






安全注意事项

1. 安全操作的标志及含义

本使用说明书及产品所使用的安全标志是为了让您正确安全的使用产品，防止您及其他人受到伤害。标志的图案和含义如下：

 危险	如果忽视此标记而进行错误的操作，会导致人员的重伤或死亡。
 注意	如果忽视此标记而进行错误的操作，会导致人员的受伤和设备的损坏。
	该符号表示“应注意事项”。三角中的图案表示必须要注意的内容。（例如左边的图案表示：“当心受伤”）
	该符号表示“禁止”
	该符号表示“必须”。圆圈中的图案表示必须要做的内容。（例如左边的图案表示“必须接地”）

2. 安全注意事项

 危险	
	打开控制箱时，先关闭电源开关并将电源插头从插座上拔下后，等待至少 5 分钟后，再打开控制箱盖。触摸带有高电压的区域会造成人员受伤。
 注意	
使用环境	
	应避免在强电气干扰源（如高频焊机）的附近使用本缝纫机。强电气干扰源可能会影响缝纫机的正常操作。
	电源电压的波动应该在额定电压的±20%以内的环境下使用。电压大幅度的波动会影响缝纫机的正常操作，需配备稳压器。
	环境温度应在 5℃~35℃的范围内使用。低温或高温会影响缝纫机的正常操作。
	相对湿度应在 45%~85%的范围内，并且设备内不会形成结露的环境下使用。干燥、潮湿或结露的环境会影响缝纫机的正确操作。
	压缩空气的供气量应大于缝纫机所要求的总耗气量。压缩空气的供气量不足会导致缝纫机的动作不正常。
	万一发生雷电暴风雨时，关闭电源开关，并将电源插头从插座上拔下。雷电可能会影响缝纫机的正确操作。
安装	
	请让受过培训的技术人员来安装缝纫机。
	安装完成前，请不要连接电源。 如果误按启动开关，缝纫机动作会导致受伤。
	缝纫机头倒下或竖起时，请用双手操作。不要用力压缝纫机。 如缝纫机失去平衡，缝纫机滑落到地上会造成受伤或机器损坏。

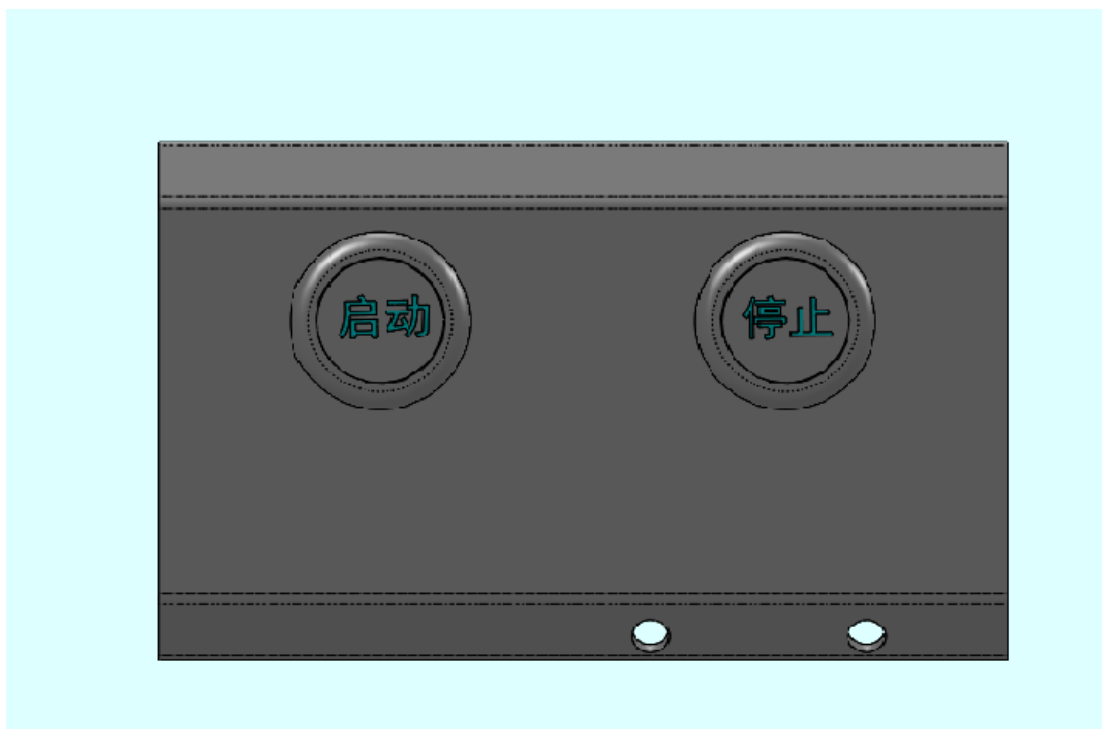
	必须接地。 接驳地线不牢固，是造成触电或误动作的原因。
	所有电缆应固定在离活动部件至少 25mm 以外处。另外，不要过度弯曲或用卡钉固定得过紧。会引起火灾或触电的危险。
	请在机头上安装安全罩壳。
缝纫	
	本缝纫机仅限于接受过安全操作培训的人员使用。
	本缝纫机不能用于除缝纫外的任何用途。
	使用缝纫机时必须戴上保护眼镜。 如果不戴保护眼镜，断针时机针折断部分可能会弹入眼睛造成伤害。
	发生下列情况时，请立即切断电源。否则误按下启动开关时，会导致受伤。 1. 机针穿线时 2. 更换机针时 3. 缝纫机不使用或人离开缝纫机时
	缝纫过程中，不要触摸任何运动部件或将物件靠在运动部件上，因为这会导致人员受伤或缝纫机损坏。
	如果缝纫机操作中发生误动作，或听到异常的噪声或闻到异常的气味，应立即切断电源。然后请与购买商店或受过培训的技术人员联系。
	如果缝纫机出现故障，请与购买商店或受过培训的技术人员联系。
维护和检查	
	只有经过训练的技术人员才能进行缝纫机的维修、保养和检查。
	与电气有关的维修、保养和检查请及时与电控厂家的专业人员进行联系。
	发生下列情况时，请关闭电源并拔下电源插头。否则误按启动开关时，会导致受伤。 1. 检查、调整和维修 2. 更换弯针、切刀等易损零部件
	在检查、调整和修理任何使用气动设备之前，请先断开气源，并等压力表指针下降到“0”为止。
	在必须接上电源开关和气源开关进行调整时，务必十分小心遵守所有的安全注意事项。
	未经授权而对缝纫机进行改装而引起的缝纫机损坏不在保修范围内。

启动和停止按钮

开始缝制时，请按“启动”按钮。缝制开始后，想暂停下来检查线迹按“启动”按钮或“停止”按钮暂时停止；要继续缝制时按“启动”按钮。结束时按“停止”按钮。

如果缝制过程中断线停止了，等穿好线后按“启动”按钮继续缝制。

如果出现紧急或异常情况下，请按“启动”按钮或“停止”按钮，机器立刻停止缝制，再按“停止”按钮机器推出模板结束。



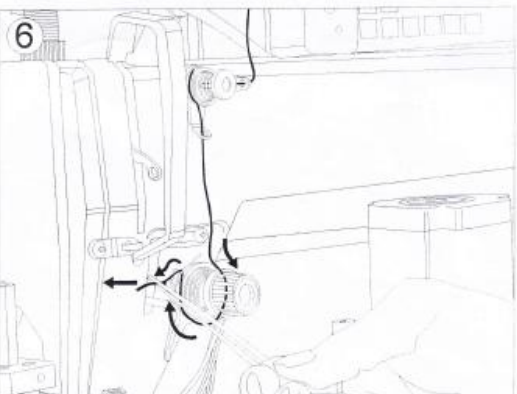
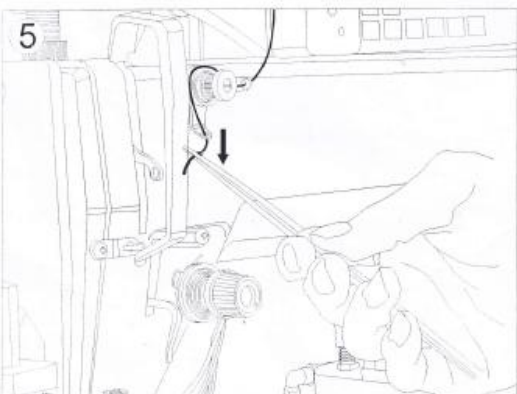
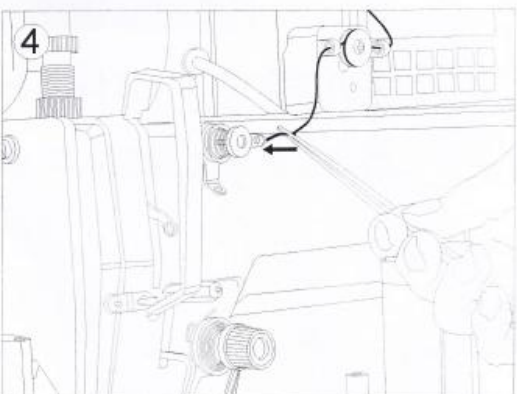
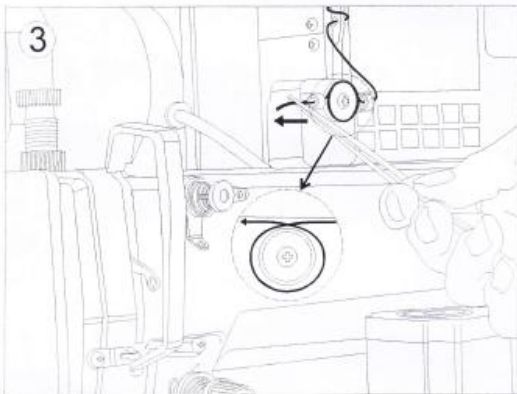
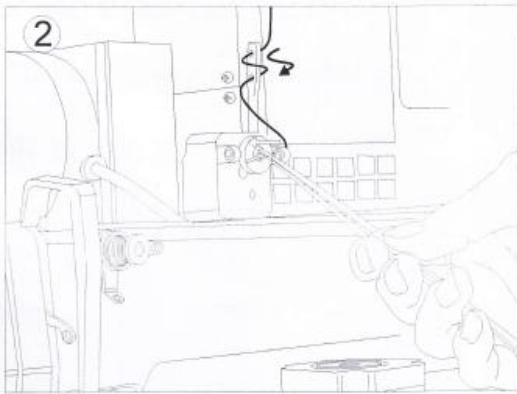
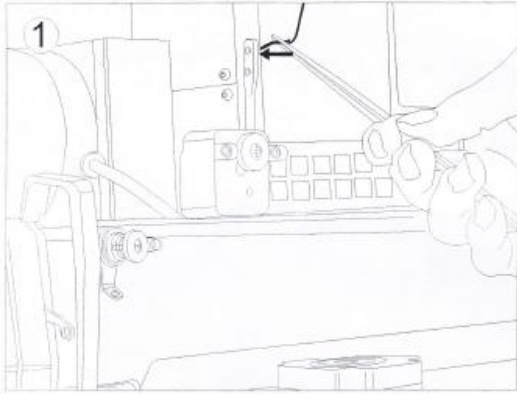
手册及零件手书

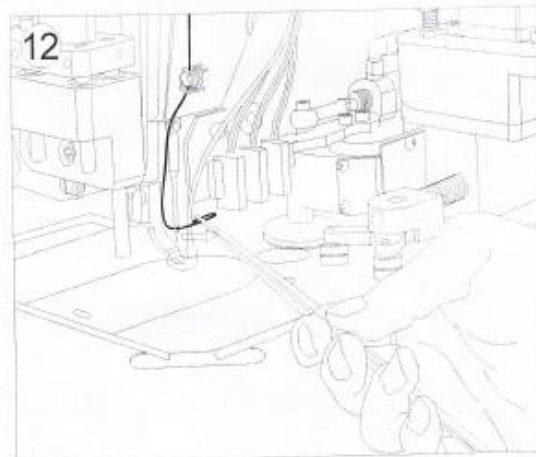
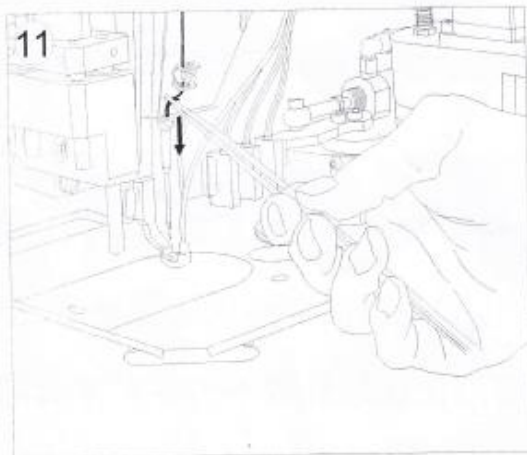
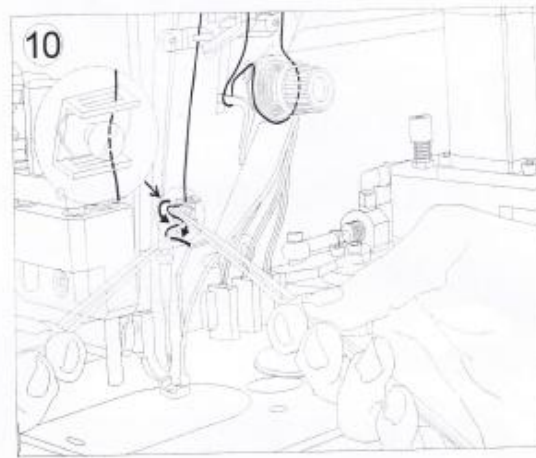
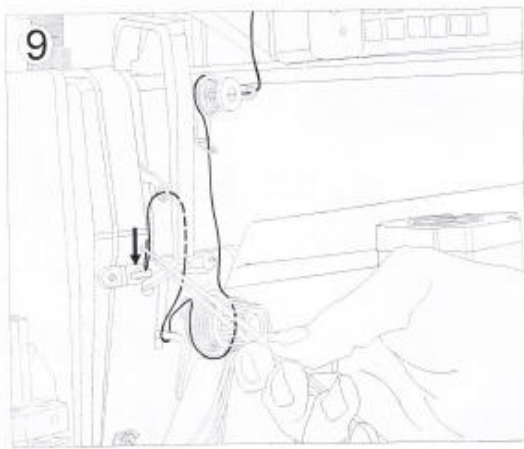
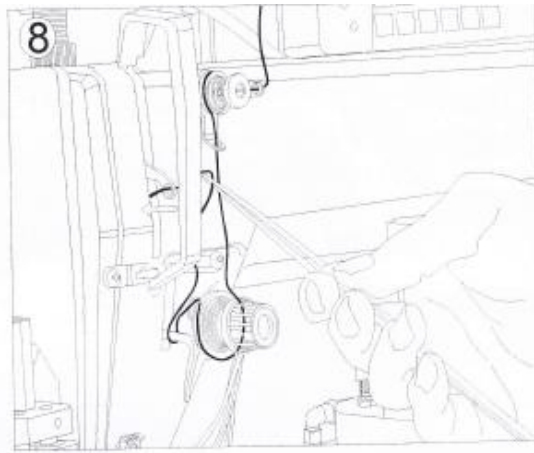
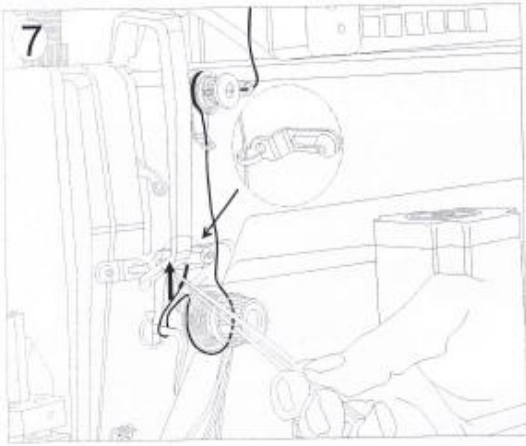
规格

1. 转速：3000 rpm
2. 针迹长度：0.5-5.0mm
3. 针板尺寸：11mm
4. 机针规格：DP*17 90/14
5. 电压：AC220V 50HZ
6. 气压：0.4-0.6MPa
7. 重量：100KG
8. 外形尺寸：1200×760×1200

穿线

请按图片所示进行穿线





显示屏操作说明



- 1. 序号:**表示保存模板类型里参数值.方便下次操作,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 1-49,50 为扫描模板上条码自动生成参数,在每次更换模板时扫描一次条码。
- 2. 生产件数:**表示机器缝纫好的产品多少件,按一下数字键可以清零。
- 3. 断线监控:**灯变绿色时表示断线传感器正常,否则传感器没有调好或已坏。
- 4. 缝纫速度:**表示缝纫机头每分钟多少转速,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 400-3000。
- 5. 软起速度:**表示在开始缝纫时每分钟多少转速,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 400-1500。
注:软起速度必须在软起针数不为零时才有效。
- 6. 倒缝速度:**表示在开始倒缝时每分钟多少转速,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 400-1500。
注:倒缝速度必须在倒缝针数不为零时才有效。
- 7. 圆角速度:**表示在缝纫圆角时每分钟多少转速,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 400-1650。
注:圆角速度必须在屏上设置有圆角图形时才有效。
- 8. 直角速度:**表示在缝纫直角时每分钟多少转速,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 1-200。

注:直角速度必须在屏上设置有直角图形时才有效。

9. **直线针距长度**:表示在缝纫直线上时的针距长度,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 0.1-5.0mm。
10. **圆角针距长度**:表示在缝纫圆角上时的针距长度,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 0.1-5.0mm。
11. **软起针数**:表示机器开始缝纫时先用软起速度缝纫多少针后再用缝纫速度来缝纫,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 0-10 针。
12. **前倒缝针数**:表示机器开始缝纫时先用倒缝速度倒缝多少针后再正常缝纫,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 0-10 针。
13. **后倒缝针数**:表示机器结束缝纫时用倒缝速度倒缝多少针后再结束缝纫,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回主页面,可输入值为 0-10 针。
14. **断线检测**:开 时表示断线后机器会自动停止,穿好线后按起动键可继续缝纫,关表示断线后机器不会停止,直到结束才停止。
15. **切刀开关**:开 表示机器缝纫时会切布,直到结束才停止,关 表示缝纫时机器不切布。
16. **图形编辑**:按模板编辑出对应的形状如图 1 和图 2。

①:编辑领子模板:

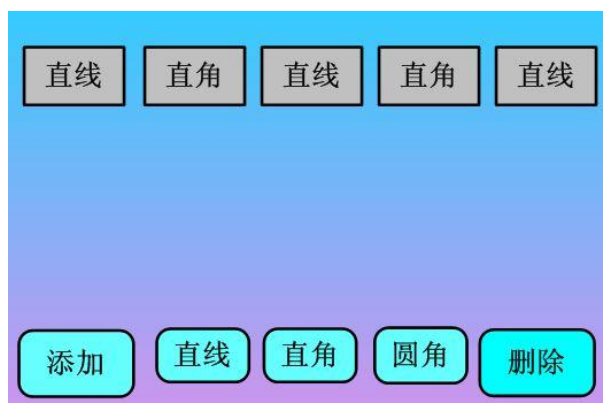


图 1

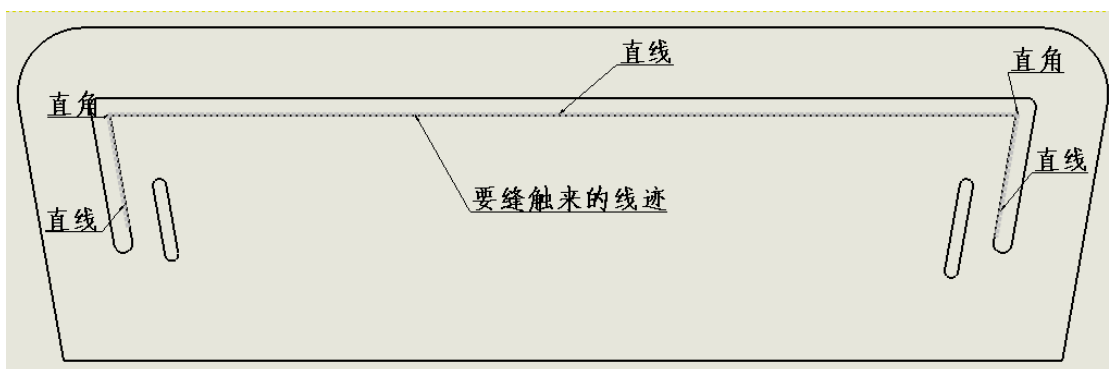


图 2

编辑操作方法:先点击图 1 的直线键,此时直线键会一直在闪烁,然后按添加键即可,到直角时,按直角键,此时直角键会一直闪烁,然后按添加键就即可,依此类推设置。

总体编辑的意思是角的前面必须要有直线开始,角的后面也必须要要有直线来结束。

②:编辑四个直角袖口模板:图 3 对应图 4,编辑方法同上;

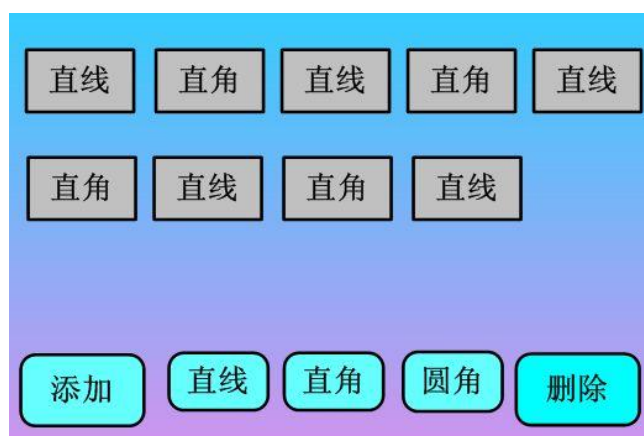


图 3

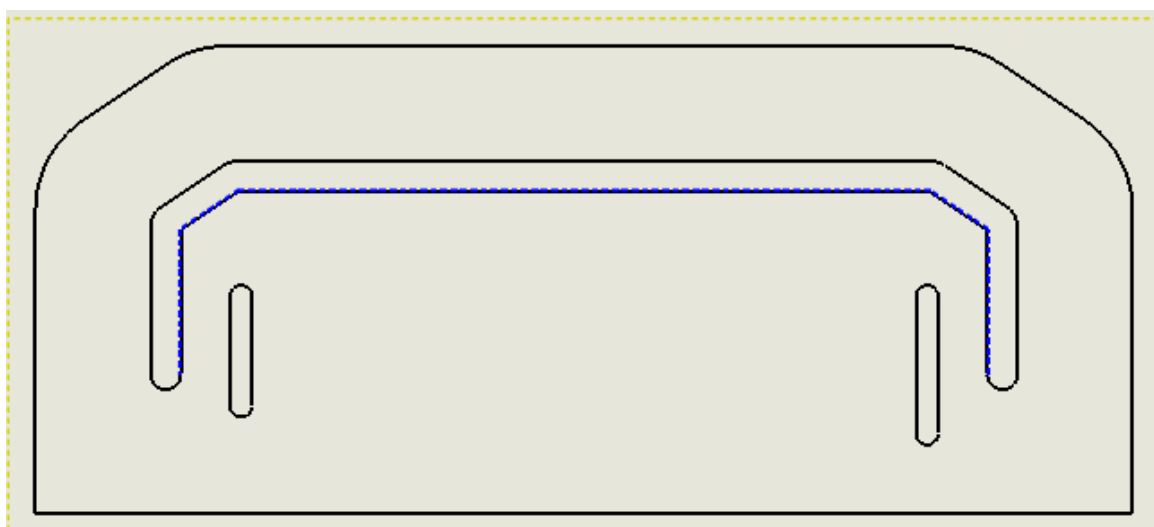


图 4

③:编辑圆角袖口模板:图 5 对应图 6, 编辑方法同上面;

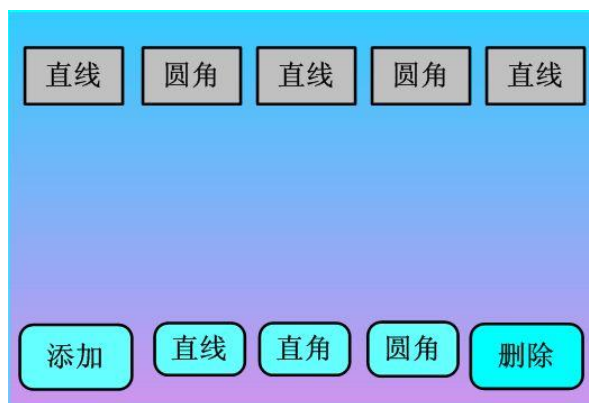


图 5

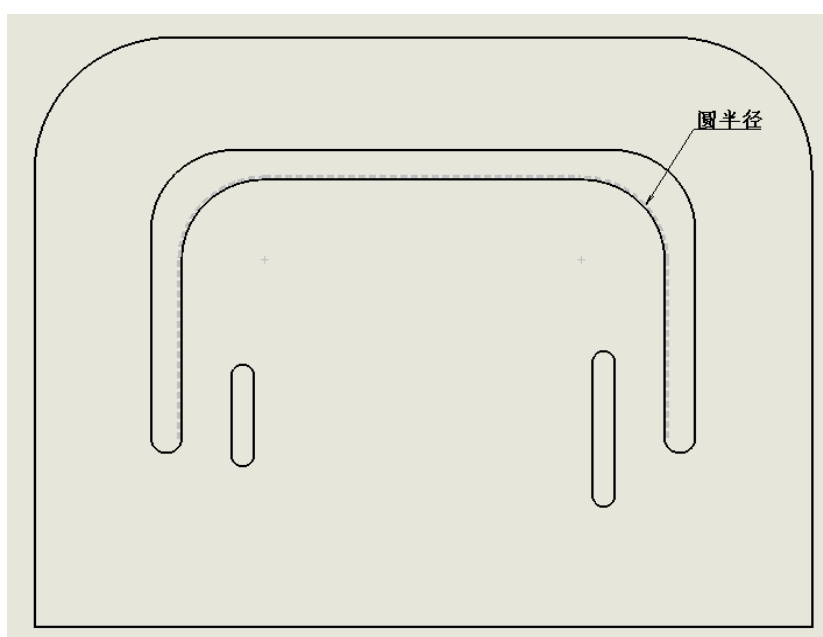


图 6

注意:做圆角模板时一定要在每个圆角都设置圆的半径大小, 否则缝制出来的线迹与圆角针距长度不一样, 设置方法如下:

17. 点击图 5 上的**圆角**键会跳出另一画面, 如图 7 所示:圆角半径, 按左边数字按钮会跳出可以输入的数字键盘, 输入您现在模板的圆角半径是多少(可输入值为 0-100mm), 输入好后按 **ENT** 键保存并返回图 7 画面, 再按**关闭**键加主页面。

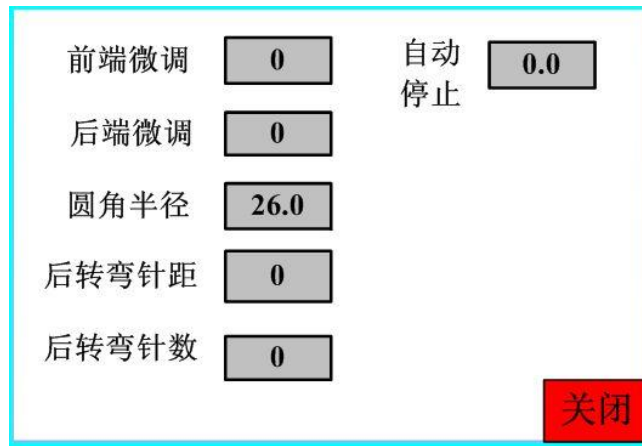


图 7

18. 图 7 说明:

①:前端微调:表示在特殊情况机器缝纫到前端角时,针距长度与直线端和圆角端针距都不一样时使用,针距比直线长了前端微调值要增加,针距比直线短了前端微调值要减少,调节方法;按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回图 7 画面,可输入值为-3 至 10 针。

②:后端微调:表示在特殊情况机器缝纫到后端角时,针距长度与直线端和圆角端针距都不一样时使用,针距比直线长了前端微调值要减少,针距比直线短了前端微调值要增加,调节方法;按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回图 7 画面,可输入值为 0 至 10 针。

③:圆角半径:前面也讲了,在做圆角时此参数非常重要,一定要输入你当前使用的模板圆角半径大小,否则针距会不一样的,按左边数字按钮会跳出可以输入的数字键盘,输入你现在模板的圆角半径是多少,输入好后按 ENT 键保存并返回图 7 画面,可输入值为 0-100.0mm。

注:此值小于 15 时,圆角速度要调到小于 500 转,否则线迹长短不一。

④:后直角转弯针距:表示在做直角模板时,转完直角后变直线缝纫时直线的前面几针针距很密时使用,增加值可以加长密的几针;按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回图 7 画面,可输入值为 0-3.0mm。

注:必须后直角转弯针数不为零时有效。

⑤:后直角转弯针数:表于在做特殊直角模板时,需要使用后直角转弯针距时必须设置针数,否则后直角转弯针距的值无效;按左边数字按钮会跳出可以输入的数字键盘,输入好后按 ENT 键保存并返回图 7 画面,可输入值为 0-10 针。

⑥:自动停止:表示在做特殊模板时无法自动结束,可以使用该功能来做自动结束,输入值计算从最后一个直线的前端到结尾时测量出长度要缝纫多少毫米,直接输入多少毫米就行了;按左边数字按钮会跳出可以输入的数字键盘,输入好后按 **ENT** 键保存并返回图 7 画面,可输入值为 0-1000.0mm

19. **启动按钮**:放入模板后点击此按键可以直接缝纫。

20. **参数设置**点击此按键会跳出另一画面,关闭图 8 页面再按**参数设置**来返回,如图 8。



图 8

①:起缝返回:表示起缝光纤感应到布料后从哪位置开始缝纫,刚好可以切完布料,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 **ENT** 键保存并返回页面,可输入值为-20 至 20 针。

②:结束针数:表示结缝光纤感应到没有布料后多少针后停止缝纫并且结束,一般根据直线针距的长短来设置,如果缝线超出布料值减小,没有缝完布料值增加,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 **ENT** 键保存并返回页面,可输入值为 0-30 针。

③ 断线接线针数:表示机器断线后,把线穿好后按起动键缝纫时机器会自动回去你设置的针数后再缝纫,就是做接线功能使用,按左边数字按钮会跳出可以输入的数字键盘,输入好后按 **ENT** 键保存并返回页面,可输入值为 0-30 针。

21. **硬件检测** 点击此按键会跳出硬件检测画面,在此页面可以测试测试所有电子元器件好坏,方便修理;如图 9:



图 9

(1) :编码器测试:转动机头手轮,编码器左边的值会变化增加或减少,Z那里灯有一下变绿色和一下变灰色,表示A、B、Z相是好的,否则编码器坏了或线没接好、控制器坏了。

注:A-X0, B-X1, Z-X2表示编码器的A、B、Z相的信号线接到控制器的X0, X1, X2的接口上,控制器上也有相应的指示灯在变化。

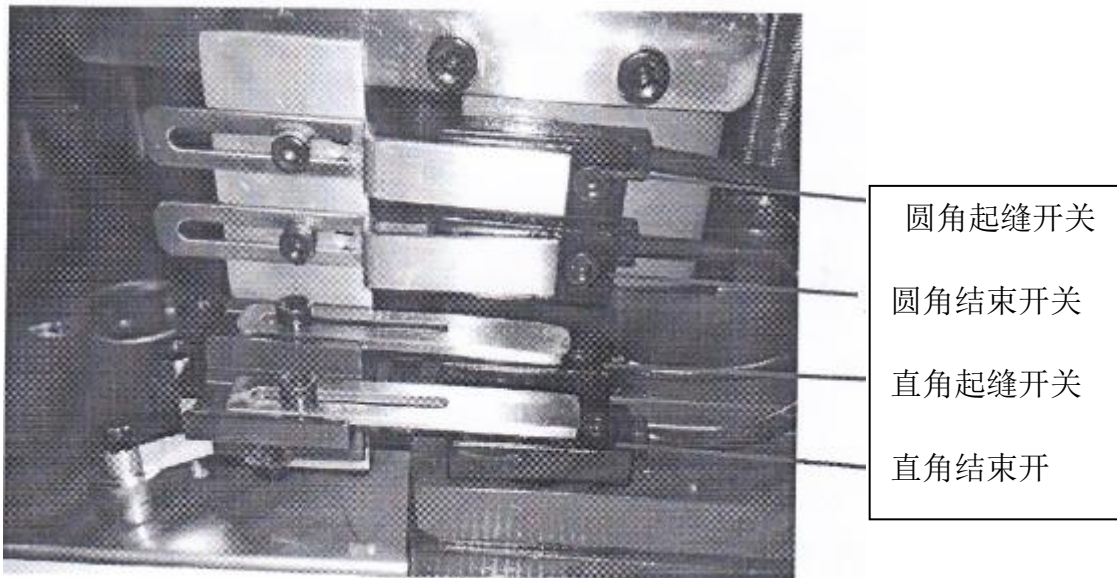


图 10

(2) :直角起缝开关测试:把气压关掉,用金属东西去感应一下直角起缝开关的感应区域(如图10所示),此时接近开关上的指示灯会变亮,对应屏上的灯变也会变绿色,拿开金属东西后接近开关上的指示灯不亮,对应屏上的灯变也会变灰色,表示接近开关是好的,否则是接近开关坏了或线没接好、控制器坏了。

注:X3表示直角起缝开关的信号线接到控制器的X3的接口上,控制器上也有相应的指示灯在变化。

(3) :直角结束开关测试:如图10所示,测试同②方法一样;

注:X4表示直角结束开关的信号线接到控制器的X4的接口上,控制器上也有相应的指示灯在变化。

(4) :圆角起缝开关测试:如图10所示,测试同②方法一样;

注:X10表示圆角起缝开关的信号线接到控制器的X10的接口上,控制器上也有相应的指示灯在变化。

(5) :圆角结束开关测试:如图10所示,测试同②方法一样;

注:X11 表示圆角结束开关的信号线接到控制器的 X11 的接口上，控制器上也有相应的指示灯在变化。

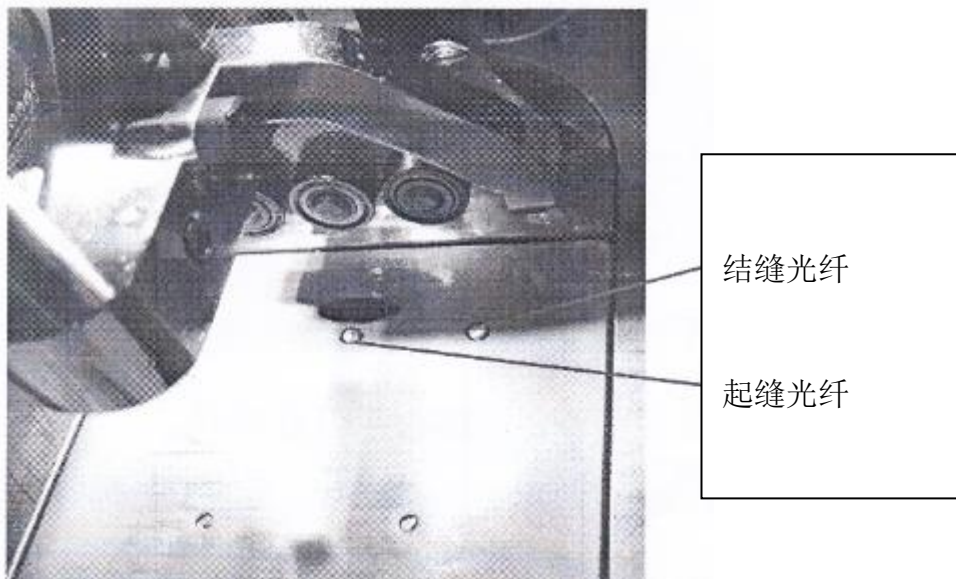


图 11



图 12



图 13

(6) :起缝光纤测试:如图 11、图 12 所示，测试同②方法一样；

注:X5 表示起缝光纤传感器的信号线接到控制器的 X5 的接口上, 控制器上也有相应的指示灯在变化。

(7) : 结缝光纤测试: 如图 11, 12 所示, 测试同②方法一样;

注:X6 表示结缝光纤传感器的信号线接到控制器的 X6 的接口上, 控制器上也有相应的指示灯在变化。

(8) : 断线检测光纤测试: 如图 12, 13 所示, 测试同②方法一样;

注:X9 表示断线光纤传感器的信号线接到控制器的 X9 的接口上, 控制器上也有相应的指示灯在变化。



图 14

(9) : 启动按钮测试: 用手按启动按钮, 如图 14 所示, 对应屏上的灯变也会变绿色, 松开启动按钮对应屏上的灯变也会变灰色, 表示启动按钮是好的, 否则是启动按钮坏了或线没接好、控制器坏了。


注:X7 表示启动按钮的信号线接到控制器的 X7 的接口上, 控制器上也有相应的指示灯在变化。

(10) : 停止按钮测试: 如图 14 所示, 测试同⑨方法一样;


注:X8 表示停止按钮的信号线接到控制器的 X8 的接口上, 控制器上也有相应的指示灯在变化。

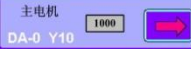
(11) : 输出测试: 点击图 9 所示的输出下面一排按键后对应的电磁阀会起动, 气缸也会做出相同的动作, 否则电磁阀坏了或线没接好、没有气压(一般要 5-6 个压)、控制器坏了。


注: 屏上写 Y 几表示电磁阀的信号线接到控制器的 Y 几的接口上, 控制器上也有相应的指示灯在变化。

(12) : 压轮步进电机测试: 按住图 9 所示的左方向键或右方向键不放  压轮会向不同方向转动表示好的, 否则步进电机驱动器坏了或线没有接好、控制器坏了。注: 步进电机接线与驱动器的接线方法是黑色线接 A+, 棕色线接 A-, 紫色线

接 B+，蓝色线接 B-，如果电机反了调换一下 A+和 A-线即可。

- (13) :靠边步进电机测试:按住图 9 所示的左方向键或右方向键不放  靠边轮会向不同方向转动表示好的，否则步进电机驱动器坏了或线没有接好、控制器坏了。**注:步进电机接线与驱动器的接线方法是黑色线接 A+，棕色线接 A-，紫色线接 B+，蓝色线接 B-，如果电机反了调换一下 A+和 A-线即可。**

- (14) :主伺服电机测试，按住图 9 所示的右方向键不放 ，缝纫机会以一定的速度在转动表示好的，否则伺服电机控制器坏了或线没有接好、右方向键左边的数值框没有值(400-3000)、主控制器坏了。

- (15) :切刀伺服电机测试，按住图 9 所示的右方向键不放 ，切刀伺服电机以一定的速度在转动表示好的，否则切刀伺服电机控制器坏了或线没有接好、主控制器坏了。




22.  在停止状态下按穿线按钮，压脚下压方便穿线，关闭再按此按钮。
23.  此功能键是用来粗调转角时接近开关感应片与接近开关感应的快慢，点击调试开启键后会跳出另一个画面，如图 15 所示：



图 15

模板内放入布料后放进针板槽里，按**启动**按钮，再长按**启动**按钮不放，此时机器会慢慢往前缝纫，到转角处时就可以调节你的起缝接近开关感应片位置，到转角处结束时就可以调节你的结束接近开关感应片位置，调节完后按停止按钮结束。再按  返回主页面。

24. 第 23 条讲解粗调方法，下面我们讲解细调方法，如图 16 所示：

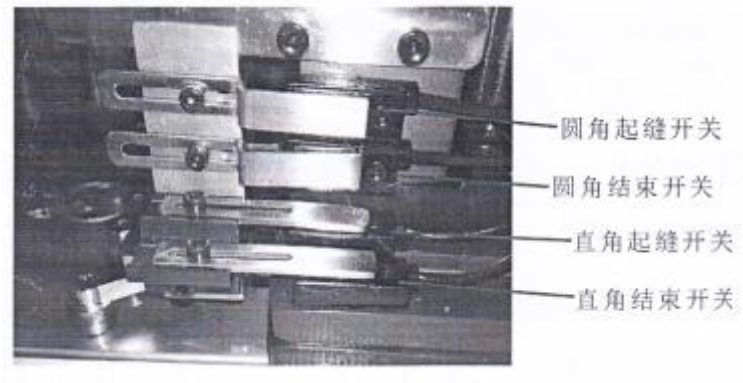


图 16

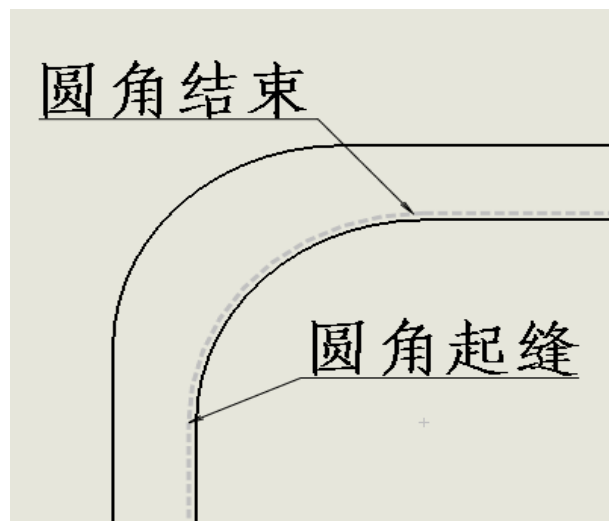


图 20

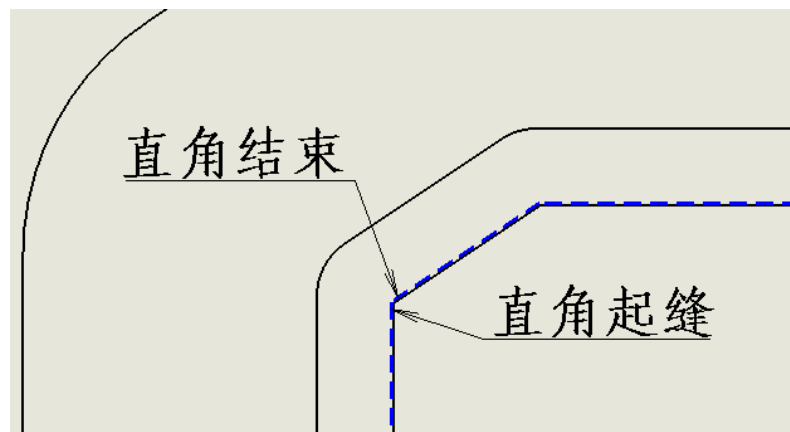


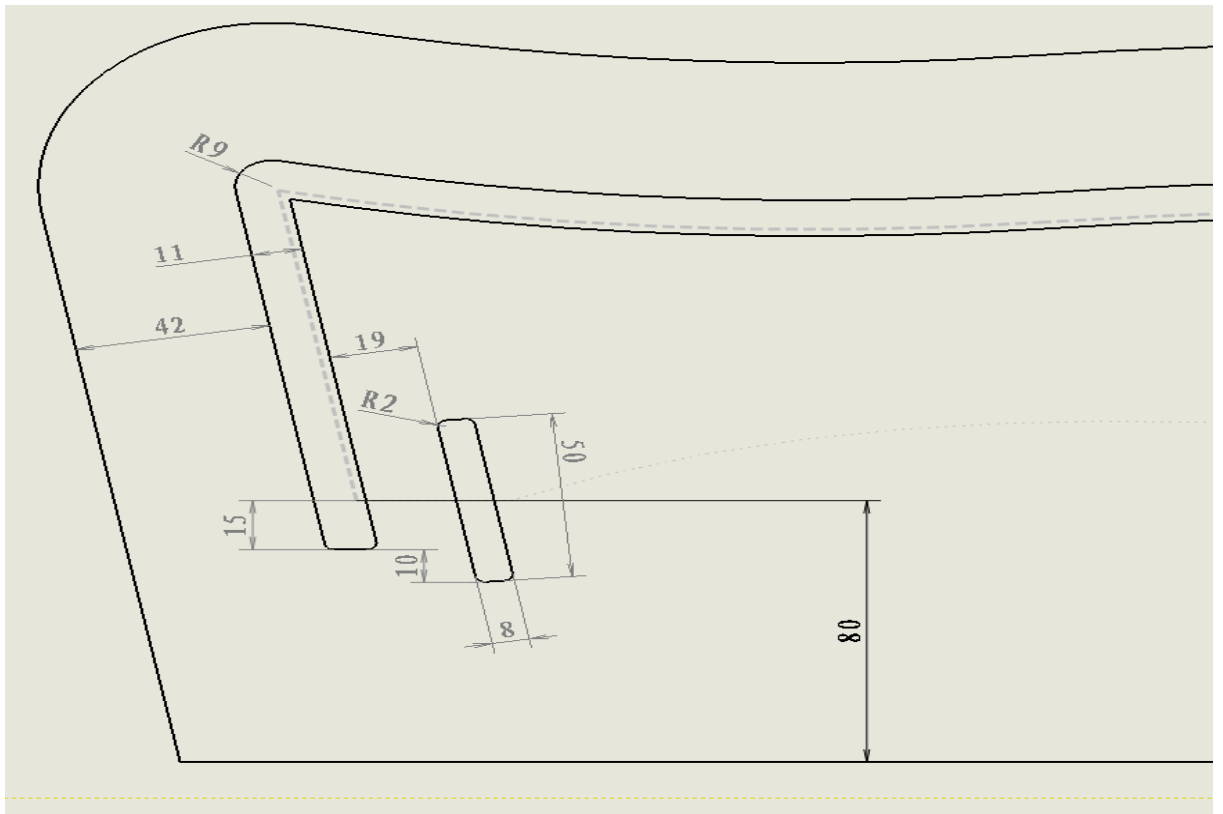
图 21

①:圆角模板调法:如果圆角起缝处针距长度变长时(图 20),圆角起缝开关感应片(图 19)向右移动,反之向左移动;如果圆角结束处针距长度变长时(图 20),圆角结束开关感应片(图 19)向右移动,反之向左移动;

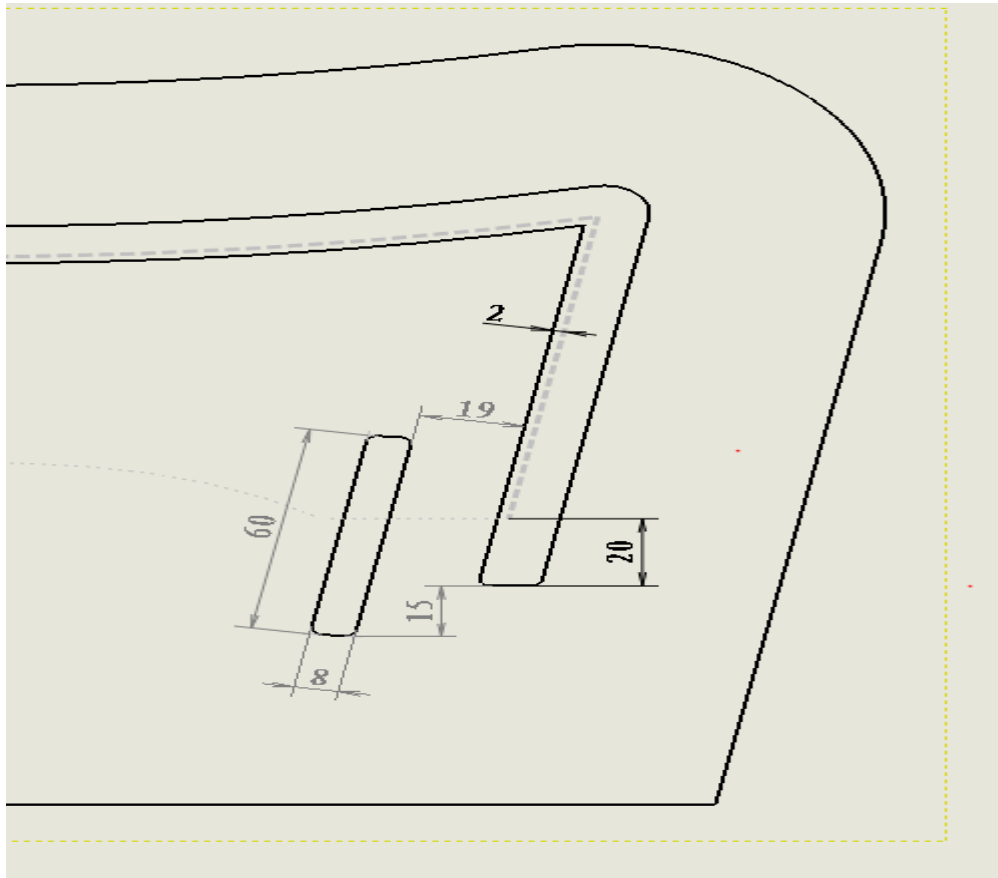
②:直角模板调法:如果直角起缝处针距长度变长或没有到直角处就停止时(图 21), 直角起缝开关感应片(图 19)向右移动, 反之向左移动;如果直角结束处针距长度变长时(图 21), 直角结束开关感应片(图 19)向右移动, 反之向左移动;注:如果直角处重针太多, 先把直角结束处针距变长后看是起缝开关感应片多向右调还结束开关感应片多向右调了。

25. 做模板尺寸:用虚线表示缝纫出来的来的位置, 用塑料板 1.5mm 厚度来做, 直角模板与圆角模板尺寸做法完全相同。

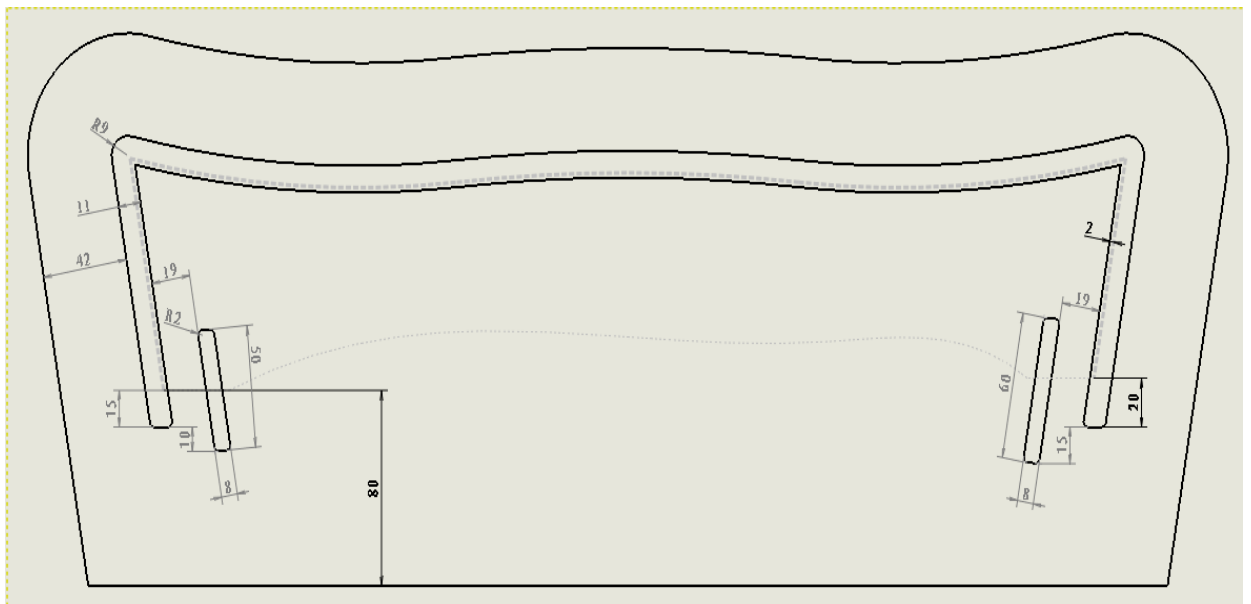
① :底块模板做法:



起缝端

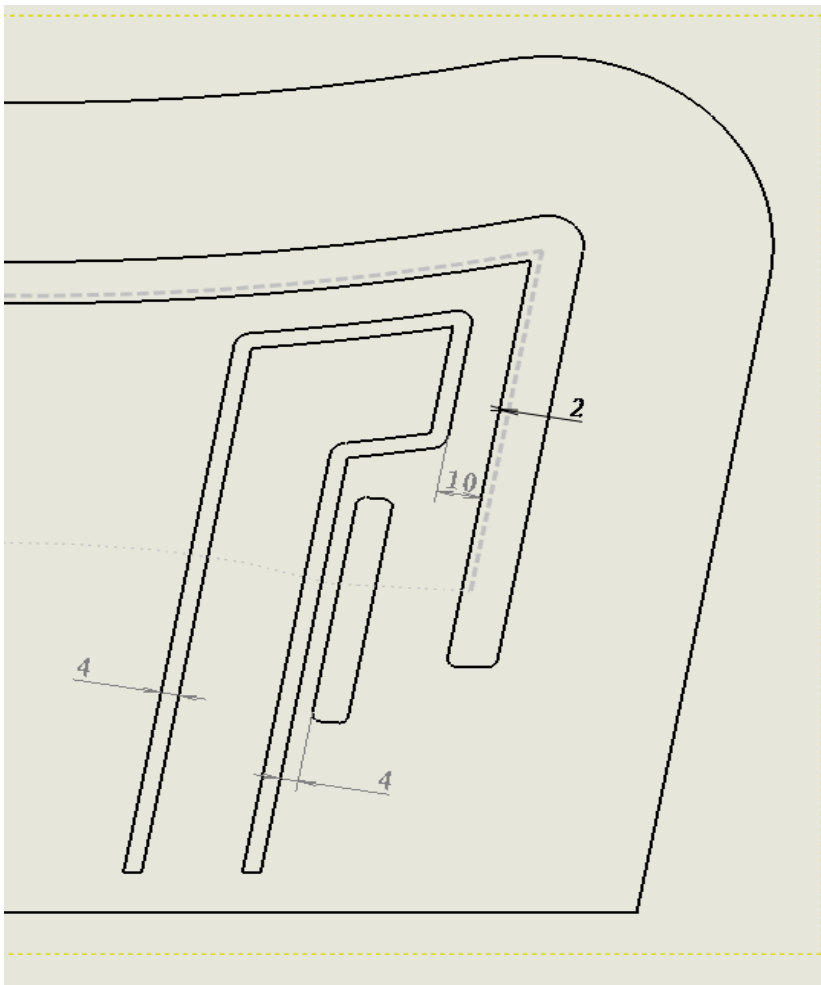
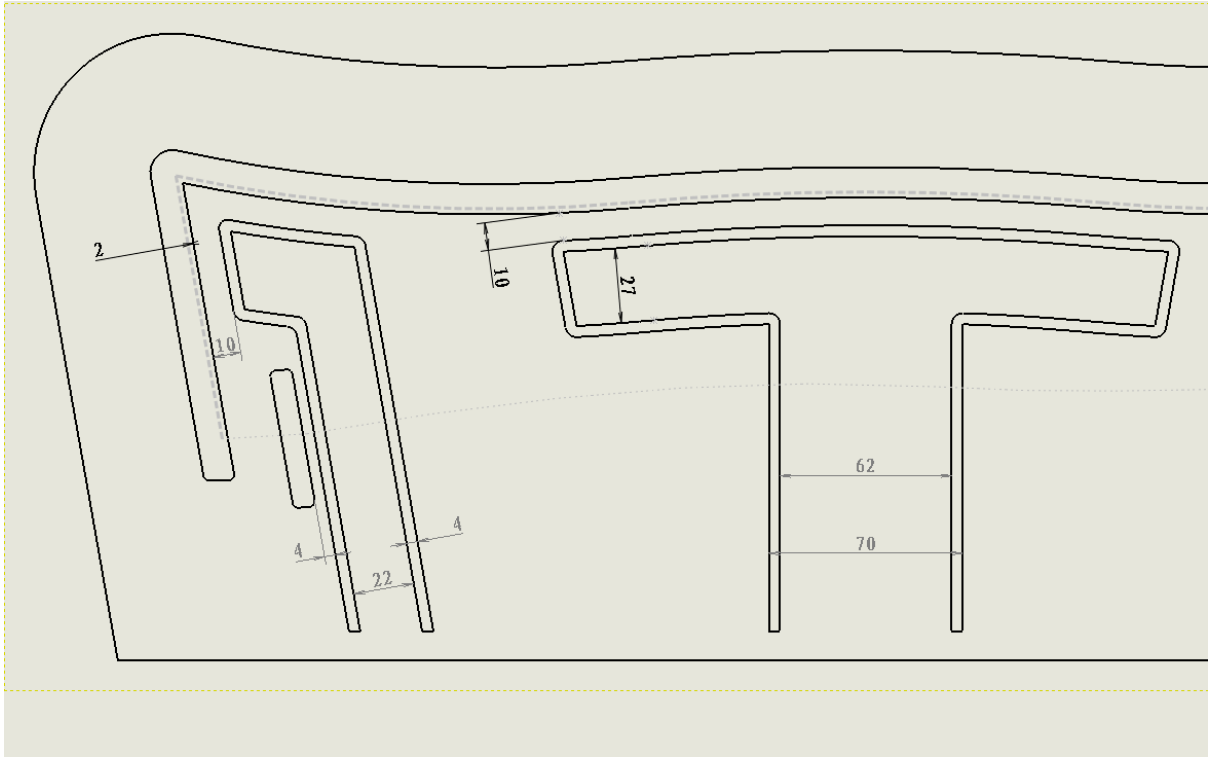


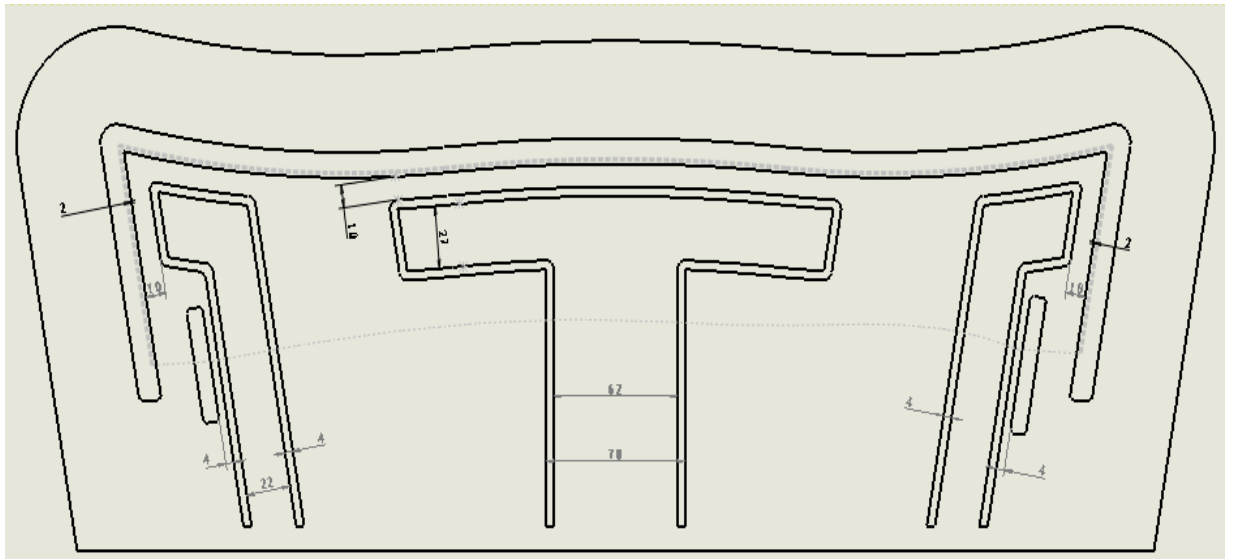
结束端



底块整体形状图

② 上块模板做法：其他尺寸与底块尺寸一样，不同的如下图：



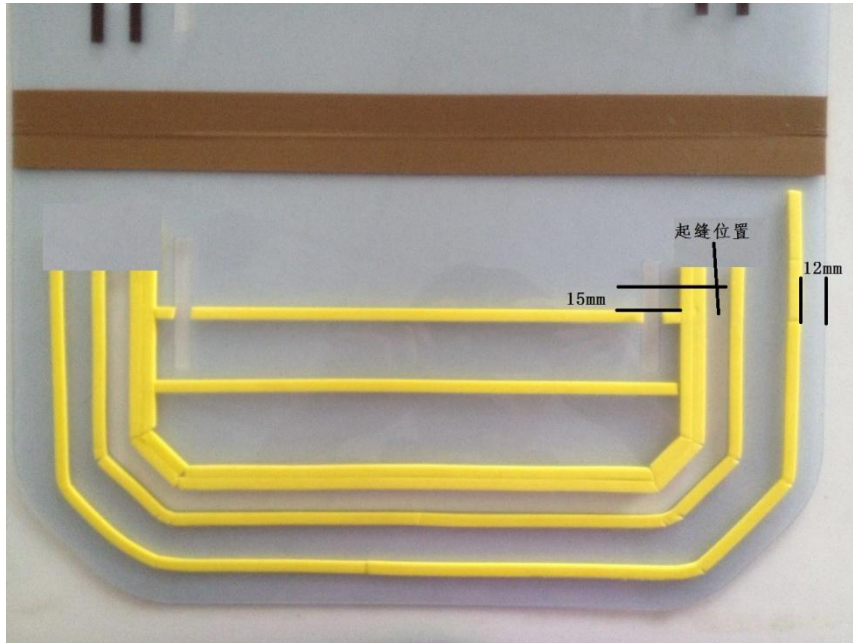


上面整体形状图

贴海面带：模板单片厚 1.5mm、海绵厚 1.2mm。



请按图所示将上层模板贴上砂纸条。

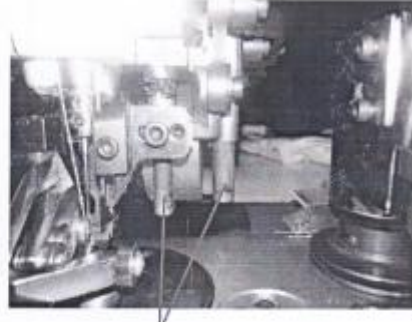
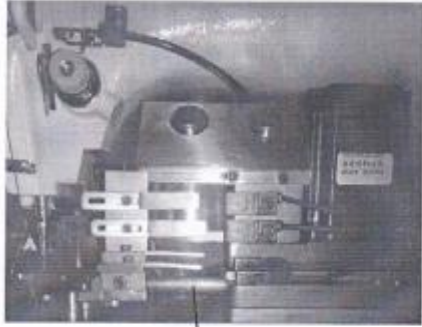


按图所示在底块模板上贴上海棉带，并在圆部位切入，这是为了自然修圆。

维护保养

为了让本机器更好地为您服务，提高更高的效益，一定要定期保养好您的设备，随时保持机器处于最佳状态，确保零件的能正常运转与整洁，以达到理想、安全动作，请依照下面的指示作定期添加机油和清理杂物。

1. 每次上班之前请对以下配件加油(最好用汽车发动机油):



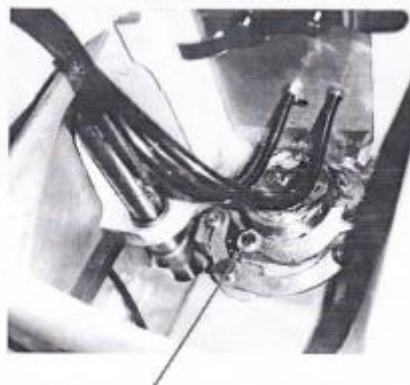
关掉气压，用棉布粘上机油对此配件进行擦油用棉布粘上机油对这两切刀轴进行擦油

2. 保持平车机头油盘里的缝纫机油量一定要够:(用专缝纫机油)



此处加专用缝纫机油

3. 每次上班之前请对以下用气枪吹进行清理整洁:








对旋梭部位用气枪吹干净，否则会有抛线现象









Safety instructions



















3. Safety indications and their meanings



This instruction manual and the indications and symbols that are used on the machine itself are provided in order to safe operation of this machine and to prevent accidents and injury to yourself or other people

	DANGER This instruction which follow this term indicate situations where failure to follow the instructions will almost certainly result in death or severe injury
	DANGER The instructions which follow this term indicate situations where failure to follow the instructions could injury when using the machine or physical damage to equipment and surroundings.
	This symbol indicates something that you should be careful ofthe picture inside the triangle indicates the nature of the caution that must be taken.(for example, the symbol at left means “beware of injury”.)
	This symbol indicates something that you must not do.
	This symbol indicates something that you must do.The picture inside the circle

4. Notes on safety

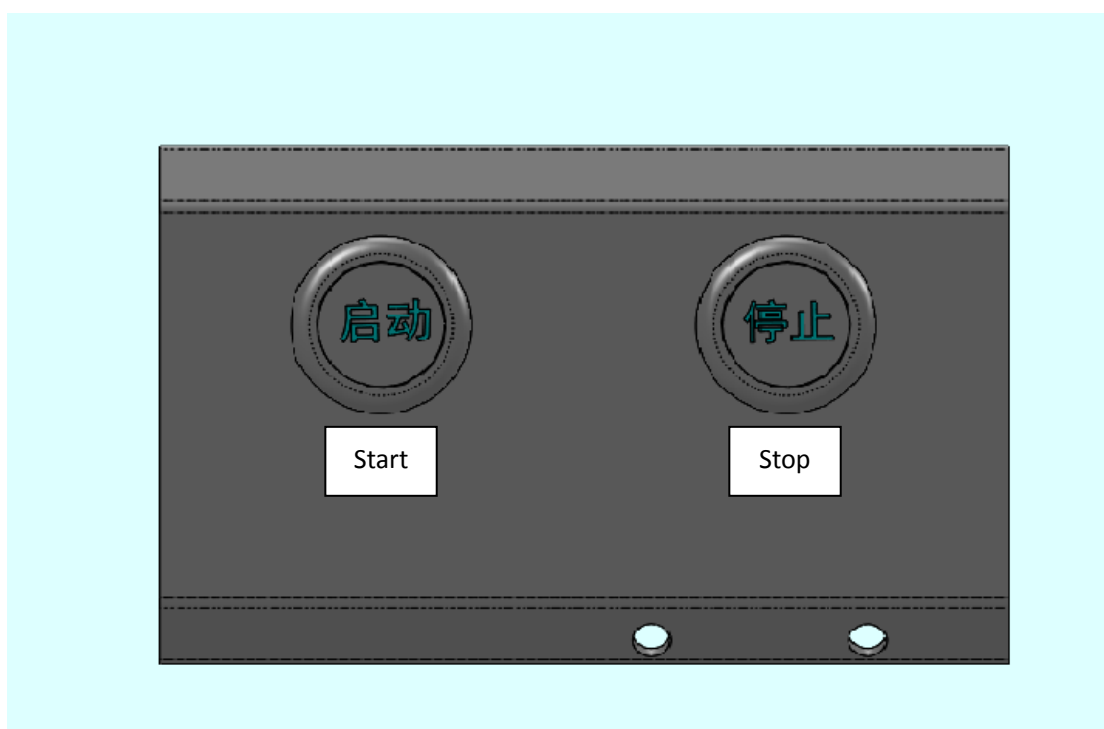
 DANGER	
	Wait at east 5 minutes after turning off the power switch and disconnect the power card from the wall outlet before opening the face plate of the control box. Touching areas where high voltages are present can result in severe injury.
 Warning	
Environmental requirements	
	Using machine avoid the source of strong electrical interference (eg.High frequency welding machine). Strong electric interference source may affect the normal operation of sewing machine.
	The fluctuation of the power supply voltage should be used within +-20% of the rated voltage. Voltage fluctuations will affect the normal operation of the sewing machine, need to be equipped with voltage regulator.
	The environment temperature should be in the range of 5 °C ~ 35 °C. Low or high temperature will affect the normal operation of the sewing machine.
	Relative humidity should be in the range of 45% ~ 85%, and the equipment will not form condensation within the environment of use. Dry, humidity or condensation environment will influence the correct operation of the machine.
	Compressed air supplies should be greater than the machine required total gas consumption. Compressed air supplies deficiency can lead the action of sewing machine to not normal.

	In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.
Installation	
	Machine installation should only be carried out by a qualified technician.
	Don't connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.
	Please use both hands to operate the machine head's up and down. Do not force pressure machine. It can cause injury or damage to the machine if losing balance .
	Must be grounded. If connecting the ground wire is not strong, it can cause electric shock or misoperation.
	All cables should be fixed to the outside at least 25 mm far from the moving parts. In addition, don't bend too much or plastic screw too tight. It will cause the risk of fire or get an electric shock.
	Please install safety cover in the head.
Sewing	
	This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.
	This sewing machine should not be used by any applications other than sewing.
	Be sure to wear protective goggles when using the machine. If goggles are not worn, there the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.
	Turn off the power switch at the following times. The machine may operate if the treadle is depressed by mistake, which could result in injury. 1. When threading the needle . 2. When replacing the bobble and needle. 3. When not using the machine and when leaving the machine
	Do not touch any of moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.
	If an error occurs in machine, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest HIKARI dealer or a qualified technician.
	If the machine develops a problem, contact your nearest HIKARI dealer or a qualified technician.
Maintenance and inspection	
	Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.
	Ask your HIKARI dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.
	Turn off the power switch and disconnect the power cord from the wall outlet at following times, otherwise the machine may operate if the treadle is depressed by mistake, which could result in injury. 1. When carrying out inspection, adjustment and maintenance. 2. When replacing consumable parts such as the rotary hook.
	Before the inspection, adjustment and repair the pneumatic, please disconnect the air supply, be sure pressure gauge pointer down to "0".

	If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.
	Unauthorized modify sewing machine caused damage is out off the scope of the warranty.

Start and stop button

Start sewing, please press the "start" button. After sewing began, if you want to pause to look over the stitch, press the "start" button or "stop" button to temporarily stop; Press the "start" button to continue sewing. press "stop" button to stop sewing. If break line stop sewing process, you can press the "start" button to continue after threading the line.



If there is an emergency or abnormal case, please press the "start" button or "stop" button, stop sewing machine, and then press the "stop" button let the machine push out the template.

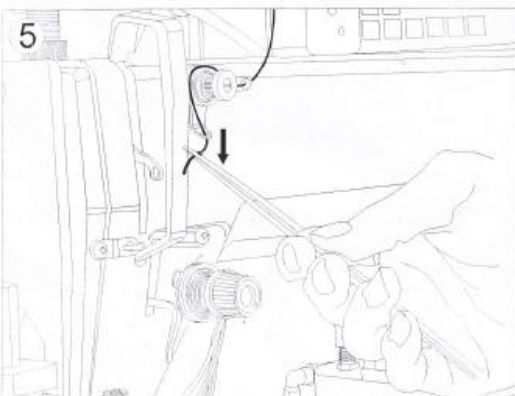
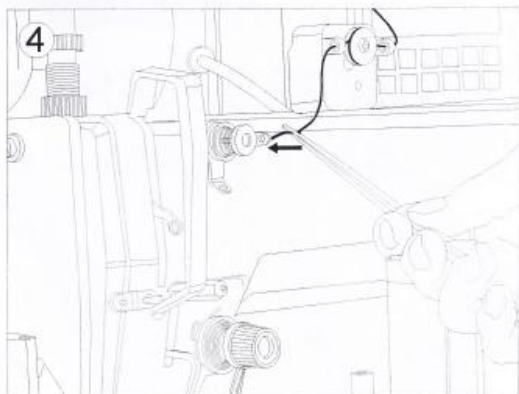
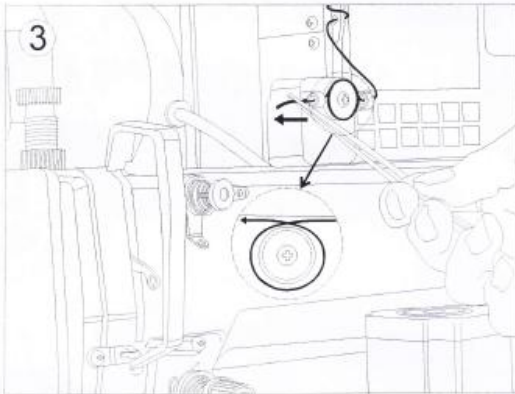
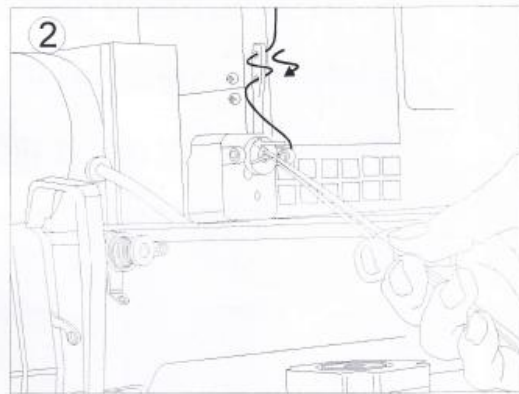
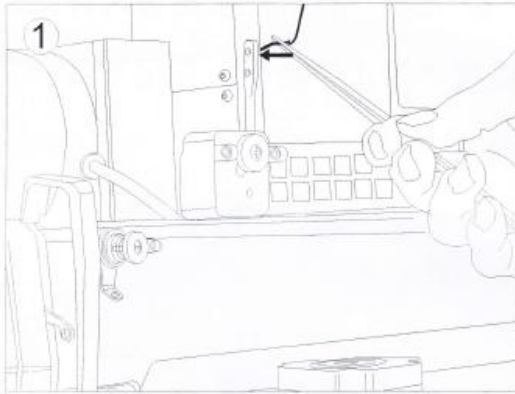
PARTS BOOK & INSTRUCTION MANUAL BOOK

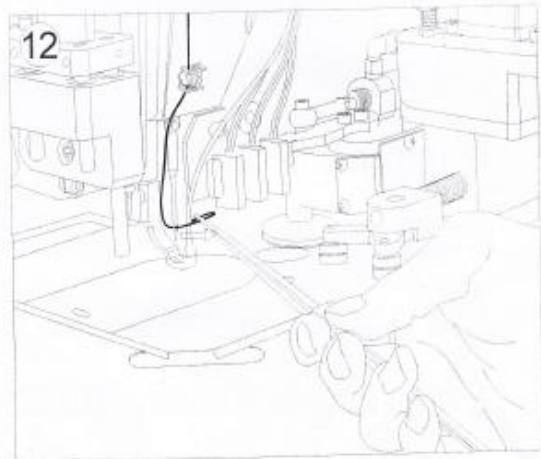
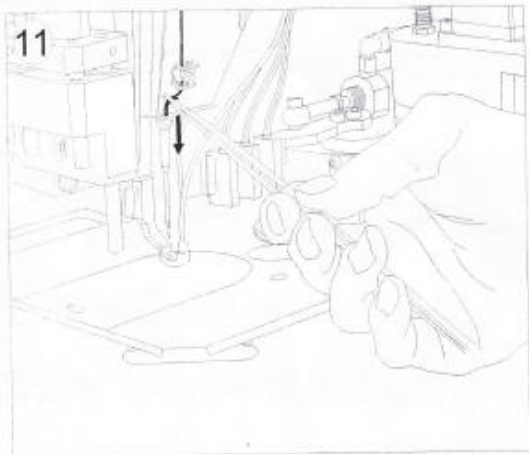
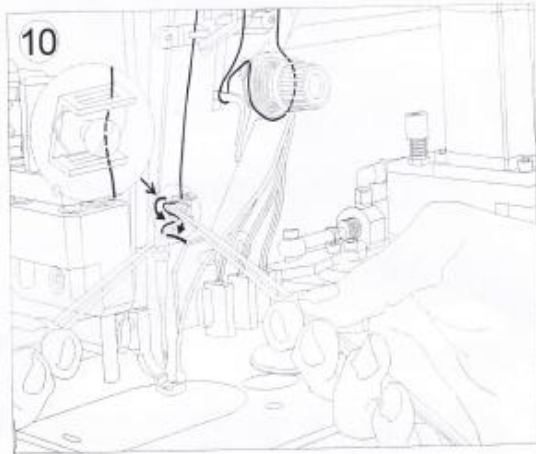
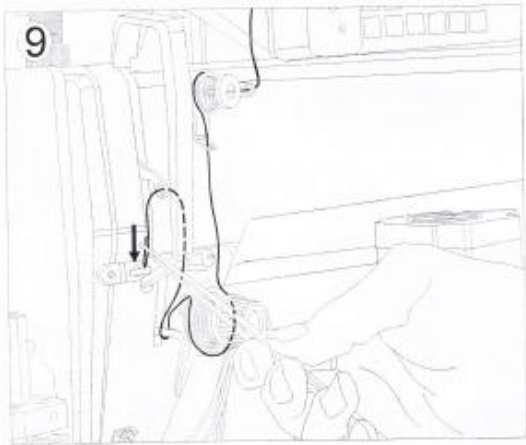
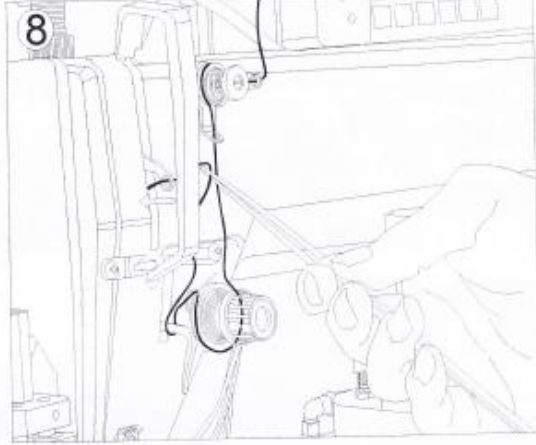
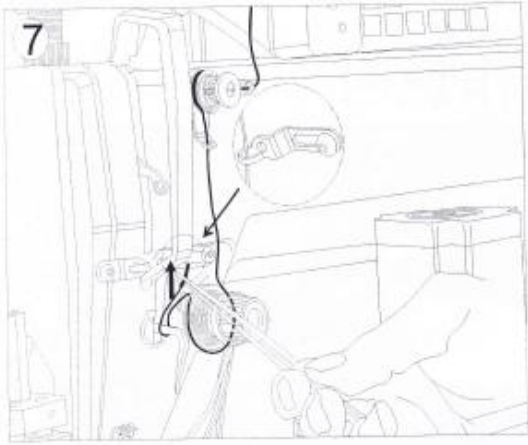
specifications

9. Speed: 3000 rpm
10. Stitch length: 0.5-5.0mm
11. Needle plate size: 11mm
12. Needle: DP*17 90/14
13. Voltage: AC220V 50HZ
14. Air pressure: 0.4-0.6MPa
15. Weight: 100KG
16. Overall dimensions: 1200×760×1200

Threading

Please thread as shown in picture





Screen instructions



1. The serial number: The parameter value represents the type of the save template. In order to facilitate the next operation, press the left digital button display the digital keyboard, after putting in the keyboard, press ENT key to save, then return back to the main menu, the value should be in the range of 1-49, 50 is the scanning template on the bar code automatically generated parameter, each time change the template should be scanned the bar code.
2. The quantity of production: Showing how many pieces finished, press the number key can be reset.
3. Break line monitoring: When the lights turns green, it indicates that the sensor is abnormal, otherwise the sensor has not been adjusted or has been broken.
4. The sewing speed: Indicate the per minute speed of the sewing machine

head, press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 400-3000.

5. Soft start speed: Indicate per minute speed at the beginning of the sewing ,press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 400-1500. Note: Soft starting speed effective must be when the number of soft starting needles is not zero.

6. Reverse sewing speed: Indicate per minute speed at the beginning of reverse sewing ,press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 400-1500. Note: Reverse sewing speed effective must be when the number of Reverse sewing needles is not zero.

7. The rounded speed: Indicate per minute speed when sewing the rounded, press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 400-1650. Note: the rounded speed must be rounded in the screen setting graphics.

8. Right angle speed: Indicate per minute speed when sewing right angle ,press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 1-200. Note: the right Angle speed must be effectively set has a rectangular shapes on the screen.

9. Straight stitch length: Indicate the straight line when sewing stitch length, press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 0.1-0.1 mm.

10. The rounded stitch length: Indicate the stitch length when sewing rounded corners ,press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range

should be in 0.1-0.1 mm.

11. Soft pin number: Indicate that using soft start speed first, after the stitches you set, back to the sewing speed. Press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 0 to 10.

12. Front reverse stitches number: Indicate the stitch number in front of start sewing, press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 0 to 10.

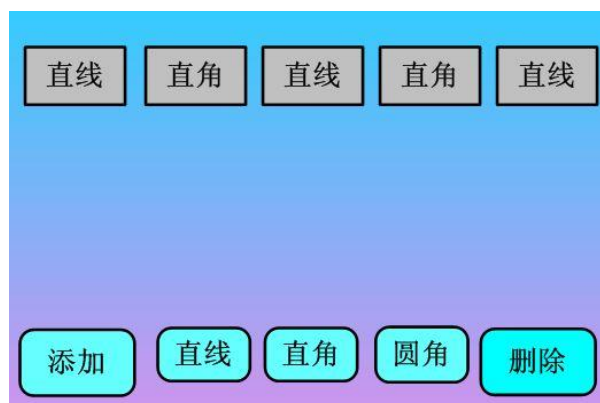
13. Back reverse stitches number: Indicate the stitch number after stop sewing, press the left digital button display the input digital keyboard , after input, press ENT to save and return back to the main menu, input value range should be in 0 to 10 .

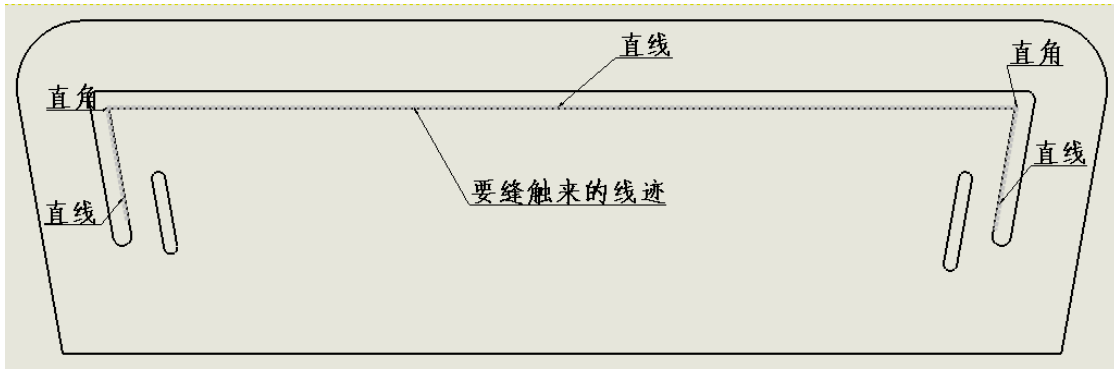
14. Detection of disconnection: open Indicate that after the break machine will automatically stop, press the start key after wear good line
Continue to sewing, off Indicate that after the break machine will not stop, till the end.

15. Cutting knife switch: open Indicate that cutting cloth until the sewing stop, shut Indicate that sewing machine have not cut cloth in the sewing time.

16. graphic edit: According to the template to edit out the corresponding shape as shown in figure 1 and figure 2

①: Edit the collar template





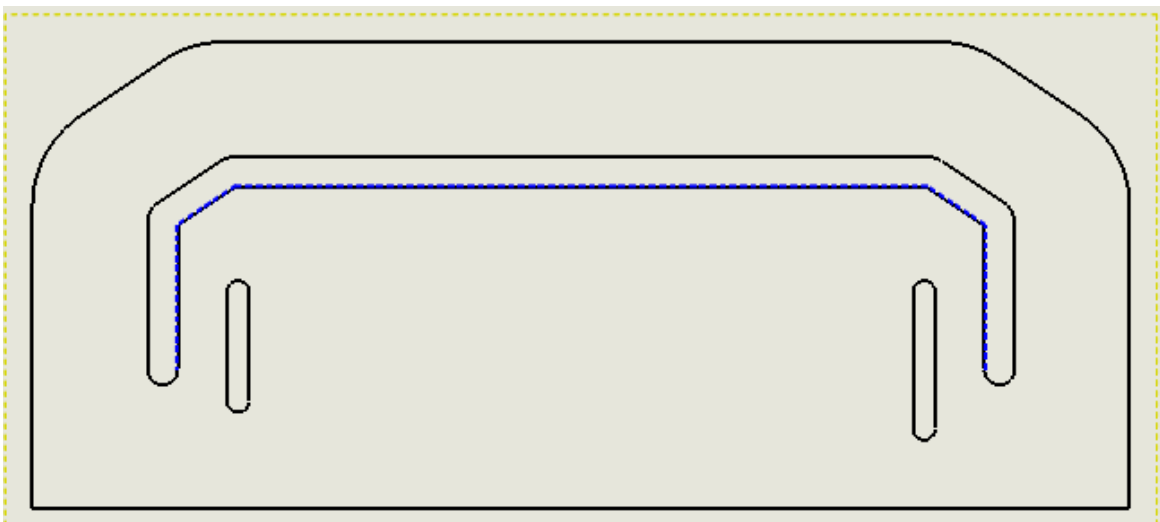
2

Edit operation method: Click the line key figure 1 first, The straight line key will always flash at the moment, To the right, Press the right key, The rectangular button will flash at the moment, Then click the add button, And so on: **The overall edit mean Angle must be straight in front of beginning The back of the Angle also must want to have a straight line to end**

②: Four square cuffs template editor: Figure 3 corresponding figure 4, With the above editing methods

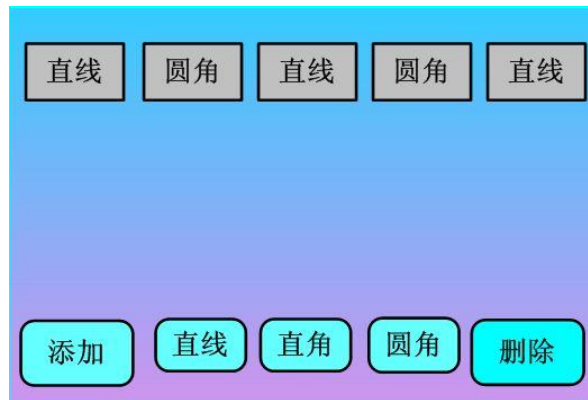


3

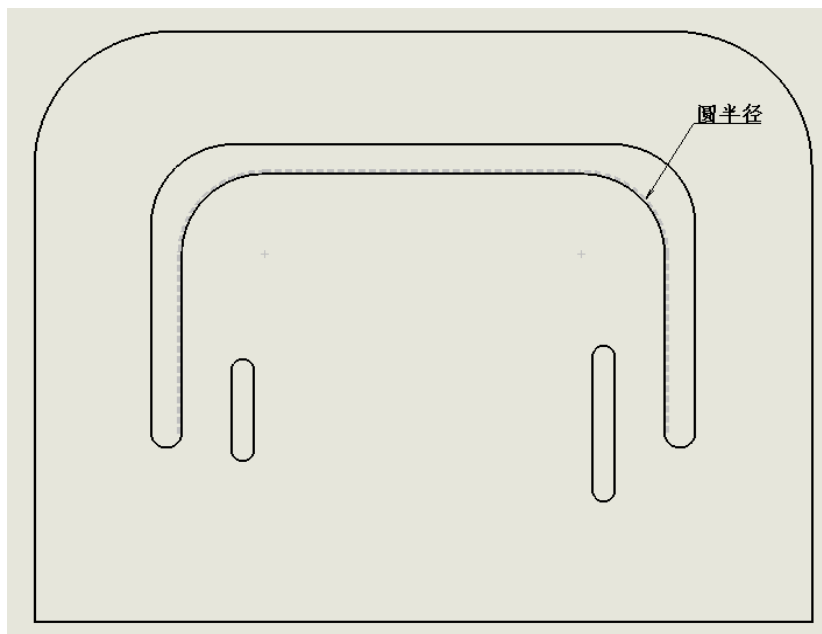


4

③: Edit the rounded cuff template: Figure 5 corresponding figure 6, With the above editing methods



5

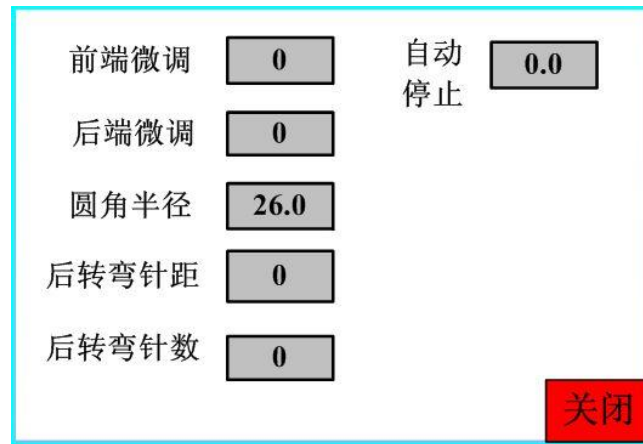


6

Attention: Do the rounded template must be set up in each round radius of the circle, Otherwise, sewing stitch and the rounded out of stitch length is different, Set as follows:

17. Click rounded corners on the figure 5 key jump out another picture, As shown in figure 7: radius, according to the Numbers on the left button will popup can input digital keyboard, Enter your template now what is the

radius(The input value of 0-100 - mm), Press ENT button to save after input, And return to figure 7, then shut down button and the main page.



The screenshot shows a control panel with the following elements:

前端微调	<input type="text" value="0"/>	自动	<input type="text" value="0.0"/>
后端微调	<input type="text" value="0"/>	停止	
圆角半径	<input type="text" value="26.0"/>		
后转弯针距	<input type="text" value="0"/>		
后转弯针数	<input type="text" value="0"/>		

关闭

7

18. Illustration 7

①:Front-end gently adjustment: special situation while machine sewing to front-end angle, and needle distance is different with needle distance in line-end and rounded end do the adjustment, front-end adjustment value increase when needle distance is more than straight line, otherwise decrease, the method; the number keyboard to enter will show up while press left number button, then press “ENT” key to save your information and back to illustration 7 interface, -3 to 10 needles is able to enter.

②:Back-end gently adjustment: special situation while machine sewing to back-end angle, and needle distance is different with needle distance in line-end and rounded end do the adjustment, front-end adjustment value increase when needle distance is more than straight line, otherwise decrease, the method; the number keyboard to enter will show up while press left number button, then press “ENT” key to save your information and back to illustration 7 interface, 0 to 10 needles is able to enter.

③:Fillet radius: mentioned before, parameter is importance while doing circular angle, must enter your model fillet radius size that you are using, otherwise needle distance will be different, the number keyboard will show up

while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to illustration 7 interface. Applicable value 0-100.0mm.

Attention: if the value less than 15mm,circular angle speed must adjust to less than 500rpm, otherwise stitch has different length.

④:Back right angle turn stitch length: when after turn right angle become to straight line sewing and the first several stitch distance will be tight, crease the value to lengthen that several tight stitch; the number keyboard will show up while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to illustration 7 interface. Applicable value 0-3.0mm.

Attention: valid only back right angle turn stitch number is not zero.

⑤:Back right angle turn stitch number: when doing special right angle model, must set stitch number while use back right angle turn stitch length, otherwise back right angle turn stitch length is invalid; the number keyboard will show up while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to illustration 7 interface. Applicable value 0-10 stitch.

⑥:Automatic stop: when doing special model can not automatic stop, so that you can use this function, enter value is the sewing length from line front-end to finish-end, then you can enter this length value; the number keyboard will show up while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to illustration 7 interface. Applicable value 0-100.0mm.

19.Initiate button: press the key to sewing after model put in.

20.Parameter setting: another interface will show up while click this button, close picture 8 interface and press parameter setting to back, as picture 8.




8

④ : Start sewing back: Optical sensor sensing the cloth when sewing start from the position, can exactly finish cloth cutting, the number keyboard will show up while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to interface. Applicable value -20 to 20 stitch.

② : Finishing stitch number: How many stitch to stop sewing while no cloth is sensed by end sewing optical sensor, generally, the setting according to straight line stitch length, if the thread exceed value than cloth diminish, the no sewed cloth value increase; the number keyboard will show up while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to interface. Applicable value 0-30 stitches.

③.Connect thread stitch number while bread thread: when finish threading after thread broken, press start button then machine will automatic back to your setting stitch number and sewing again, so that is for connecting thread function using purpose, the number keyboard will show up while press left number button, enter the model fillet radius size that you are using now, then press “ENT” key to save and back to interface. Applicable value 0-30 stitches.

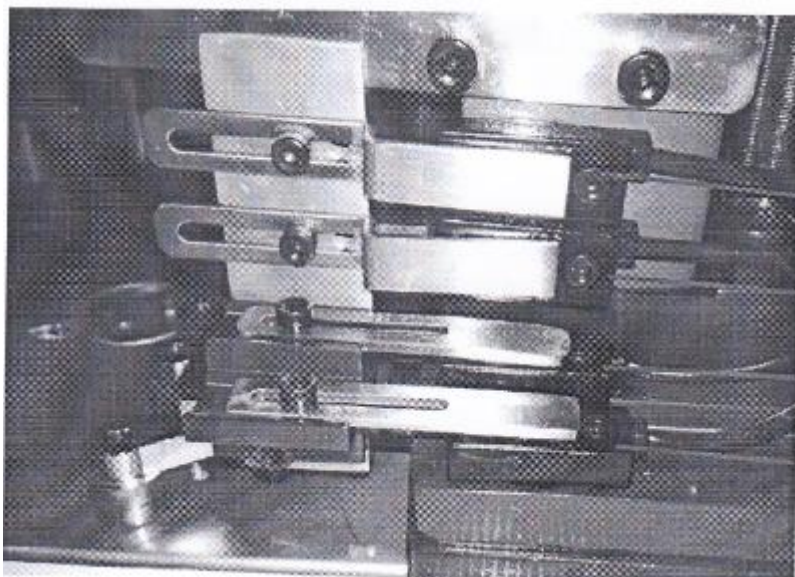
21. The Hardware checking inter face will show up when click this key  , so that you can test all electronic component in this interface, and convenient repair, As illustration 9:



9

(16) :Encoder testing: turn machine head pulley, the value on the left side of encoder will change, the lamp beside Z change to green or gray, means A,B,Z is ok, otherwise encoder break or threading failed, or controller broken.

Attention: A-X0, B-X1, Z-X2 means encoder's A,B,Z signal line connect to controller's XO,X1,X2 junction, and corresponding indicate lamp changing on controller.



Circular angle start Switch
 Circular angle finish switch
 Right angle start switch
 Right angle finish switch

10

(17) Right angle start switch testing: Turn off air pressure, use the metal article to touch the induction area (as illustration 10) of right angle start switch, at moment, the indicate lamp beside the switch will bright, and the lamp on corresponding screen change to green, take away metal article the

light out, and the lamp on corresponding screen change to gray, means approach switch is ok, otherwise the switch broken or threading failed, or controller broken.

Attention: X3 means the signal thread of right angle start switch connect to X3 junction of controller, also the corresponding light on controller changing.

(18) : Right angle finish switch testing: as illustration 10, testing method same with

Attention: X4 means the signal thread of right angle finish switch connect to X4 junction of controller, also the corresponding light on controller changing.

(19) :Circular angle start switch testing: as illustration 10, testing method same with ②;

Attention: X10 means the signal thread of connect to X10 junction of controller, also the corresponding light on controller changing.

(20) :Circular angle finish switch testing: as illustration 10, testing method same with ②;

Attention: X11 means the signal thread of Circular angle finish switch connect to X11 junction of controller, also the corresponding light on controller changing.



End sewing optical fiber

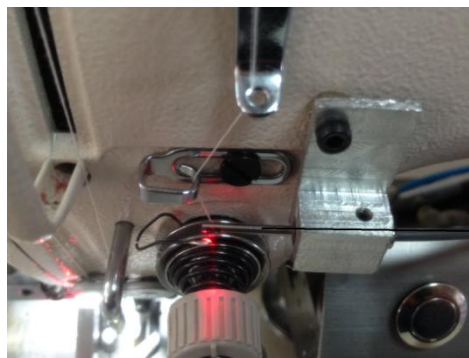
Star sewing optical fiber

11



起缝光纤传感器X5
结缝光纤传感器X6
断线光纤传感器X9

12



断线检测光纤

13

21 : Start sewing optical testing: As illustration 11,12, the same testing method with ②;

Attention: X5 means the signal thread of start sewing optical switch connect to X5 junction of controller, also the corresponding light on controller changing.

22 : End sewing optical testing: As illustration 11,12, the same testing method with ②;

Attention: X6 means the signal thread of end sewing optical sensor connect to the X6 junction of controller, also the corresponding light on controller changing.

23 : Thread break check optical testing: as illustration 12,13,the same testing method with ②;

Attention: X9 means the signal thread of thread break optical sensor connect to the X9 junction of controller, also the corresponding light on controller changing.



14

24 :Start button testing: press start button by finger, as illustration 14, the lamp on corresponding change to green, loosen start button the lamp change to gray, means button is ok, otherwise button broken or threading failed or controller broken.

Attention: X7 means the signal thread of start button connect to X7 junction of controller, also the corresponding light on controller changing.

25 : Stop button testing: As illustration 14, the same testing method with ⑨;

Attention: X8 means the signal thread of stop button connect to X8 junction of controller, also the corresponding light on controller changing.

(11): Output testing: It's easy, click the buttons below output as illustration 9, then the corresponding electromagnetic valve will operate, and the cylinder will do the same action, otherwise electromagnetic broken or threading failed, no air pressure(normally 5-6 pcs),controller broken.

Attention: Connect signal thread to controller's junction of Y ""(see what show on screen), also corresponding indicate lamp changing on controller.

(12): Roller stepper motor testing: keeping press left or right direction button



as shown on illustration, if roller turn to different direction means ok, otherwise, stepper motor diver broken or connection failed, controller broken.

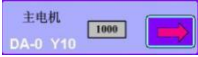
Attention: The method of stepper motor connection and driver connection is black thread connect A+, brown thread connect A-, purple thread connect B+, blue thread connect B-, if motor reversed, change A+ thread to A- thread.


(13):Side stepper motor testing: Keeping press the left or right button




as shown illustration 9, if side wheel turn to different direction means ok, otherwise, stepper motor driver broken or connection failed, controller broken.

Attention: The method of stepper motor connection and driver connection is black thread connect A+, brown thread connect A-, purple thread connect B+, blue thread connect B-, if motor reversed, change A+ thread to A- thread.

(14):Main servo motor testing, keeping press left or right direction button  as shown illustration 9, if machine operate means ok, otherwise servo motor controller broken or connection failed, no value(400-3000) at the numerical box on the left of right direction button, main controller broken.

(15):Cutter servo motor testing, keeping press the right direction button  as shown illustration 9, if cutter servo motor operate by normal speed means ok, otherwise controller of cutter servo motor broken or connection failed, main controller broken.

21.Press threading button  at the stop state, press down presser foot for convenient threading, close and press the button again.

22. The function button is for rough adjust response time of approach switch sensor and approach switch while turning corner, when click the adjustment start button another picture will show up as shown illustration 15.



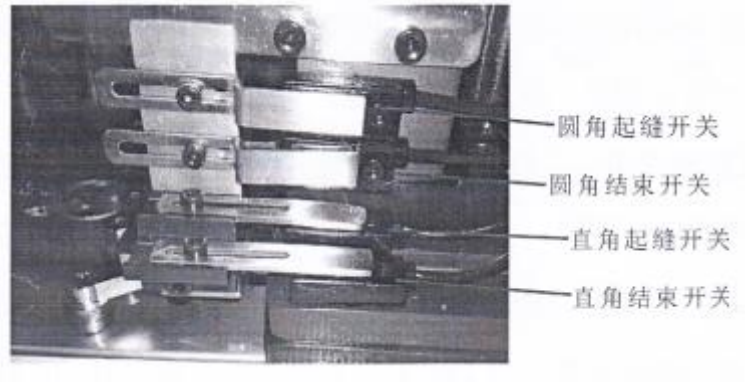
15

Insert fabric into model plate and put into needle plate groove, press the start button, and keeping press the start button, then machine will slowly start

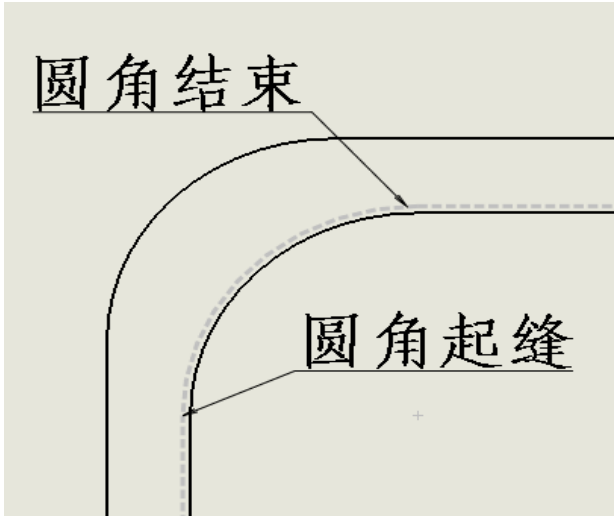


perate, you can adjust the position of start approach switch sensor at the turning corner, can adjust the position of finish approach switch sensor at the end of turning corner, press finish button after adjustment and then press to back to main interface.

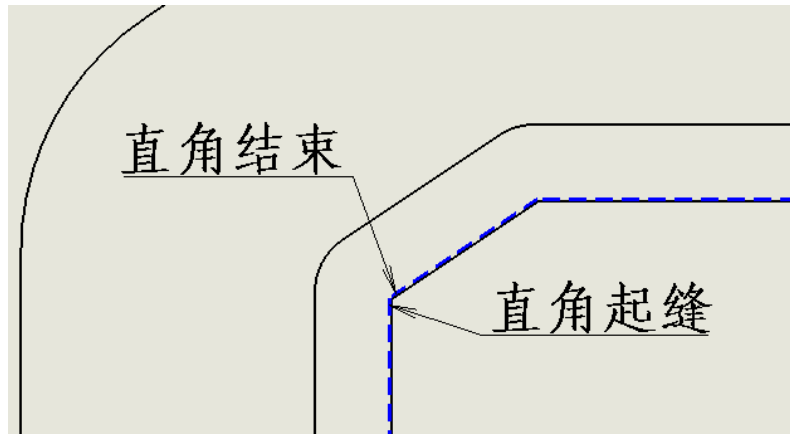
23. The article 23 explain rough adjustment method, but following we teach fine adjustment method, as illustration 16:



16



20



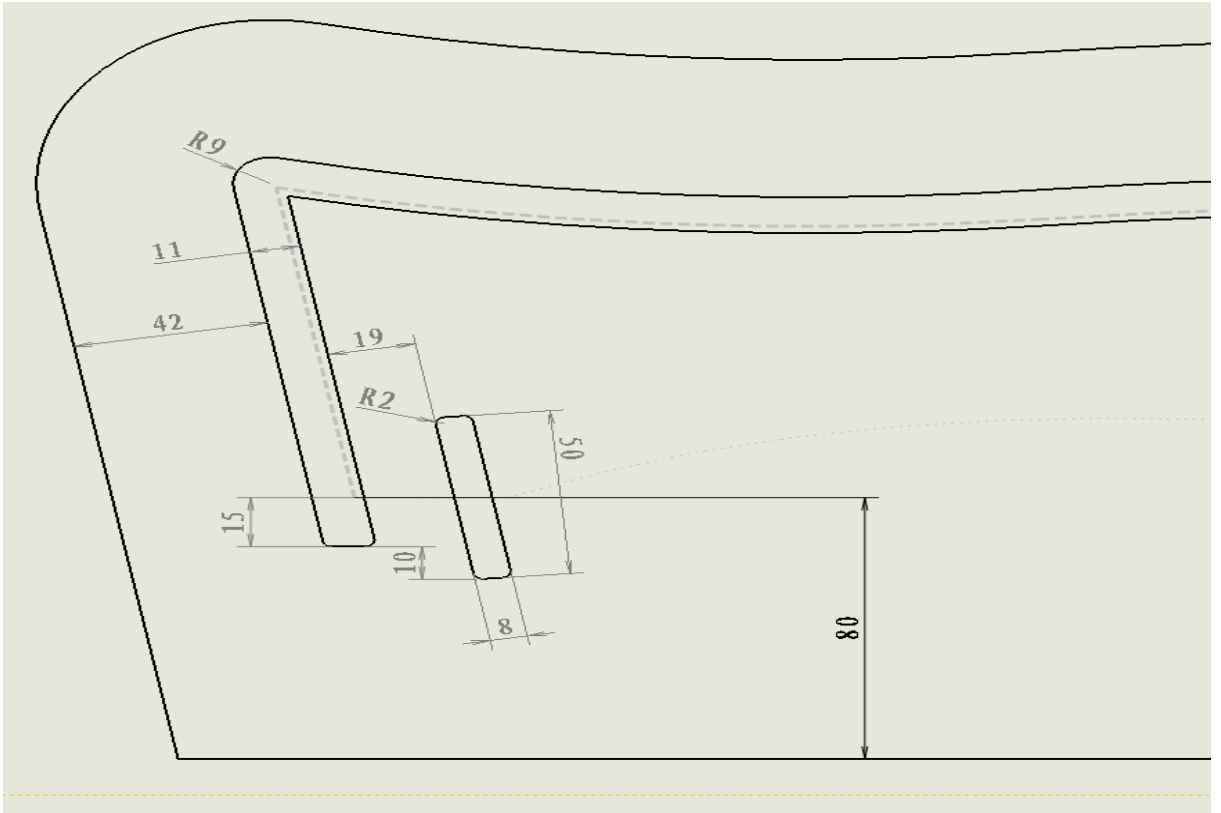
21

①:circular bead pattern adjustment: if the stitch length of the circular bead start sewing position become longer ,the sensor of start switch move to right , if not , than move to the opposite direction. If the stitch length of the end position become longer ,the off switch move to right , if not , than move to left side .

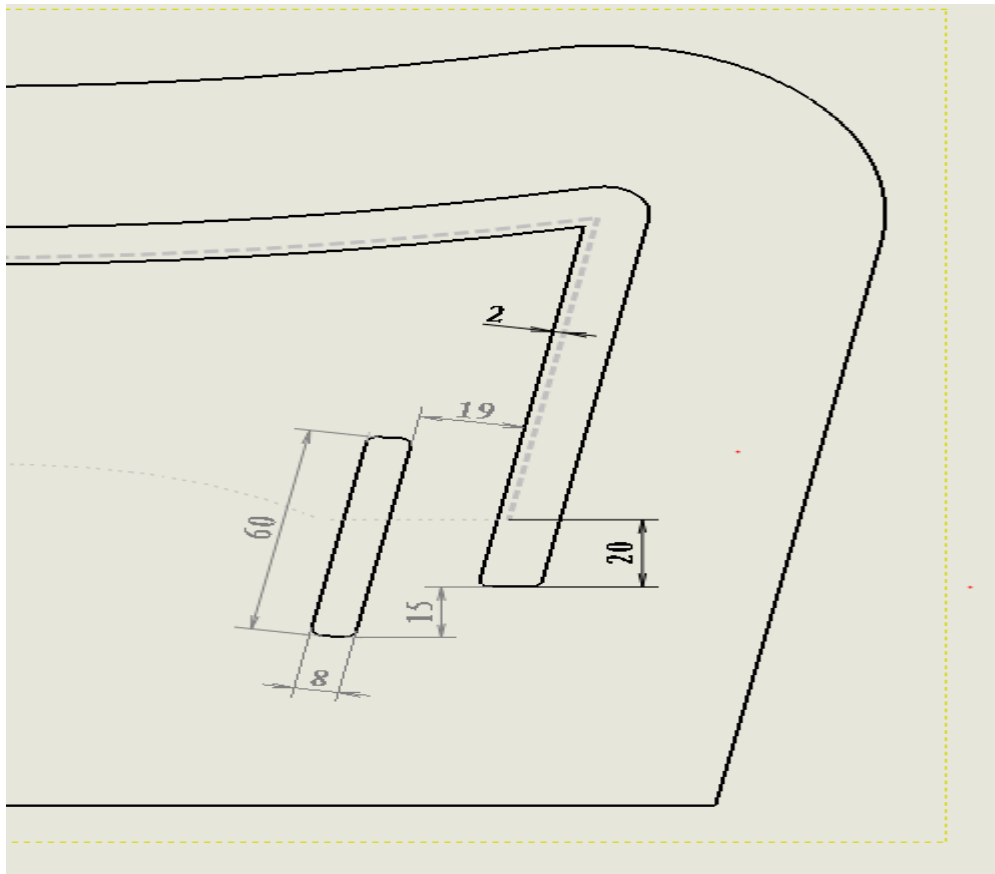
②:Right angle pattern adjustment: if the stitch length of the right angle sewing start position become longer or stop while it not arrive at right angle ,the sensor plate move to right , if not ,turn left ; if the stitch length of the right angle end position become longer ,the sensor plate move to right , if not , turn left side . Tips: if the repeat stiches too much on the right angle, firstly make the stitch length longer then check the sensor is turn more left or right side .

25.How to make patterns size: imaginary line show the stitch line , use the 1.5mm plastic plate .the methods of making right angle and circular bead patterns are the same.

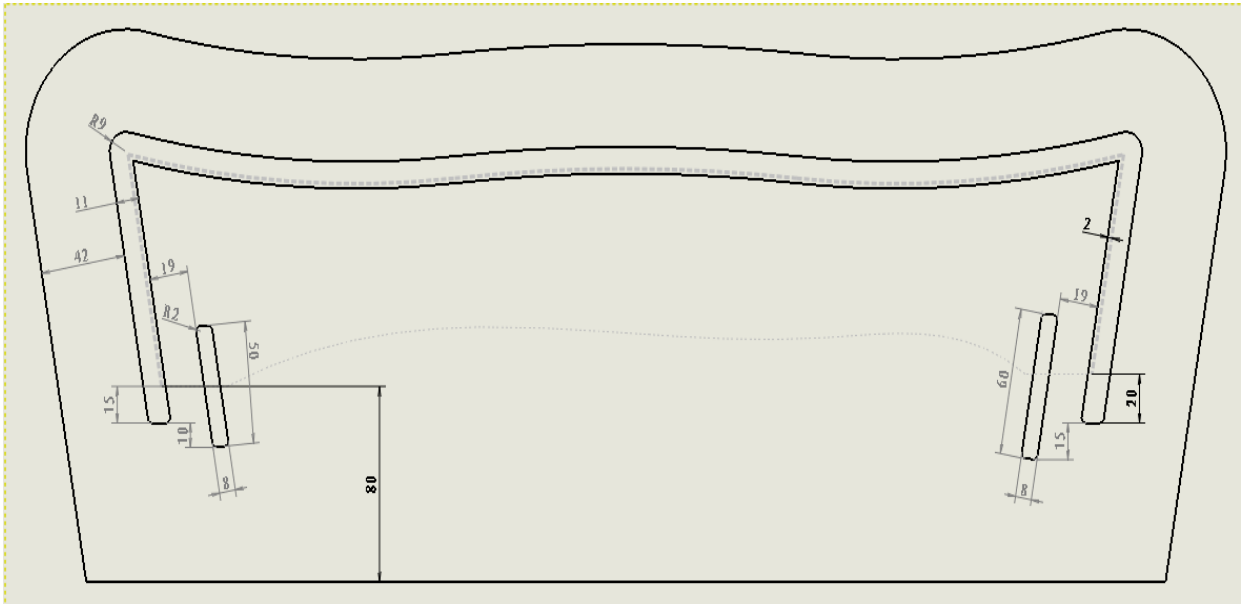
③ :How to make base plate pattern



Start part

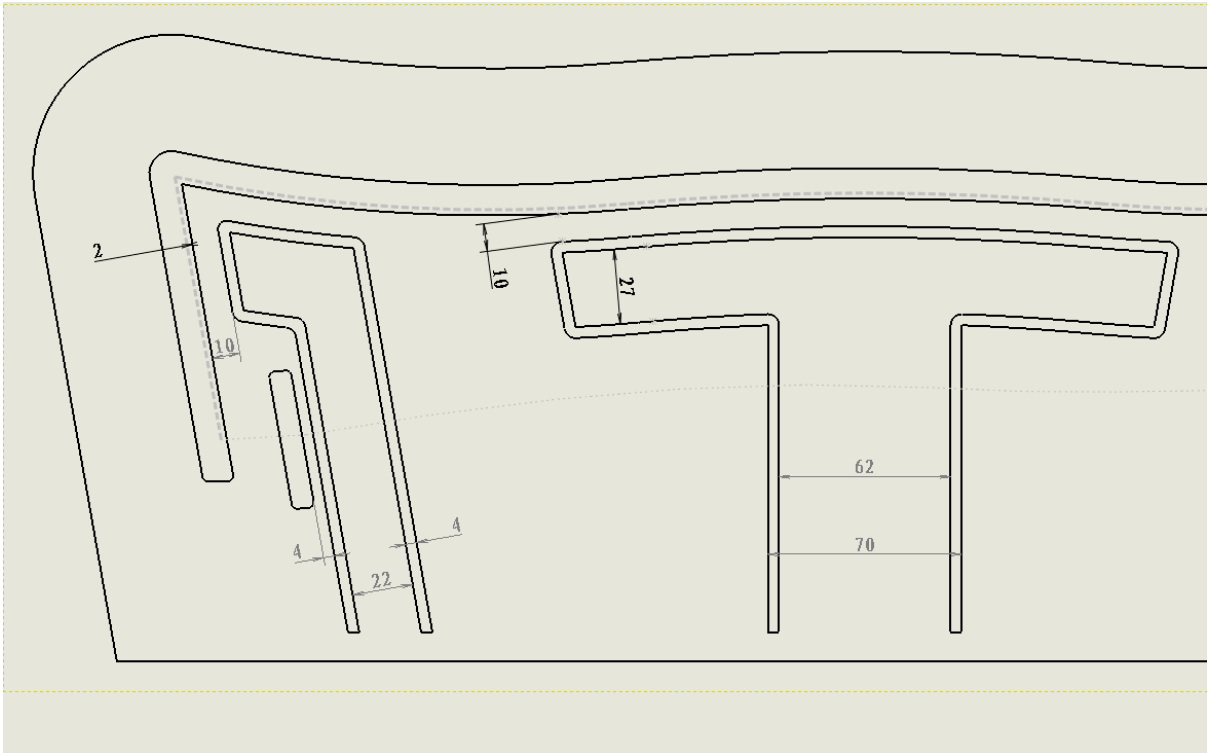


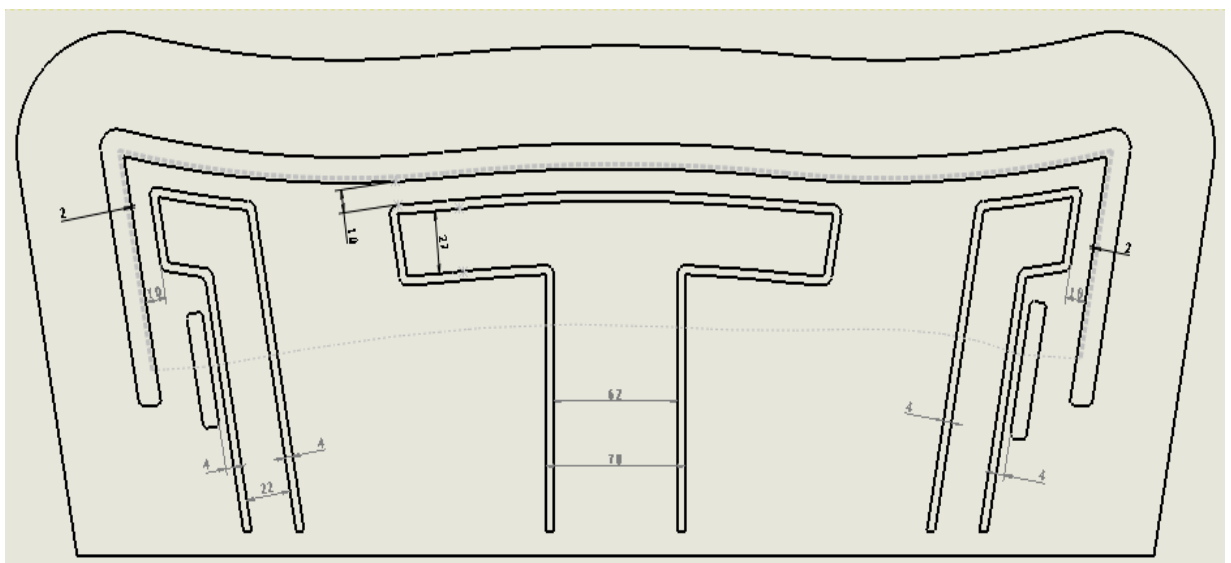
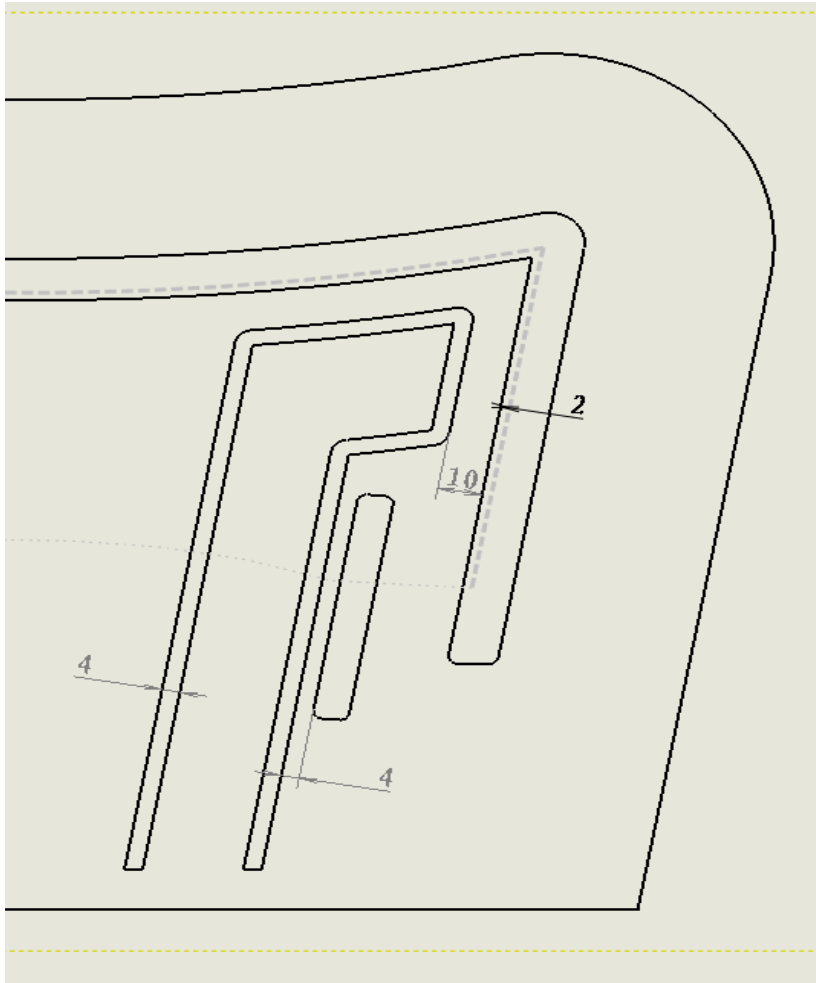
end part



base plate overall shape draft

④ pper pattern methods: the other size is the same as base plate ,
difference as below .





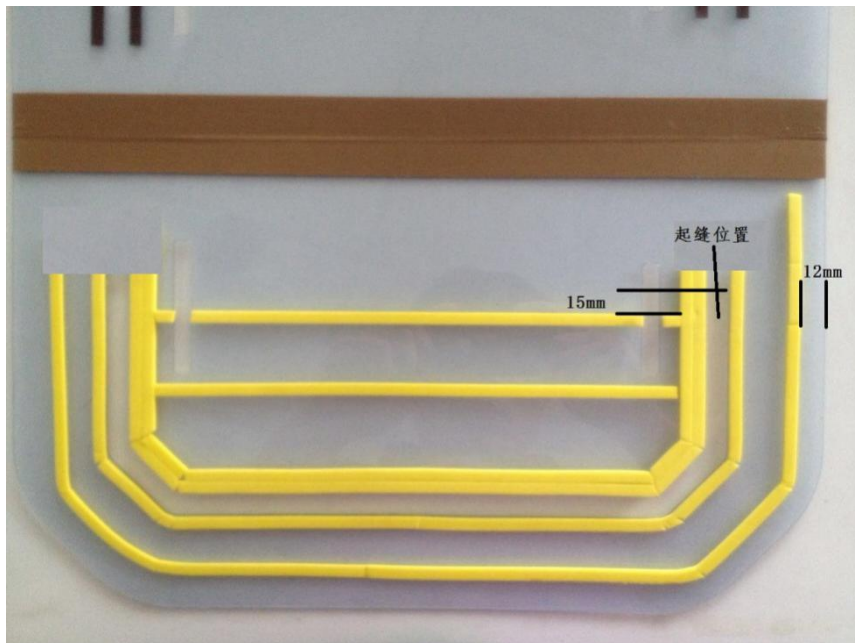
upper overall draft

paste pelagic zone

Unit pattern 1.5mm ,sponge 1.2mm



Please paste the sandpaper on the upper pattern according to the draft

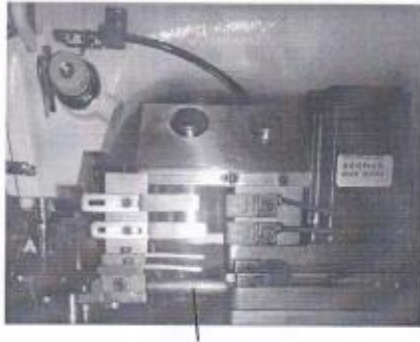


Stick the sponge belt on the bottom according to the draft ,and cut-over from the round part for nature circle

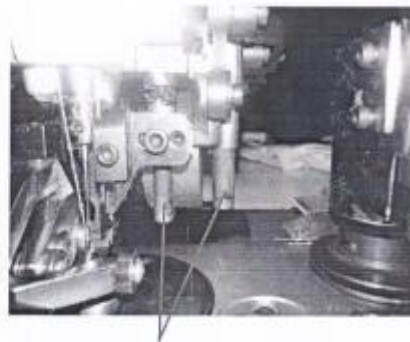
Repair and maintainance

In order to better use the machine and increase the efficiency ,should maintain your equipment ,keep the machine in best situation . make sure the fittings are function and tidy to operate safety and ideal .please add machine oil and clean it according to below items .

4. :Please add oil for below fittings before operate everyday (it's better to use the car engine oil)



Turn off the pressure , add oil with a cotton cloth



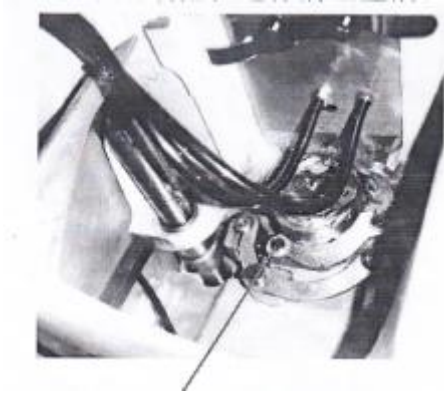
use a cotton cloth with oil wipe the two knife axle

5. Keep the oil is enough in the lockstitch machine oil tank (sewing machine oil)



Add sewing machine oil to this part

6. :Please use the pneumatic gun clean before operate .



Use the pneumatic gun clean , otherwise it will be casting