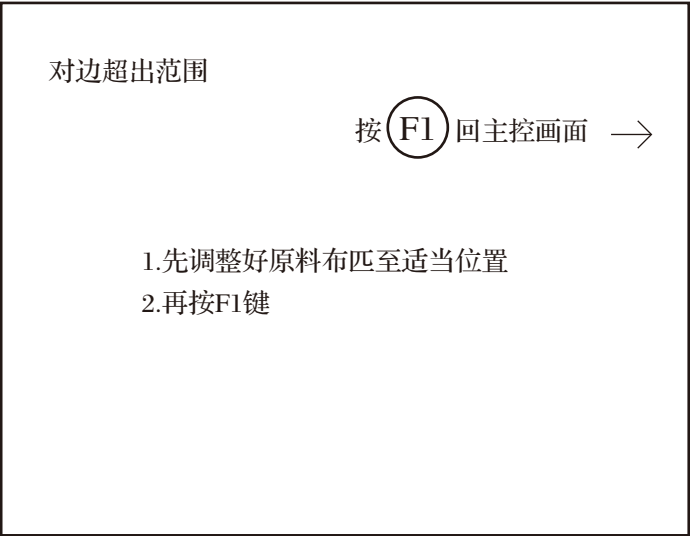
一旦出现此画面后"对边功能"随即失效

按F1键回主控画面

再按"自动"后恢复"对边功能"

↓

模式	长　　度	层数-0	预设
3			
2			
1			
位置	12345　/ cm	连贯	

自动

SYSTEM
左停
ON
F1
F2
F3
10　10
F4
解布
F5

15

16
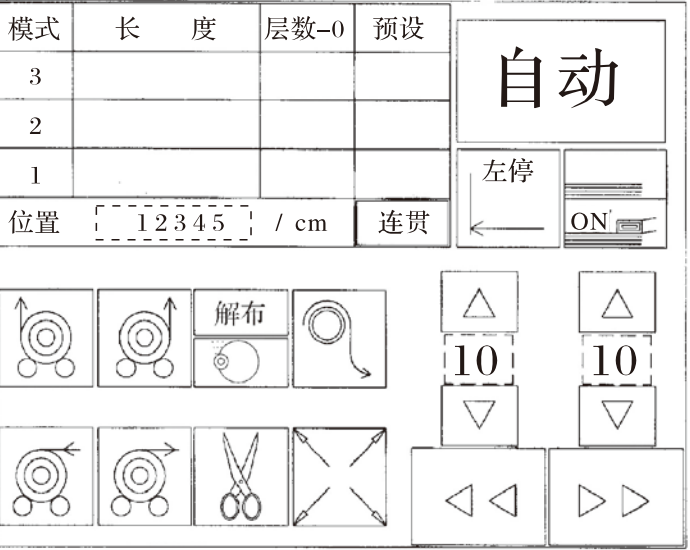
操作前注意：
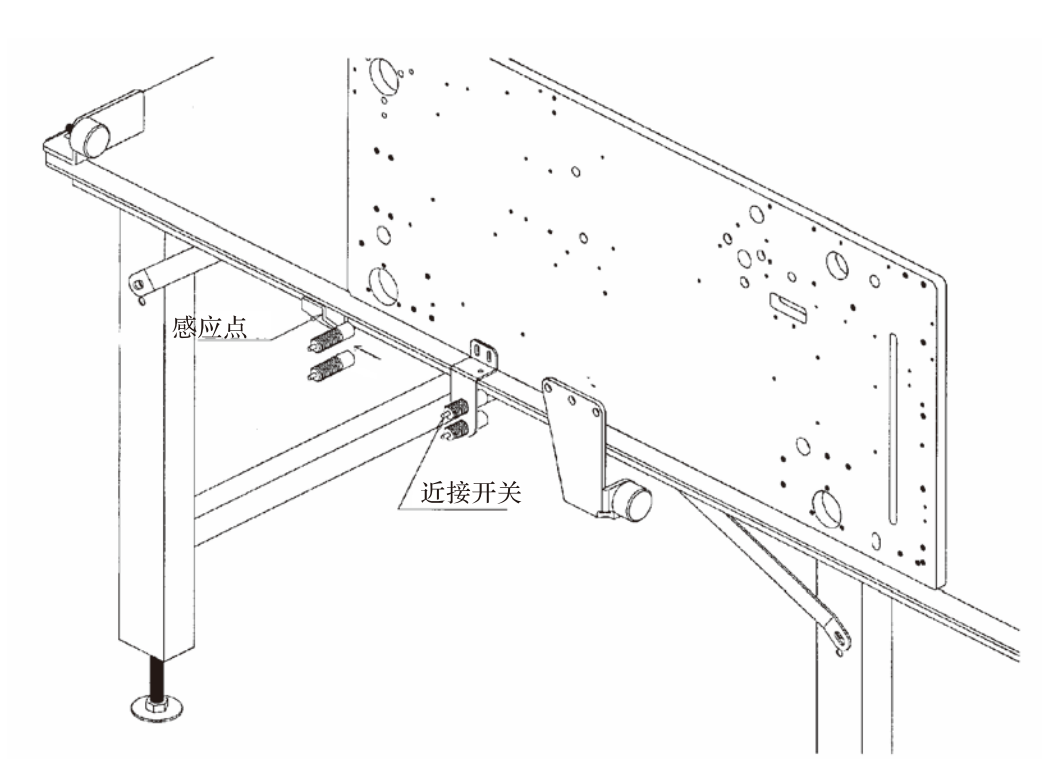
当近接开关左行通过感应点时，现在位置归0。

此为机器计算位置的基准点。

每一次近接开关左行通过感应点时，都会把现在位置归0。

当一部机器使用二条以上裁床时，由A床移至B床后，

第一个必要动作是：接上电源——送电——压一下 ⊠ （放开煞车），

轻推机器由右向左（由前向后），使近接开关通过感应点。

机器才能确定自己的基准位置。

机器行进中突然断电，机器会在无力状态下滑行停止。

因此，基准位置会跑掉而不在原来的位置，碰到这种状况，再送电后，

必须以寸动方式让机器回到原位，重新执行一次——

接近开关，由右向左通过归零点，让机器重新确定自己基准位置。

注：上述二只近接开关中，一只为归"0"定位作用，一只为安全保护作用。只要其中任何一只
　　开关有故障，机器即停止不动作。
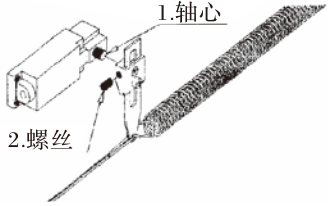
故障：
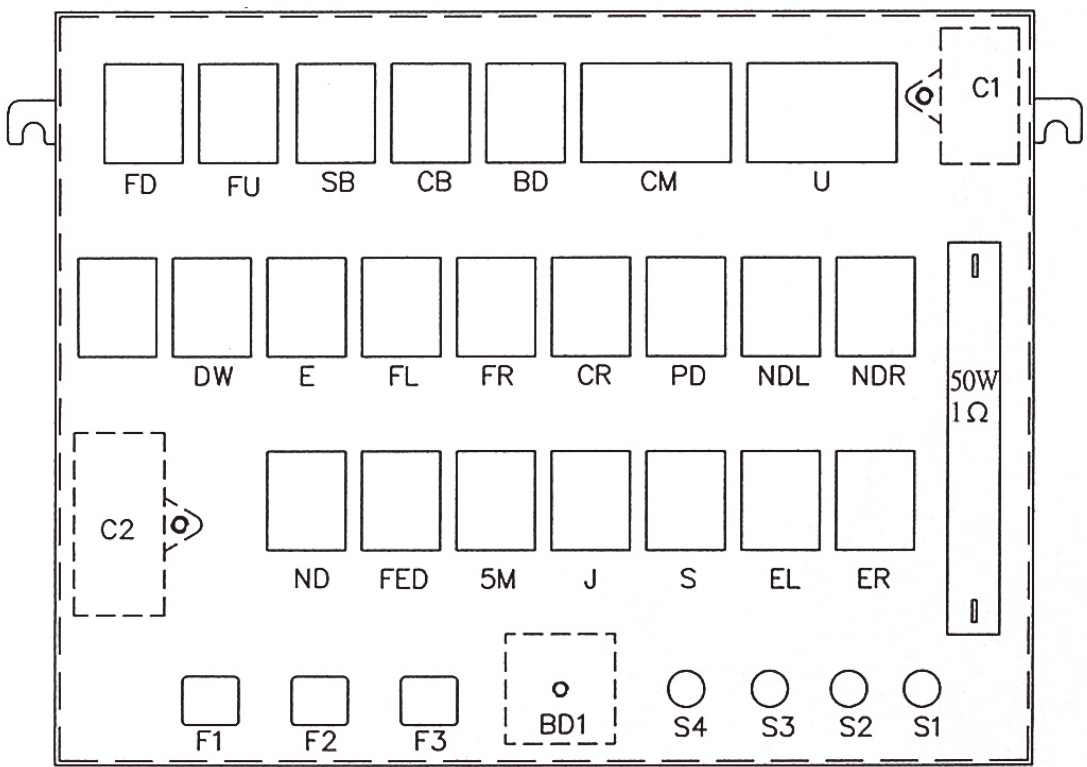
F1——圆刀马达　　电路保护器

F2——DC24V　　　电路保护器

F3——对边马达　　电路保护器

电路保护器于过电流时会跳脱，押回后再试用，如不再跳脱，则可安心继续操作。

如一再跳脱，有可能短路，或电路保护器本身故障。

简易故障排除

状　况	原　因	对　策
裁断刀片不转动	1、电路保护F1跳脱 2、继电器CR接点烧毁 3、马达碳刷或转子磨损	1、押回再试，正常则继续使用。如一再跳脱，有可能短路，或电路保护器本身故障。 2、更换继电器 3、马达寿命约1.5~3年，建议整个马达更换。
对边布料台不动	1、电路保护器 F3 跳脱 2、继电器ER EL接点烧毁 3、对边马达故障	1、押回再试，正常则继续使用。如一再跳脱，有可能短路，或电路保护器本身故障。 2、更换继电器 3、此马达在未遭撞击情况下不易故障。
无法开启电源	1、电磁接触器（零件号码：P7/30778）内热电译跳脱 2、机器外电源断路	1、掀开电磁接触器外壳，押一下后归杆即可。 2、用电表循线测查。
押 自动 不能自动行走	OP继电器异常。 在送电中OP必处于ON（吸磁）状态， 押钢索 ↓ 让OP断电 ↓ 机器停止 ↓ OP持续断电=不能自动行走	OP电源经由紧急停止钢索端的限制开关而来， 1、检查有无布削包或台车之类压到钢索。 2、钢索端的限制开关角度偏差过大或故障。 3、参考P/14循线检查有无断线 1.轴心 2.螺丝 限制开关角度偏差过大时放松 2.螺丝再重销让 1.轴心再弹回原点。
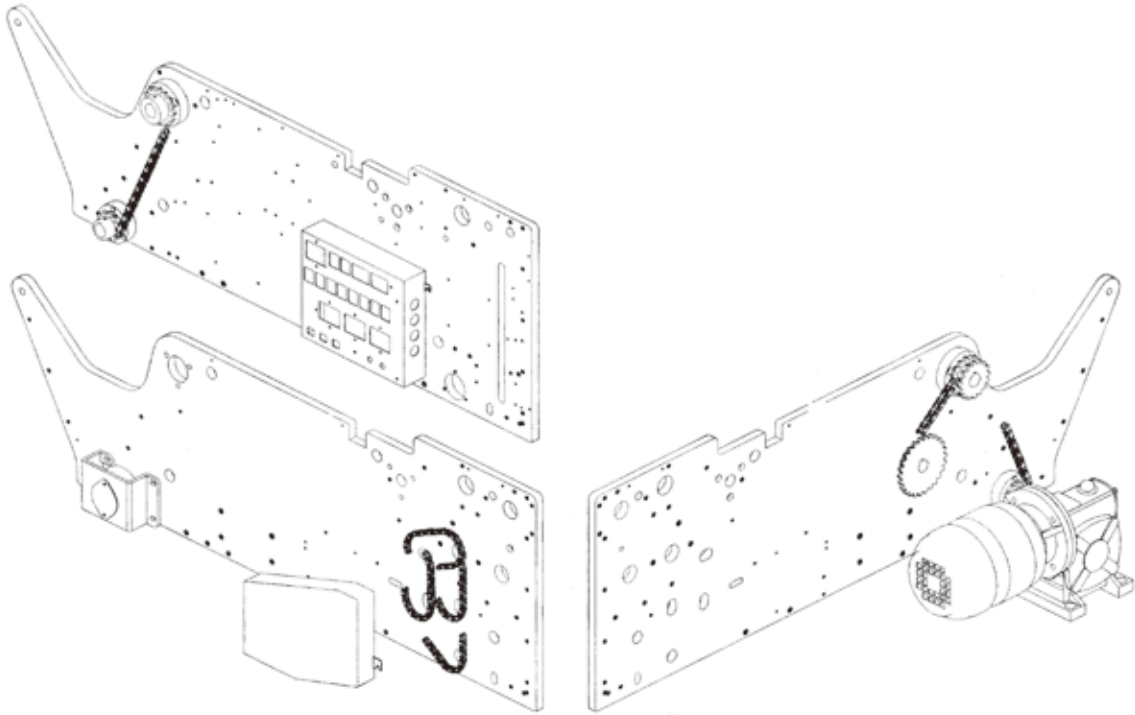
基本保养：

1. 链条：加油与调整松紧
   链条加油以40#机油为宜，每2个月加油一次，注意不可过量，避免油污。
   链条如果失油，容易磨损。
   （上图示链条为必须加油之链条，其他链条请勿加油）

2. 清除积尘
   一个星期至少以风枪清洁一次，清洁是工作品质的第一步。

3. 清除轮子表面污垢
   轮子表面污垢多为积尘附着，积尘一多容易打滑，造成长度不准。

Normal Operation:

2. Unfasten cloth roller

10. 'Control Subtense' electric eye PH

3. Unfasten cloth electric eye Ph2

4. Anterior column roller

5. PH3,PH4 Subtense electric eye PH3,PH4

6. Internal pressure cloth roller

7. Cloth sending roller

8. Spread cylinder outside pressure

9. 'Existing cloth' electric eye PH1

1. Cloth bucket roller
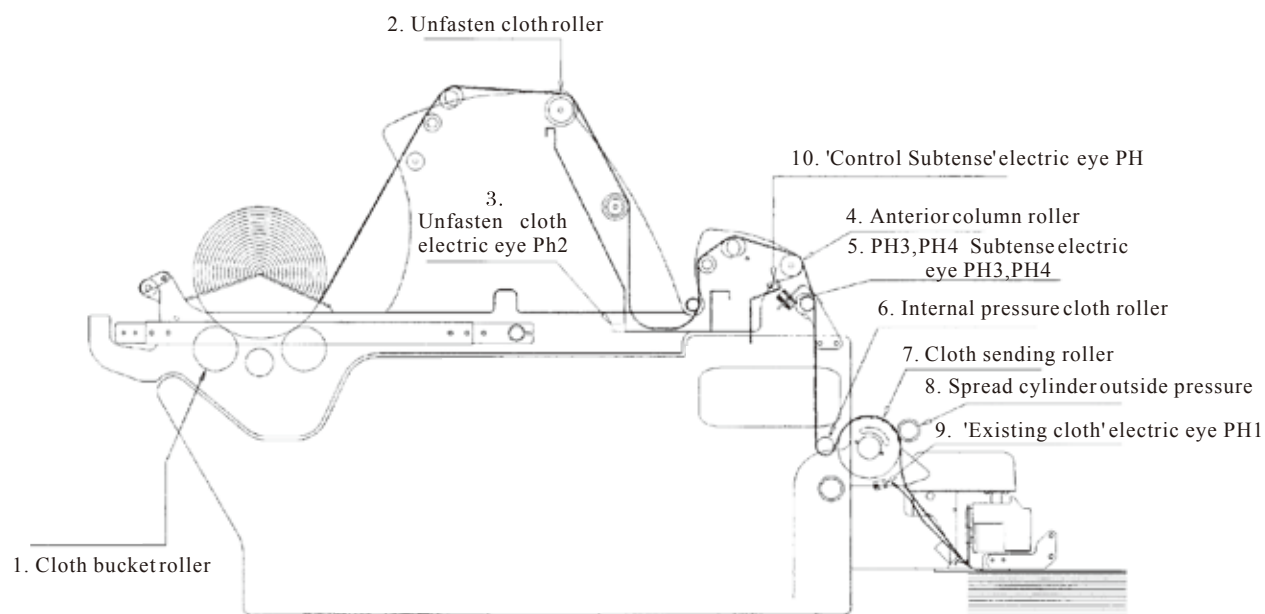
Rewinding Cloth:
Place as the above figure.
When spreading the necessary keys are: or
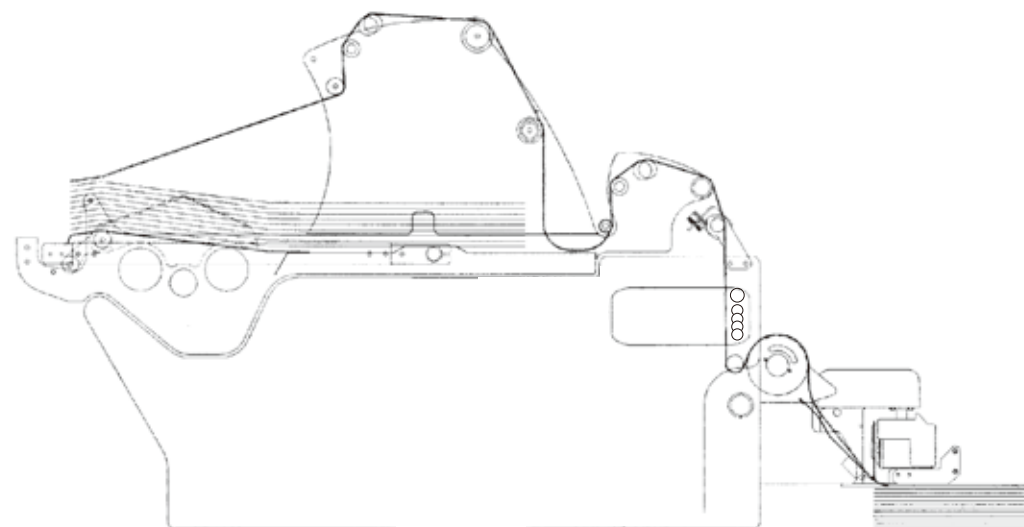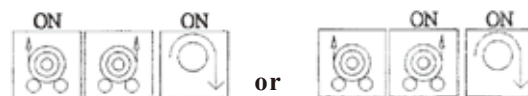
Folding yard cloth:
place as the above figure. When spreading the necessary keys are:

21
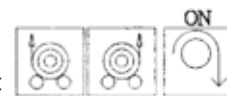
Normal Operation:
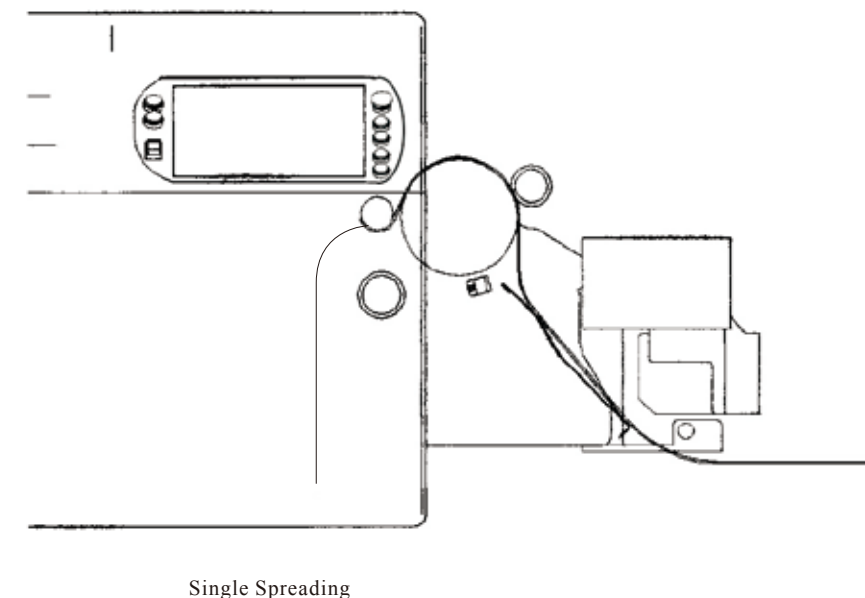
Single Spreading

Hang up cutting group and plug connector, the spreader will automatically enter into *Single Spreading* mode, and don't have to do any other setting.

Outrigger
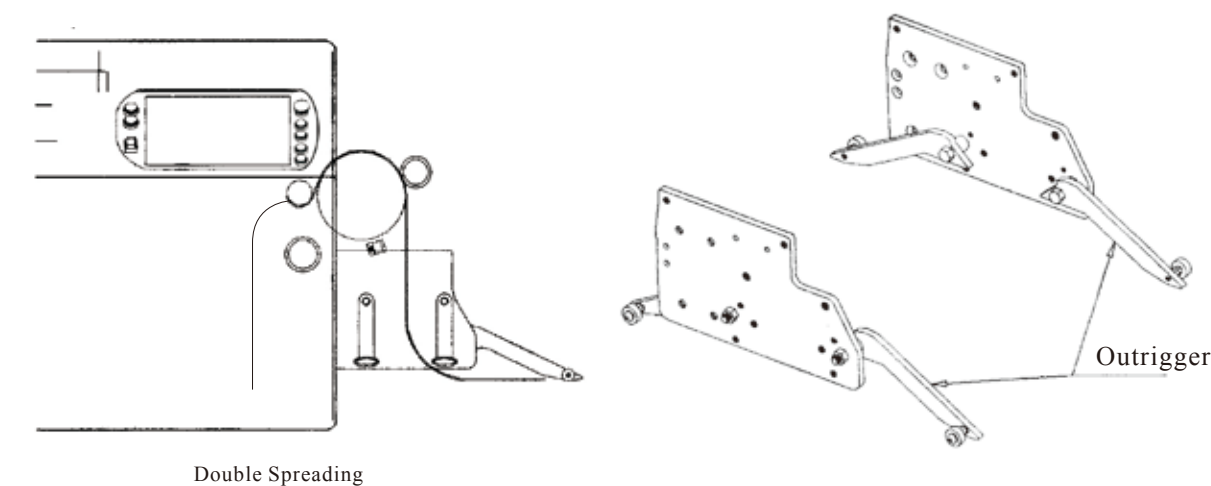
Double Spreading

Remove the cutting group and install the outrigger, the spreader will automatically enter into *Double Spreading* mode.

Double spreading: needs to use two-end pressure device, the back-end device should push forward and be fixed the front point with bolt. (For single spreading, not needs back-end device, when double spreading should pull to bottom and be fixed the back point.)

22

Normal Operation:

SW1 ON *Start power button*

SW2 OFF *Shun off power button*

SW3 *Manual lifting*

SW4 *Stop button*

Sw5 *Counterclockwise rotate button manually*

Sw6 *Clockwise rotate manually*

Sw7 *Cloth sending quantity adjustment button loose*

Sw8 *Cloth sending quantity adjustment button tight*

Inch Move Handle
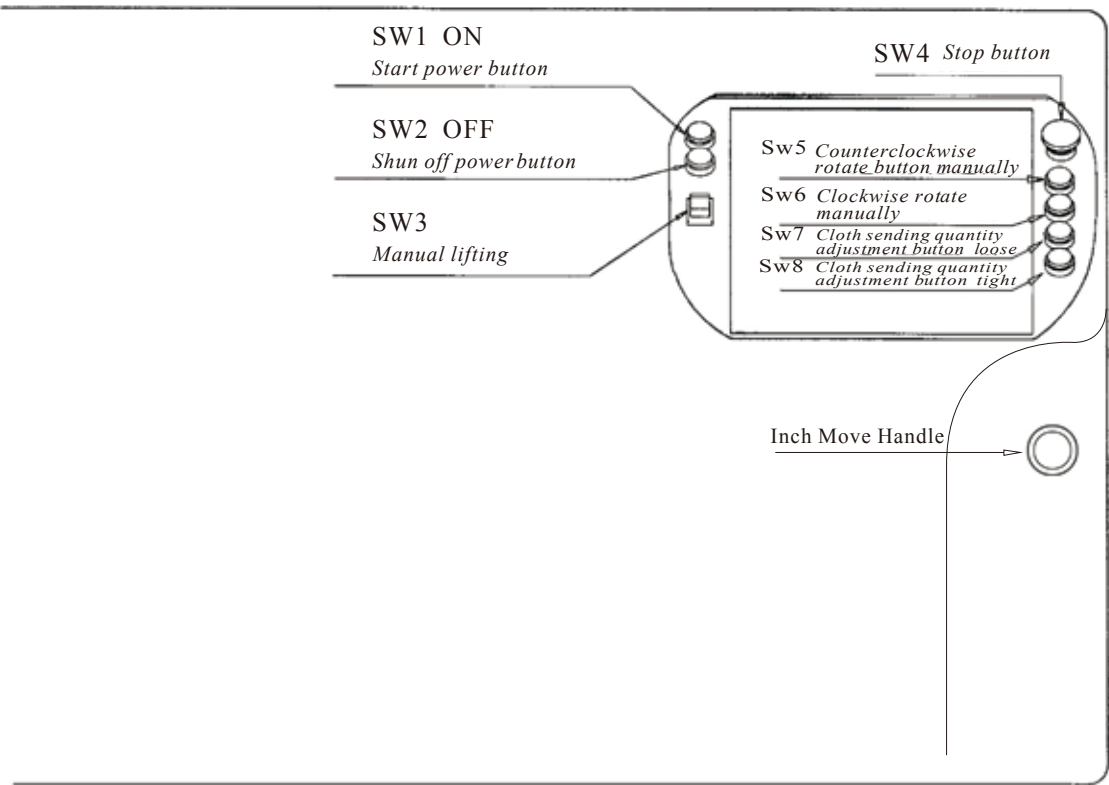
Sw1「Start power button」: Star power.

Sw2「Shun off power button」: Power-off and shut down. Besides, at rest for 5 minutes, the machine will automatically power-off and shut down.

Sw3「Manual lifting」: Pull upwards-rise; Pull downwards-fall.

Sw4「Stop button」: Stop button.

Besides, two sides of cutting bed have set stop cables, pulling the cables is the same with pressing stop button.

(Stop cables are the most commonly used stop devices)

Sw5「Cloth sending roller」: Counterclockwise rotate button manually.

Sw6「Cloth sending roller」: Clockwise rotate manually.

During spreading, the cloth sending roller will rotate with the machine's movement.

Under the static status, if need to rotate cloth sending roller, please use these two buttons.

Sw7「Cloth sending quantity adjustment button loose」: Press the button, when spreading, the cloth will be more and more loose, the button only plays role when the machine operates.

Sw8「Cloth sending quantity adjustment button tight」: Press the button, when spreading, the cloth will be more and more tight, the button only plays role when the machine operates.

[Inch move handle]: 'Manually' rotate machine's handle. Clockwise rotation for right movement, counter clockwise rotation for left movement, and control speed by rotation angle.

Normal Operation:
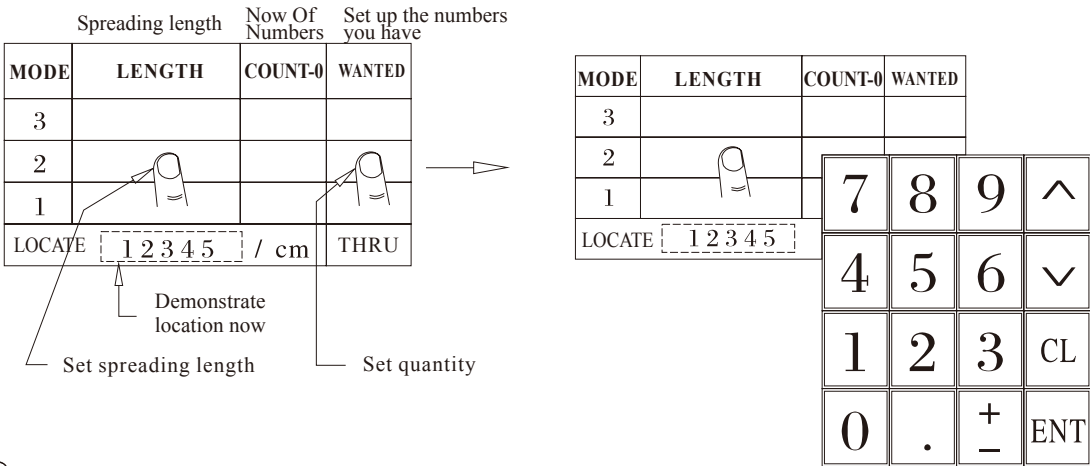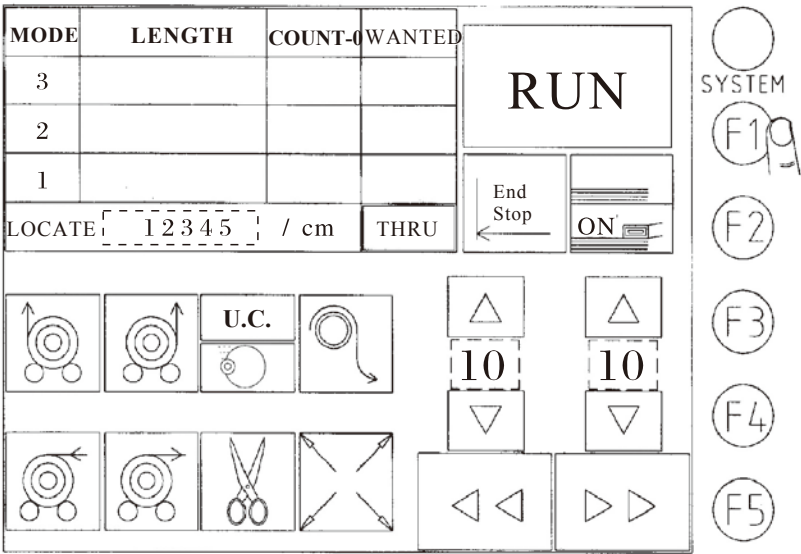
Press it and display digital keyboard as the right figure, input the desired figure and press ENT

「Spreading length」Unit: cm   1M=100cm   1inch=2.54cm

Single spreading mode: When 「COUNT-0」achieves 「WANTED」value, the machine will stop.

Continuous spreading mode: When all 「COUNT-0」achieve 「WANTED」value, the machine will stop.
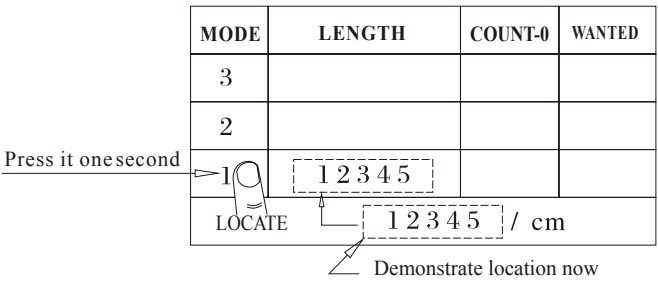
Techning mode: Set spreading length: when doesn't know the exact spreading lengeh, press mode [1] for 1 second after moving the machine to the desired position, as shown in the figure, and now, the position value will be set in mode 1's spreading length.

Mode [2] and [3] can be set in spreading length according to this method.

Normal Operation:
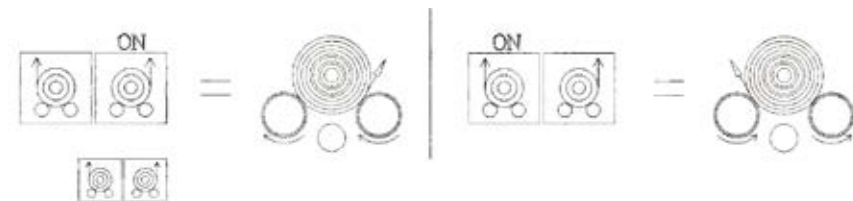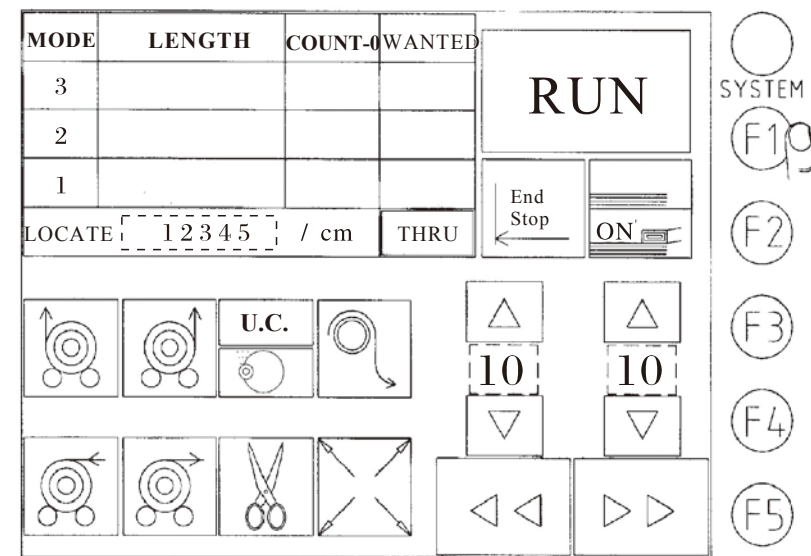
Rewinding cloths are placed into bucket and controls cloth direction by ⌊ON⌋ or ⌊ON⌋

The piece of cloth will not use bucket, press the direction key and cancel ON to make bucket not operate.
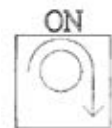
Cloth Sending Button

→ Under the cloth sending status, when the machine moves, the cloth sending roller will send out cloth downwards by rotation.

→ Not sending cloth, though the machine moves, but the cloth will not be sent out.

Press it → Press it →

RUN

Press automatic key and the spreader will enter into automatic spreading status.

When the cloths are all set, confirm the direction be correct and then press the key to spread.

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Normal Operation:
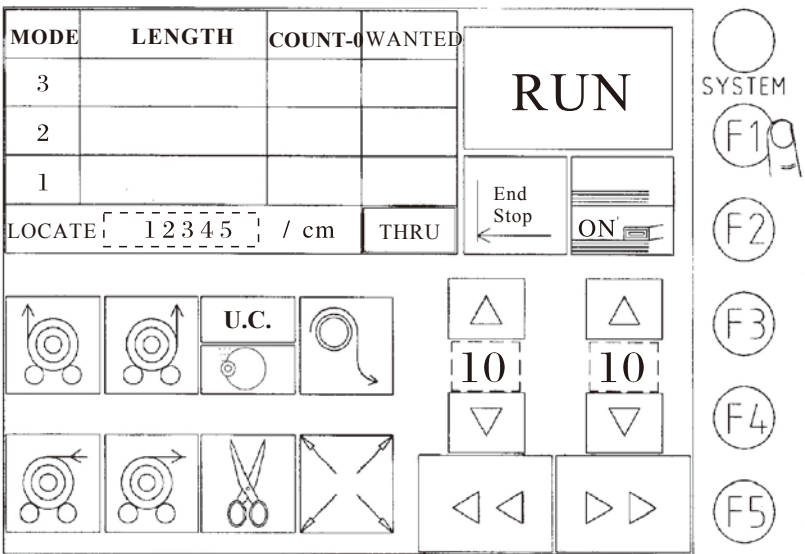
CUTTING BUTTON

When the machine stops, press [✄] to carry out cutting action for one time.

If the cutter head doesn't stop at fixed position due to emergency stop, press [✄] to make the head return to fixed position.

When press the cutting button for manual cutting, the layer number value is unchanged.

CALLBACK INCH MOVE
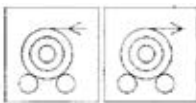
Cloth bucket roller 'Manual' key

When press [◉] the cloth will roll back with low speed. When press [◉] the cloth will roll out with low speed.

U.C.
Relieve lock-in key

Press **U.C.** → **U.C.** (Relieve lock-in) Unfasten cloth roller rotation lock

Press **U.C.** → **U.C.** (Relieve lock-in) Unfasten cloth roller stop lock
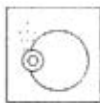
The key of Knife stone

Press [◉] → [◉ ON] The blade rotates and then gently press millstone to sharpen.

Press [◉] → [◉ ON] The blade stops rotate
(The burrstone is able to have dust surficially generally , disboard a burrstone grinding dust off on arriving at sand paper)

26

MODE	LENGTH	COUNT-0	WANTED		
3				RUN	SYSTEM
2					F1
1				End Stop	F2
LOCATE 1 2 3 4 5 / cm		THRU		ON	

U.C. 10 10 F3 F4 F5
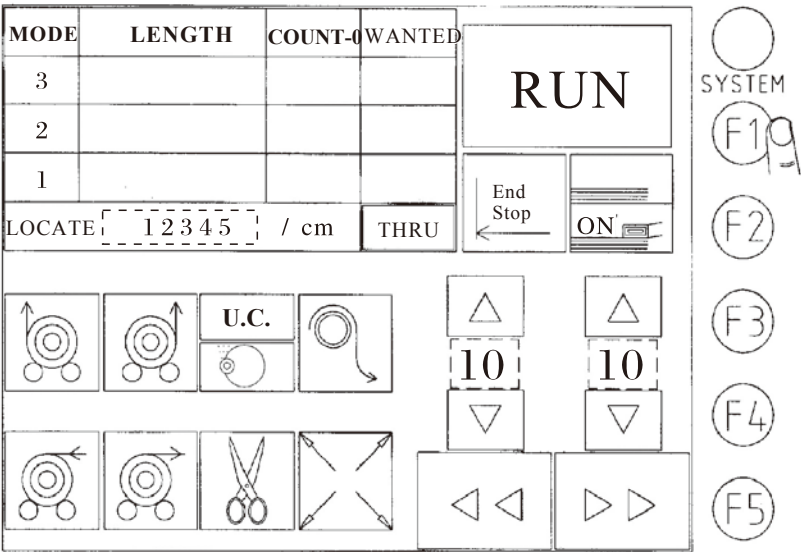
When single spreading front-end and pressing cloth, slow down in advance

ON — When single spreading front-end and not pressing cloth, don't slow down in advance

Release Brake key
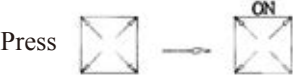
Press ⊠ → ⊠(ON) Release brake, can gently push and move machine by hands
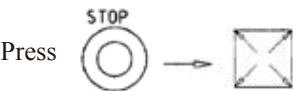
Press ○(STOP) → ⊠ Brake locks and need to big strength to push machine

Speed for Automatic goes to left 10   10 Speed for Automatic goes to right

◁◁ ▷▷ Left right   ◁◁ ▷▷
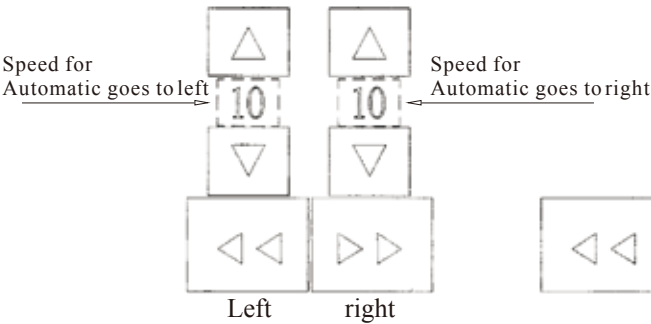
1. Key of indicating direction:
2. Key of changing direction
3. Recover Subtense electric Function

1. **Key of indicating direction:** The flashing place stands for the direction of machine moving to, when pressing RUN, the machine moves to this direction.

2. **Key of changing direction:** Press flashing-free key to change indication direction.

3. **Recover Subtense electric Function :** After the machine is hit by stoppage from voluntary state, may close *Subtense Electric Function.* Voluntary state of entrance is once again middle , is able to restore *Subtense Electric Function.*

Possibly press here anyone button, can't will be Subtense electric Function recovery.

MODE	LENGTH	COUNT-0	WANTED		
3				RUN	SYSTEM
2					F1
1				End Stop	F2
LOCATE 1 2 3 4 5 / cm		THRU		ON	

U.C. 10 10 F3 F4 F5

◁◁ ▷▷
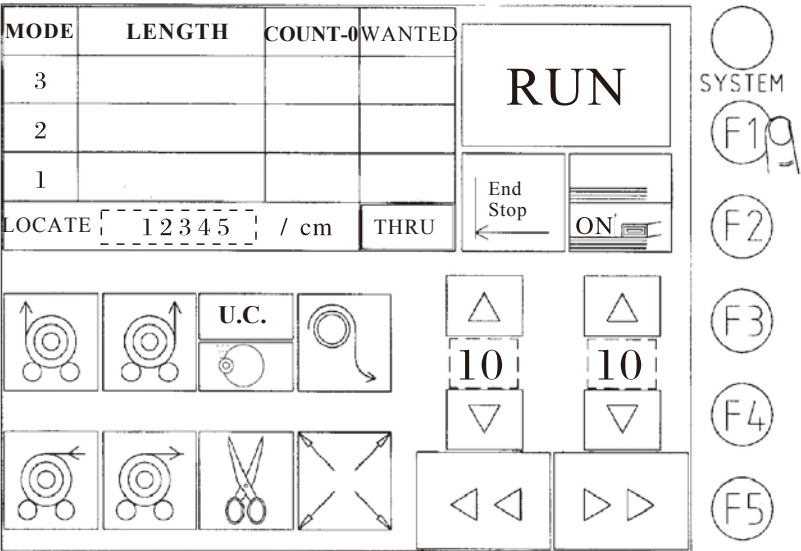
MODE	LENGTH	COUNT-0	WANTED
3			
2			
1			
LOCATE 1 2 3 4 5 / cm		THRU	

1. Press layer number-0 grid COUNT-0

2. Press figure grid

1. Press **COUNT-0** grid for 0.5 second to let all layer number grids return to 0.

2. Press [ ] for 0.5 second to let the grid retun to 0. Please input 0 for unused mode default grids.

MODE	LENGTH	COUNT-0	WANTED
3	0	0	0
2	0	0	0
1	780.5	0	210
LOCATE 1 2 3 4 5 / cm		THRU	

For single mode spreading, please use Mode 1.

Spreading mode: when spreading length has long and short yards, can preset Mode 2-3 length and layer number.

WANTED		WANTED
20	→	20
20		20
30		30
THRU		THRU

Start thru spreading functions, the machine will pass through all modes of having set preset value according to mode 123, then stop.

Normal Operation:

MODE	LENGTH	COUNT-0	WANTED
3			
2			
1			

LOCATE [1 2 3 4 5] / cm   THRU

RUN

End Stop ←   ON

U.C.

△ 10 ▽   △ 10 ▽

◁ ◁   ▷ ▷

SYSTEM F1 F2 F3 F4 F5
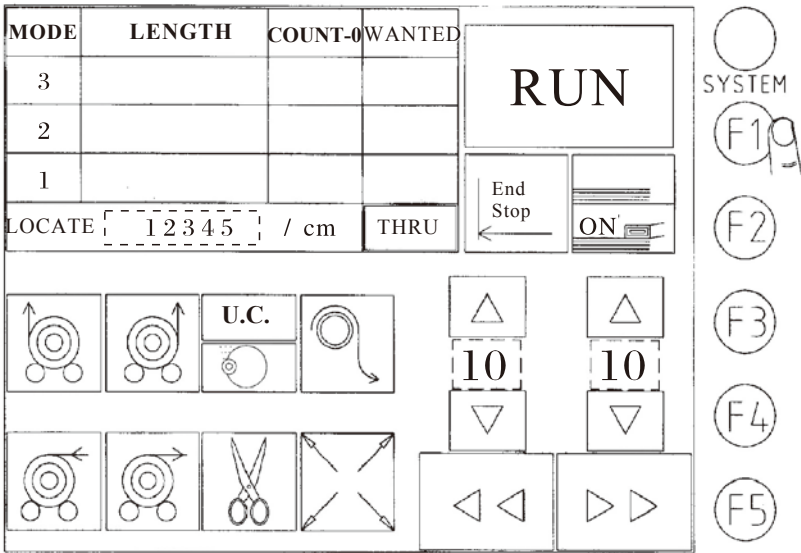
The number of "laid fabric" :

If the shown valueis not the actual value of the layers. you may adjust to synchronize the digits.

1	1234.5	+ 123	123

↓

1		123

Plus — ✚

Minus — ▬

回主控画面
Back to control screen
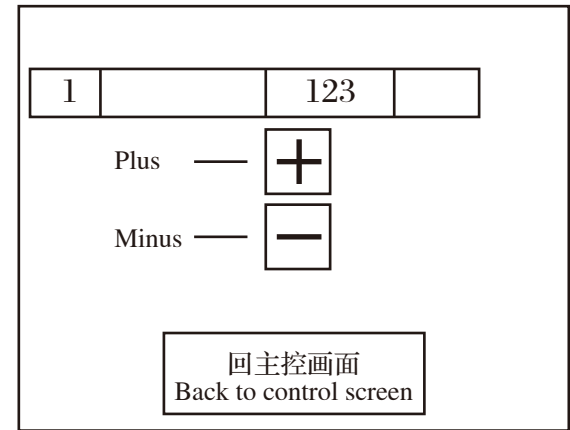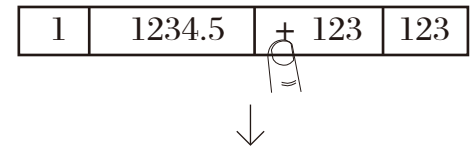
You may choose either Yard or Meter for the spreading lenth:

MODE	CM(yd)		
3	1234.5		
2	1234.5		
1	1234.5		
LOCATE	1234.5cm		

↓

MODE	yard（CM)		
3	1y12"		
2	1y12" 1'		
1	1y12" 1'		
LOCATE	1234.5cm		

↓

MOD	CM（yd）		
3	1234.5		
2	1234.5		
1	1234.5		
LOCATE	1234.5cm		

Normal Operation:

MODE	LENGTH	COUNT-0	WANTED
3			
2			
1			

LOCATE [1 2 3 4 5] / cm   THRU

RUN

End Stop ←   ON

0-1 [0.06]

Spd • 1   Wid

△ 12 ▽   △ 12 ▽

△ 10 ▽   △ 10 ▽

◁ ◁   ▷ ▷

SYSTEM F1 F2 F3 F4 F5
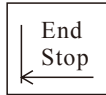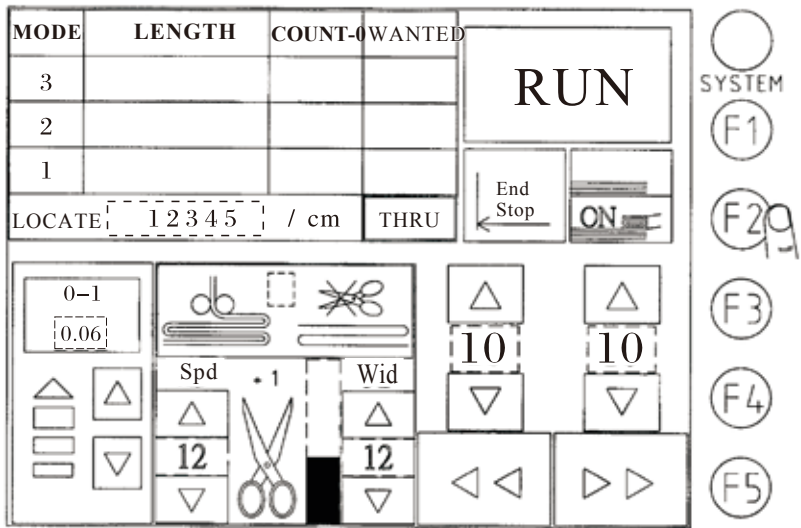
End Stop ←   **Left-end Point Stop Key**

If you need to stop operation when completing the next cloth, press End Stop → End Stop ON and the machine will stop at left-end point after completing this cloth.
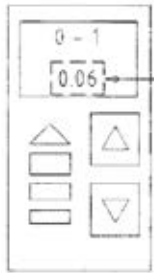
0-1 [0.06] —— **Set Value Of Automatic Rising Quantity**

Automatic rising quantity.

According to cloth thickness to set automatic rising quantity to make rising height is consistent with cloth stack height.

Automatic rising will automatically rise one time when completing cutting during automatic spreading.

Cutting speed → Spd • 1 [△ 12 ▽]   Wid [△ 12 ▽] ← Cutting length
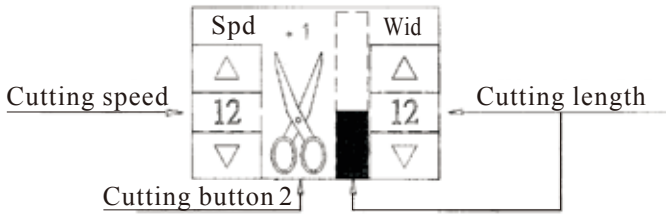
Cutting button 2

Cutting button 2: Press this button for manual cutting, the layer number will add 1.

According to cloth nature and width to set cutting speed and length to make them well cooperate with.

Glimmer   Glimmer
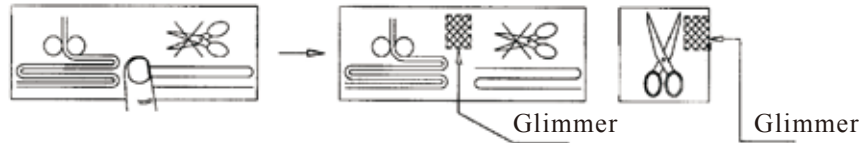
Double spreading mode of hanging cutter group not automatically cut, and spreading mode of cylinder cloth using double-roller device.

Press (F1) back to Main Screen →

ENCODER ERROR:

The single is not ready by encoder properly.

← ENCODER ERROR

SYSTEM

Press (F1) back to Main Screen →

(F1)
(F2)
(F3)
(F4)
(F5)

ENCODER ERROR:

The single is not ready by encoder properly.

↓

MODE	LENGTH	COUNT-0	WANTED	
3				**RUN**
2				
1				End Stop
LOCATE 1 2 3 4 5 / cm	THRU			ON

U.C.

△ 10 ▽   △ 10 ▽

◁◁   ▷▷

SYSTEM
(F1)
(F2)
(F3)
(F4)
(F5)
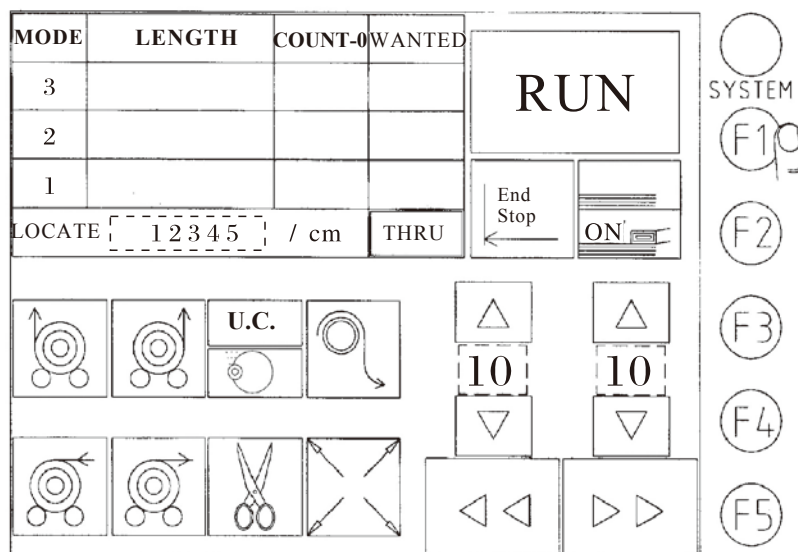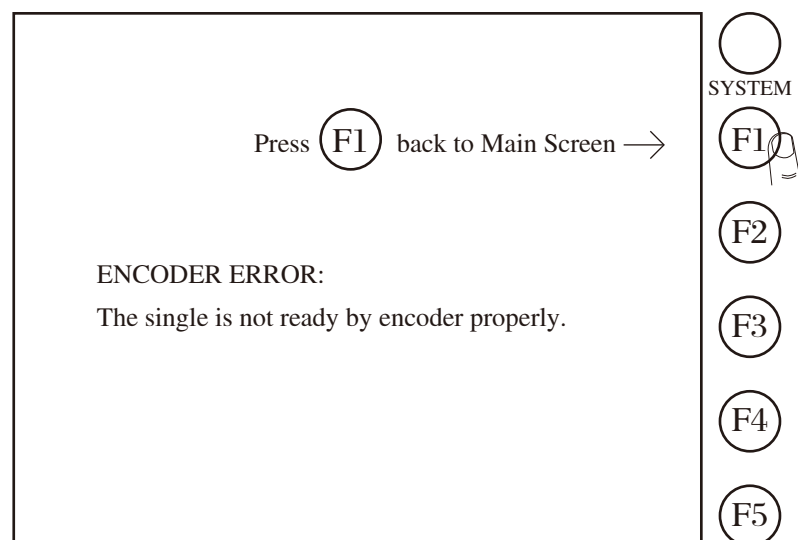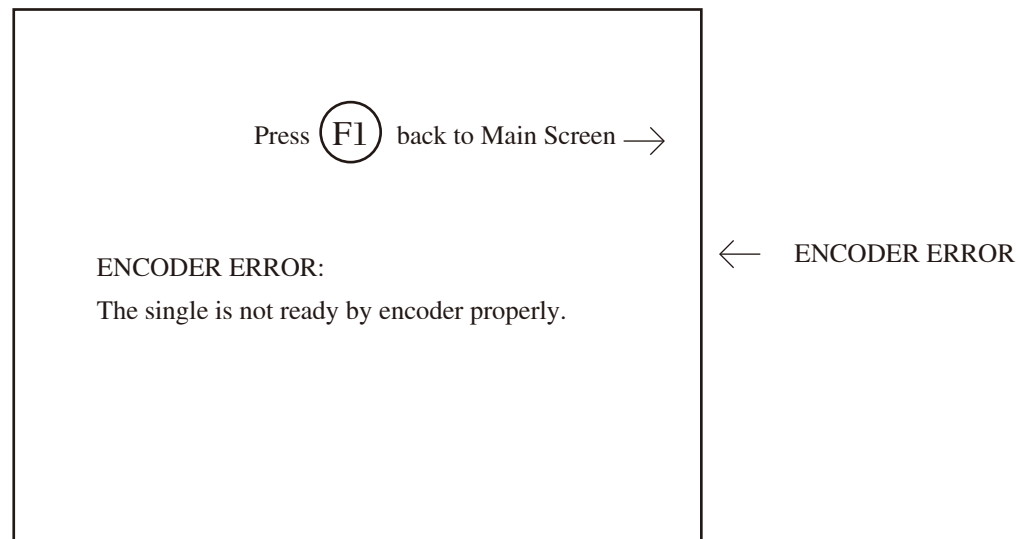
If it can work on properly,please keep working on,

If the above "ENCODER ERROR" keeps showing up,

Please check the ENCODER,and its wiring.

Encoder No.:P/04–30439

31

KW 自动拉布机
SPREADING

请确认机器是否置于上次停放位置

| 是 | 否 |

Please confirm that the machine is placed in the last parked position

| YES | NO |

↓

WARNING

The last time the machine has been "abnormal shift" in order to run the interrupt, please do a "position calibra–tion" by hand, so that the "close switch" will go through the "0 regulation" according to the direction. Complete this picture and jump to the main control page.

When the operation is interrupted, the machine will have a short distance inertia slip in the absence of power, resulting in the "reference point shift".

When the key is reactivated,Press "Yes", the left column appears.

Please do "position calibration" according to the picture description

Page 33 (left)

MODE	LENGTH	COUNT-0	WANTED
3			
2			
1			

RUN

SYSTEM
F1

LOCATE 1 2 3 4 5 / cm THRU | End Stop ← | ON

F2

U.C.

△ 10 ▽   △ 10 ▽

F3

F4

◁◁ ▷▷

F5

— Press both button
at the same time,
will pop to below page.

↓

SELECT FUNCTION	
STOP when exceeding edging range	OFF

When it is "ON",

means the machine will STOP when
exceeding edging range.

When the machine will not STOP when
exceeding edging range.

"ON" and "OFF" mode will be set
once be touth.

33

Page 34 (right)

Exceeding the range of edge control

Press (F1) back to Main Screen →

Please
Adjust the fabric position properly
before perss the button F1

Out of range for Auto Edgeing:
The methods to place the fabrics−
Put the fabric on the spreader,
The fabric edge tower control side must trigger the
edge control sensor.
The "edge control" movement is 13cm for each
side as maximum.
If the fabric edge did not trigger the sensor over
13cm,the machine will be stop
From "AUTO RUN" mode,and the display will
show as attached scree.

Exceeding the range of edge control

Press (F1) back to Main Screen →

SYSTEM
F1
F2
F3
F4
F5

Please
Adjust the fabric position properly
before perss the button F1

Once this message is on the shown screen,
Edge Control Function will be off.
It will recovered after pressing RUN.

↓

MODE	LENGTH	COUNT-0	WANTED
3			
2			
1			

RUN

SYSTEM
F1

LOCATE 1 2 3 4 5 / cm THRU | End Stop ← | ON

F2

U.C.

△ 10 ▽   △ 10 ▽

F3

F4

◁◁ ▷▷

F5

34

Pay Attention To Before Operation
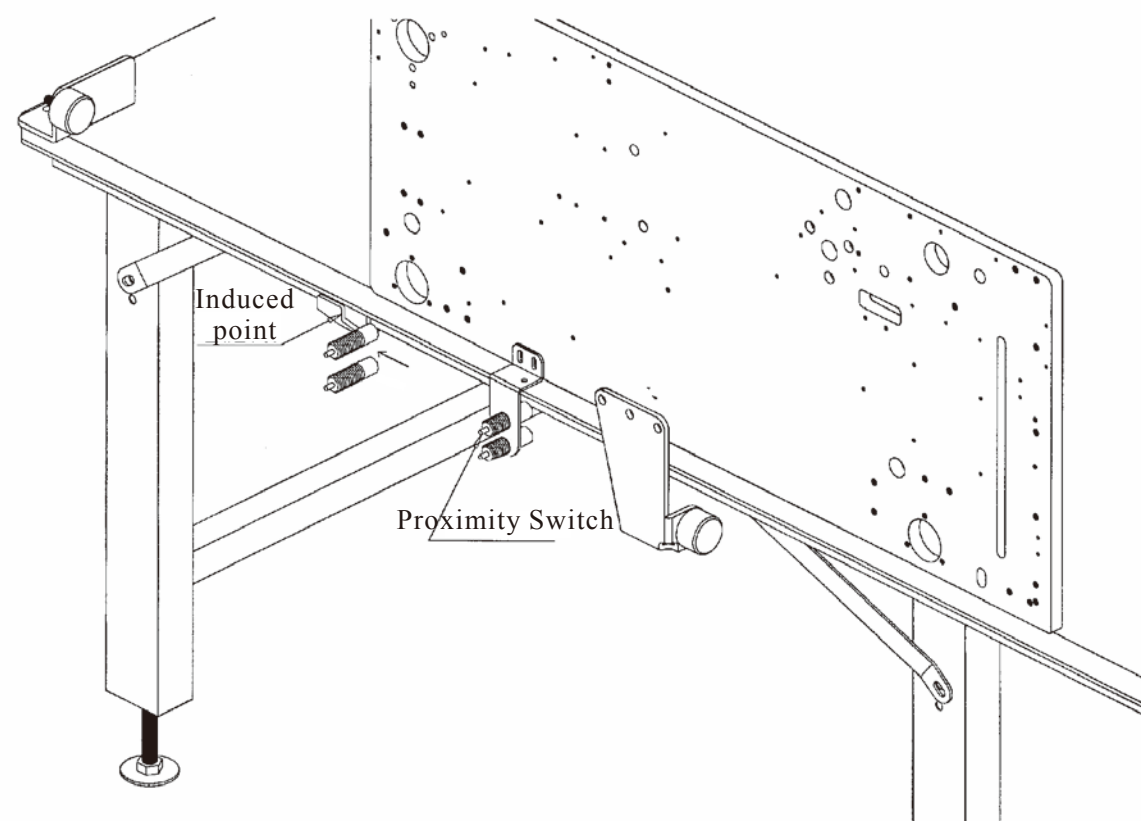
Induced point

Proximity Switch

When proximity switch goes to left and passes through induction point, the current position returns to 0.

This is the benchmark point of machine calculating position.

Every time when proximity switch goes to left and passes through induction point, the current position will be returned to 0.

When a machine uses more than two cutting beds, after moving by bed A to B,

The first necessary action is: Connect power-power transmission-press it ☒ (release the brake),

Gently push the machine from the right to the left (from the front to the back) to make proximity switch pass through induction point.

Then the machine can determine its own benchmark position.

For sudden power failure during operation, the machine will stop sliding under the weak status.

So, the benchmark position will run away and not in the original position, for this situation, after again power transmission,

Must let the machine return to original position by inch move way, and re-run again

The proximity switch passes through return-to-zero point from the right to the left to let machine re-determine its own benchmark position.

Note: In above two proximity switches, one plays the roles of returning '0' and positioning, and another plays the role of security. The machine will stop and not act as long as any swithch is faulty.

Faults

| FD | FU | SB | CB | BD | CM | U | C1 |

| DW | E | FL | FR | CR | PD | NDL | NDR | 50W 1Ω |

| C2 | ND | FED | 5M | J | S | EL | ER |

| F1 | F2 | F3 | BD1 | S4 | S3 | S2 | S1 |
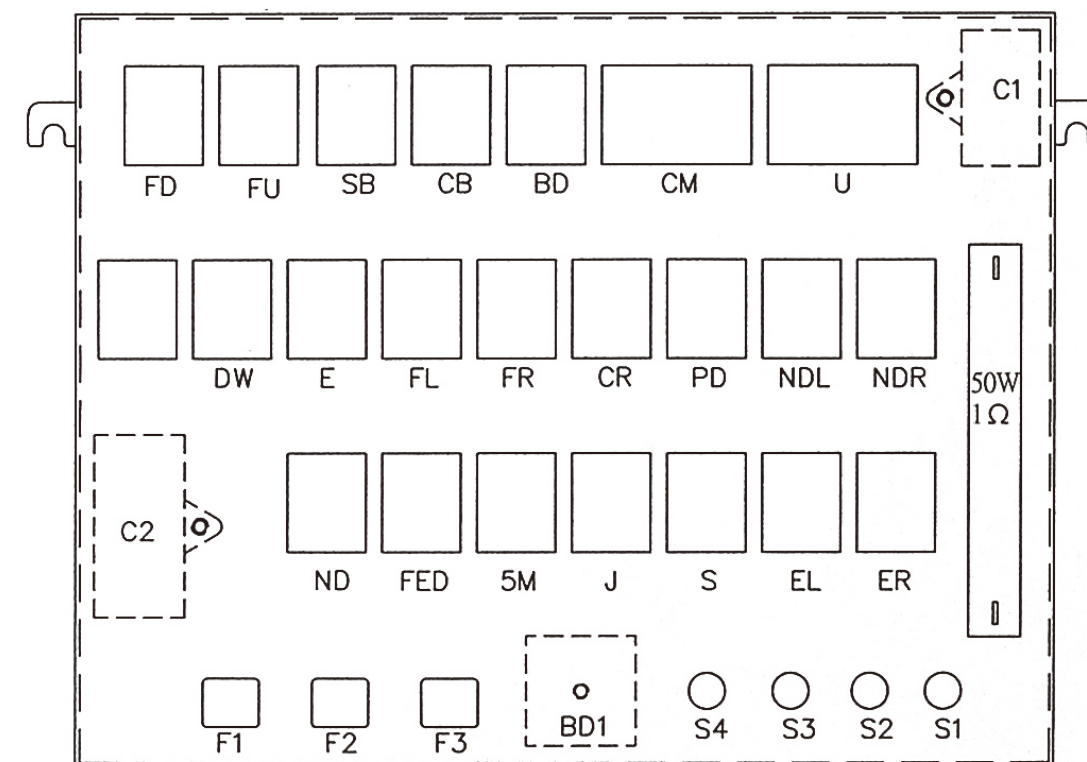
F1——**Round knife motor Circuit protector**
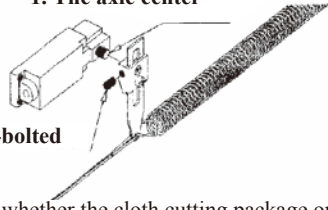
F2——**DC24V   Circuit protector**

F3——**Opposite side motor   Circuit protector**

For overcurrent, the circuit protector will jump, after pressing back and again tries out, if not jump, can safely continue to operate.

If over and over again jump, maybe have a short circuit, or the circuit protector itself has faults.

Simple trouble removal

Problem	Cause	Countermeasures
Cutter blade doesn't rotate	1. Circuit protector F1 jumps 2. Relay CR connection point is burned 3. Motor carbon brush or rotor is weared	1. Press back and again try out, if normal, continue to use. If over and over again jump, maybe have a short circuit, Or the circuit protector itself has faults. 2. Change relay
Cloth table of opposite side doesn't operate	1. Circuit protector F3 jumps 2. Relay ER EL connection points are burned 3. Opposite side motor is faulted	1. Press back and again try out, if normal, continue to use. If over and over again jump, maybe have a short circuit, or the circuit protector itself has faults. 2. Change relay 3. Under the situation of not been hit, the motor is difficult to fault.
Can not start power	1. Electromagnetic contactor (part No.: P7/30778) thermal overload relay jumps 2. External power of machine opens circuit	1. Open electromagnetic contactor's peripheral, press and then return pole. 2. Measure and check with ammeter following the circuit.
Press RUN but can't toggle autorun	During power transmission, OP must be in ON (magnetic absorption) state. press cables ↓ let OP interrupt ↓ machine stops ↓ OP continues to interrupt and can not toggle autorun	Countermeasures: OP power comes from limit switch of emergency stop cables end. **1. The axle center** **2. Again re-bolted** 1. Check whether the cloth cutting package or trolley, etc. are press the cables. 2. Angle deviation of cables end limit switch is too large or fault. 3. Refer to P/14 to check whether has breakage following the circuit, loosen when the angle deviation of limit switch is too large. The screw of Figure 2 is again re-bolted. The axle center of Figure 1 is again jumped back to the origin.

Maintenance:
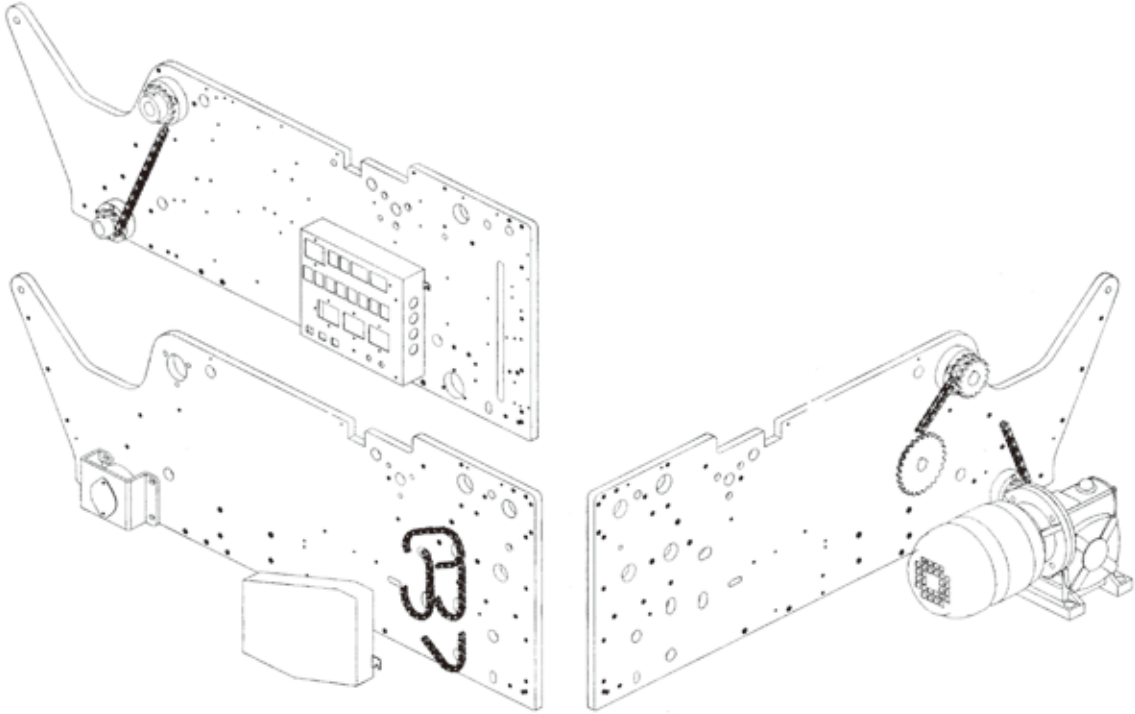
Basic Maintenance

1. Chain: Add Lubricant And Adjust Elasticity
For lubricant of chain, 40# machine oil is advisable, adding once every 2 months, note not excessive to avoid greasy dirt.
If lacking of oil, the chain is easy to wear.
(The above figure's chain is the chain must add oil, don't add for the other chains)

2. Clean Dust
One week at least clean once with air gun and cleaning is the first step of high-quality work.

3. Clean surface dirt of wheels
The surface dirt of wheels is attached dirt, more dirt easily causes slip to make length not accurate.

K9 電器配線圖 / K9 ELEC. POWER DIAGRAM

POWER 220V 0V

ON OFF

總參照此圖接線，若機器不能自動移動，請將紅黑線互換。
The wiring of socket according to this diagram, if machine is can not moving automatically, please switch the cord RED and BLACK.

220V

限位開關作停止用（桌面下兩邊）。
Limit Switch for STOP(under table 2 side).

動態繼電器 OP Relay for STOP

RELAY

停電繼電器 OP Relay for STOP

MAGNETER 電磁接觸器

Grn

220V T相 B相 G相

SW1 SW2

B側 (非操作側) / B-side

變速皮帶輪 Adjustable Pulley

吐布馬達 Manual Feeding Motor

OP 搖電器 OP Relay

電磁接觸器 Magnet Contact

FEDK NDK

刀行馬達 Cut-moving Motor

驅動馬達 Driving Motor

C4 押布馬達 Pressing Motor

LS2 LS1 CS3

鬆布馬達 Unwinding Motor

布斗馬達 Bucket Motor

LSR
LSRR
LSLL
LSL

對邊馬達 Edging Motor

圓刀馬達 Blade Motor

升降馬達 Lifting Motor

24VDC 電源供應器 24V Supplier

220V 0V

PLC

V7 1.5kw

V7 0.75kw 操作面板 Panel

CS9 CS2 CS1

SBK

配電盤 Circuit Box

左 (後) Backward Direction — A側 (操作側) A-side(Operation Side) — 右 (前) Forward Direction

K9/K5 電力配線圖

27-29 20# L=W+1600　83-85 20# L400　25-26 +黑-白 20# L=W+1600　30-33 16# L600　36-38 16# L400　56-57 16# L500　34-35 16# L500　40-43 20# L300　44-46 20# L=W+1200　58-59 16# L=W+1200　10-15 20# L380　53-54 16# L1600　47-50 16# L200　20-24 16# L380　51-52 20# L800

紅 R
黑 B　220V
白 W
綠 G

POW
SW8 56 1 2 57　緊急停 A
SW9 58 1 2 59　緊急停 B

OP　POW 5 6 13 14
SW1　SW2
5M
MAGNET 電磁接觸器

LIMIT SWITCH FOR STOP 停止用 限制開關

5A F2　AC AC V G POWER SUPPLY
24V　0V
FBs-8EY　PLC FBs-32MC　FBs-B2DA
S/S C0 C2 G
FILTER LINE LOAD 10A

E1 E2 人濃
FED　FEEDING CLUTCH 送布離合器
NDR NDL ND　MANUAL FEEDING CLUTCH 壯布離合器

FU FD CON 1　40 41 42
NDR NDL CON 2　44 45
PD LS1 LS2 10 11 CON 3 12

M5 B　LIFTTING MOTOR 升降馬達 5IK-5GN180 43
M6　MANUAL FEEDING MOTOR 壯布馬達 3IK-3GN18 46
M7　PRESSING MOTOR 押布馬達 2RK-2GN120 12

47 48　20V 5A　49
ER SCR1 SCR2 EL ER
EDGE CONTROL MOTOR 對邊馬達 12CBG 1/100
M8
54

BD1 CR　M9 BLADE MOTOR 圓刀馬達 20 21 22 23 24
SB S1 S2 BEM-A-72 SBK BRAKE 煞車離合器

5M 5 MIN SWITCH OFF 五分鐘關機 H3Y2-5M 220VAC 13 14

14A REACTOR 電抗器
MACHINE MOVING MOTOR 驅動馬達
M U1 W2 紅 U / V1 U2 白 V / W1 V2 黑 W
V1000 1.5kw
120W 200Ω B1 B2
紅 S1 Y4 / 白 S2 Y5 / 藍 S6 Y6 / 黃 S7 Y7 / 紫 SC C4,C6
V+ A1 AC E
VR202
V0O+ DW1 / GND DW2
FBs-B2DA
MANUAL MOVING 寸動走行　Shielded 隔離線

5 9 U / 6 10 U / 8 12 U
BD BD CM CM CM CM CM CM
紅 白 黑 1.25mm² 3芯電纜線
M2 BUCKET MOTOR 布斗馬達 90W 1/5
M3 UNWINDING MOTOR 解布馬達 25W 1/3
M4 CUTTING MOVING MOTOR 刀行馬達 25W 1/3
13 14 15

紅 白 黑
5A REACTOR 電抗器
U R S V W
V1000 0.75kw
茶 S1 Y8 / 橙 S2 Y9 / 灰 S6 Y10 / 粉紅 S7 Y11 / 青 SC C8
A1 綠 AC 黑 E
V0I+ FBs-B2DA GND
Shielded 隔離線

K(负极) G(触极) A(正极)

WR SB 橙 紅 黑 茶
ALARM LAMP FOR EXCEEDING THE RANGE OF EDGE CONTROL 對邊超越 警示燈 TPTF4-L23ROG-S

K9/K5 控制迴路圖

M5084

04.03.01.1042

04.03.01.1041

04.05.01.0111

10P

KS3B007

M3105

M4105

KS3A008

KS3A002

04.04.18.2121

04.04.19.1402

M6083

KS3B265

KS3A006

04.07.03.1273

5P

KS3B007

04.04.17.1201

04.08.03.2201

04.08.03.2302

KS3B30?

M4127

KS3A005

KS3B008

KS3A009

K1A004

KS3B306

KS3B264

05.04.09.1401

M4084

KS1JB2066

K5A044

M3125

KS3B009

KS3A003

KS3B012

KS3A011

04.04.14.1201

KS3B004

04.07.01.2101

S9

KS1JB2067

鐵板牙 外六1/4" x 3/4"

R26

KS3B010

KS3A010

M10501

KS3B280

M4155

04.04.18.1101

KS3A017

06.09.02.1001

M5121

KS3A013

KS3A117

KS3A016

05.04.09.1301

M2046

M5101

KS3B345

KS3B199

KS3B292

M4255

KS3B344

M5108

KW-190-3D-01

45

46

KW-190-3D-02

KS3B093
KS5A003
KS3B180
KS3A035
KS5A0B8
04.07.02.1108
合金M4251
KS3A032
KS3B039
04.07.03.1205
KS3B045
04.07.01.2131
KS3A031-R
SZA019
KS3B034
KS3B049
KS3B051
KS3B048
KS3B334
04.04.14.1003
KS3B333
KS3B050-R
K5A002
KS3B289
KS3A029
KS3B304
K5A0B8
KS3A031-L
SZA3100-L
F1B049
KS5B057
KS3B017
SZA018
K5A04B
KS3B033
KS3A118
04.07.02.1108
KS3B028
KS3B29
KS3B049
KS3B287
F1B069
KS3B042
SZA3100-R
K5B0B8
KS3B034
K5A052
KS3A027
KS3B032
04.07.01.3021
04.07.01.3021
K5B053
04.07.01.2111
KS3B270
KS3B050-L
KS3B289
KS3B147
K5B056
S8
04.07.01.2081
KS3B016
KS3B313
KS3A032
04.07.01.3021
04.07.01.3021
KS3B029
M4*10牙棒
KS3A032
04.07.01.2052
04.07.01.3021
M5108

KW-190-3D-03

KW-190-3D-04

KW-190-3D-05

04.07.02.1103
04.07.01.2132
K9B002
KS3B085
S19
KS3A055
04.07.02.1102
04.07.02.1102
04.07.02.1105
K5A028
B4039
KS3B063
K5B063
A4026
M8251
04.07.01.2081
S15
K5A058
KS3A047
04.07.01.2161
KS3B064
KS3B080
04.07.01.2121
KS3B079
KS3B271
4*4*10
KS3B065
KS3B339
KS3B063
04.07.01.2081
S15
KS3B079
M8401
KS3B082
S12
KS3B086
KS3A051
S15
04.07.01.2121
KS3B083
04.07.01.2141
M8501
KS3B071
R42
04.07.01.2081
KS3A107
KS3B207
M8401
KS3B084
KS3B073
M8127

KW-190-3D-06

04.04.21.1101
04.07.01.2123
04.04.21.1101
KS3B099
KS3B094
04.07.01.2121
R32
04.07.02.1104
KS3B095
KS3B096
KS3B097
KS3B098
S15
KS3B100
04.07.01.2161
KS3B213
5×5×20
H
04.07.04.1001
S
06.10.03.4211
KS3B300
04.07.04.1001
K
KS3B318
KS3A112
K5A087
G
KS3B125
M10501
04.07.01.2081
K5B087
KS3B115
KS3B114
KS3B283
KS3B110
KS3B111
KS3B112
KS3B113
KS3B105
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6P
04.04.12.3001
04.04.12.1003
K5A061
04.04.19.1301
K5B004
04.04.18.2111
KS3B118
04.07.01.2111
KS3B119
S12
04.07.01.2161
KS3B121
KS3B213
04.07.02.1209
KS3B126
KS3B117
5×5×20
04.07.02.1201
KS3B122
KS3A108
KS3B103
KS3A106
F1B047
G
H
KS3B087-90
KS3B116
04.07.03.1091
04.07.02.1002
CS2B076
7×7×25
04.04.19.2002
K5A062
E
S15
KS3B098
E
KS3B198
KS3B104
KS3A131
K5A010
KS3A056
R40
04.07.01.2133
04.07.01.2121
KS3A058
KS3B101
S
KS3B209
S17
A7074
KS3B107
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KS3B108
KS3B109
KS3B124
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04.04.06.1201
04.04.06.1203

KW-190-3D-07

57   58

KW-190-3D-08

KSA014

KSA013

KSA066

M6102

04.04.13.0111

04.04.13.0111

3P

CS2B080

M4305

04.04.13.0111

KSA012

M6152

04.04.13.0111

3P

04.04.18.1002

KSA063

KS3A062

6P

合金 M8351

K5B009

KS3A061

KSA064

KSA011

K5B007

B9001

K5B008

A7065

A7064

KW-190-3D-09

KW-190-3D-10

KS3B324

KS3B329

04.07.01.2197

KS3B305

KS3B323

M10W

KS3A087

M10S

M10251

KS3B327

KS3B330

KS3B328

KS3B336

04.07.01.2141

04.07.01.2161

KS3B326

M5087

KS3B322

M6127

M5089

KS3B325

06.10.03.3002

KS3B204

06.10.03.3002

KS1JB2067

S6

KW-190-3D-11

KS3B228

KS3B231

KS3B216-R

KS3B235

KS3B229

M10201

KS3B232

KS3B217

KS3B216-L

KS3B233

KS3B262

KS3A100

BZ009

KS3B218

KS3B236

KS3B215

04.07.01.2121

KS3B223

KS3B220

M8207

KS3B221

BZ036

BZ039

04.07.01.4004

KS3B217

06.10.03.3001

M8201

BZ044

04.07.01.3002

KS3A088

04.07.01.4001

06.10.03.4201

M8301

M5107

AZ044

KS3B237

KW-190-3D-12

KW-190-3D-13

KW-190-3D-14