

JQ-3010 Microcomputer Fully Automatic Trademark Cutter (Hot & Cold)

Operation Manual

JQ-3010 微电脑全自动商标切机 使用说明书

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Content

I. Operating Manual of Trademark Cutter3-4
II. Parameter Setting and Operating Methods5-6
III. Adjust the Method of Cutting for Printed Trademark
Belt.6-8
IV. Method of Usual Troubleshooting9-12
V. Part List of Cutter13



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Main Technical Variables:

Cutting Length: 1-70cm

Cutting Width: 1-10 cm /1-12cm

Cutting Speed: 300pcs/min

Power: 220V/50/60HZ (Single Phase) 1.5KW

Weight: 50KG

Dimension: 60<l>*44<w>*44<h>cm

Packing Dimension: 96*58*75CM

Gross weight: 58KG





I. Operating Manual of Trademark Cutter

- Length of Trademark(Length) Precut the length of the trademark, and make adjustment according to its actual length.
- 2. **Speed of Operation (Drives Speed)**: the operation speed is divided into 5 grades, of which Grade 5 is the fastest and Grade 1 is the slowest.
- 3. **Speed of Cutting Blade (Reamers Speed)**: the speed of the cutting blade is divided into 5 grades, of which Grade 5 is the fastest, and Grade 1 is the slowest.
- 4. **Position Augmenting (Make up)**: a length of +3mm can be obtained.
- 5. **Length of Waste Label (Blank)**: The length of waste label or (blank part label) in the trademark belt, only functions at F4.
- 6. **Period of Trademark (Period)**: This function operates when there is blank part label in the trademark belt, the calculation of which is to count the number of trademarks



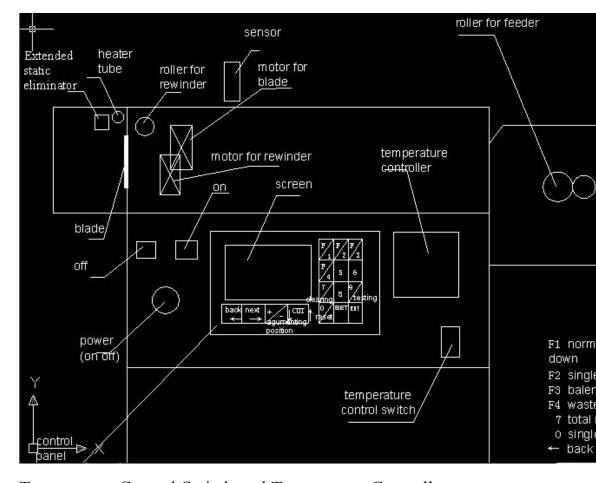
between two blanks. It functions only at F4.

- 7. **Position of Waste Label (Reamer-Blank)**: In case a blank belt of trademarks occurs, the position between the cutting blades should be set according to the number of the blank trademarks when cutting for the first time or there is a color error. It functions only at F4.
- 8. **Position of Cutting Blade (Reamer-Sensor)**: The number of trademarks between the cutting blade and the sensor.
- 9. **Background Colors of Trademark (Grounding Setup)**::
 Sensor Distinguish Dark or Light, used together with sensor indicator. When the sensor casts on the color marks area, please set 0, once the light is off; please set 1, once the light is on.
- of trademarks (**Total**): This is for the setting of trademark quantities in total. When automatic cutting starts, the computer will count the label quantity automatically and the machine will stop when the preset number is reached. On display will be the trademark



number in a batch and the finished trademark number +1.

11. **Accuracy**: The accuracy between the length of the finished trademark and the preset trademark length. (reserved functional extension)



Temperature Control Switch and Temperature Controller use for HOT CUTTING FUNCTION and the blade should be change hot cutting blade

The setting of operation: First, open power (on off), and the



screen appears:

Function 1: Total (Amount of Trademarks)

Count (The quantity of have been cut)

Group (Total Produce)

First Page

Length (Length of Trademark)

Total (Amount of Trademarks)

Drives Speed (Speed of Operation)

Blank (Length of Waste marks)

Second Page

Reamers Speed (Speed of Cutting Blade), 1 is slowest, 5 is

fastest

Back off (Function of hot cutting) "on or off"

Make up (Position of Augments) +/-

Period (Period of Trademarks) work on Function 4

Third Page

Reamer-Blank (Position of Waste Mark)

Reamer-Sensor (Position of Cutting Blade)



Grounding Setup (Base Color of Trademark) 1.0

English 中文

Function (2.3.4) has the same page.

II. Parameter Setting and Operating Methods

- Enter "Cutting function 1" frame, and press "↑" and
 "↓" keys will change the cutting function. (1, 2, 3, 4)
- 2. Cutting function 1: cutting trademark belt with no waste mark (or blank part), automatic to tracking coloring
- 3. Cutting function 2: cutting trademark belt with no waste mark (or blank part), automatic to tracking coloring (guide cutting)
- 4. Cutting function 3: Cutting at a certain length, without using the sensor.
- 5. Cutting function 4: cutting trademark belt with waste mark (or blank part), automatic to tracking coloring.



III. Adjust the Method of Cutting for Printed Trademark Belt

Press "←" and "→" keys, and the trademark belt will be moved. Press "↓" key to try the cutting. Press SET to find the parameter to be modified. Press the corresponding number key, and the data on this figure will be modified. For example, to modify the parameter of "position of augmenting", press "↓" key to change between "+" and "—", and press "←" and "→" keys to select the parameter to be modified. When the modification is finished, press ENTER to save and exit.

Press "0" to enter testing frame, and check input, output and controller keys. Move the no mark area (blank area) and the color area on the trademark belt under the light emitted by the sensor and see if there is change of color in figure "1" of the number "12345678" displayed. If there is no color change, it indicates that the sensor cannot identify the color. Before adjustment, set the "position of augmenting" to zero, cutting use function 1, and cut continuous trademark belt



with color guide block.

First, press the "←" and "→" keys of the controller to move the trademark belt, and calibrate the position to be cut with the edge of cutting blade. Then, adjust the position of the sensor, let it be on the blank part of the trademark belt, and the sensor cast on the mark on the trademark belt. Now, adjust the controlling knob of the blank length, and let the indicator be off or on. Then, pull the trademark belt, and there should be on and off change of the indicator. Press " ↓ " key to cut off the surplus part. Now, press "on" and try a few cuttings. Press "off" to see the position of the trademark position. If the cutting position is forward, press SET to enter the parameter modification frame, then press the "←" and "→" keys to select the parameter of "position of augmenting", and set the value "-". If the figure approaches the length of the surplus cutting, try a few more cuttings and see the cutting position, and set the value of compensation position accordingly.

Cutting function 4 is used for cutting trademark belt



with waste mark (blank) length, whose adjustment method is the same with cutting function 1. Before stopping the trial cutting, try cutting function 3 to cut a few cuttings, and compare the length of cut trademark with that of the trademark belt. The two lengths should be approximately the same. The same applies to the trial cutting of the length of the blank trademark. Use cutting function 3 to cut the length of blank trademark, and make the two lengths approximately the same.

IV Method of Usual Troubleshooting

Phenomenon 1: the upper electric cutting tool to-and-fro several times.

Reason 1: During the procession of reposition, you don't find the low position sensor, on the working page, press "9" to enter into test page, use baffle slice to shut out the middle of switch, look whether the showed 2 changes, if it isn't, it means the sensor doesn't work; if the voltage of connecting-wire plate 11 and Foot13 hasn't changed<10, it means there is something wrong with connection of sensor,



if the voltage is >10, it means the circuitry may be open circuit, if the voltage is 0, it means the short circuit.

Phenomenon 2: The cutting tool always rests on the position apart from sensor.

Reason 2: Sensor signal is wrongly set, change the motor pulse 0100 into 1100 under the machinery parameters page, if it is 1150, and change it into 0150.

Phenomenon 3: The press key doesn't work.

Reason 3: Press any key on the panel, observing whether there is red light twinkling quickly in the controller. If the red light isn't related to press or not, it means there is something wrong with key panel caused by connector plugs becoming loose inside.

Phenomenon 4: The display is abnormal, but other operations work normally (motor can work).

Reason 4: It means there is something wrong with the display screen, which is caused by connector plugs becoming loose inside and great machinery vibration.

Phenomenon 5: Feeding motor can't work



Reason 5: Maybe there isn't pulse output, press 9 on the panel to enter into "test page", in the test page, select the DC-voltage-gear of the digital universal meter and measure Foot 11 on connecting-wire plate with the black end of it and then measure Foot 10 on connecting-wire plate to check whether there is 12V-voltage or not. If not, maybe because Foot 10 on connecting-wire plate isn't connected to DC2 (+12V), also maybe because Foot 11 isn't connected to COM (GND ground). If there isn't anything wrong with circuitry connection, measure Foot 1 with the red end of it to see whether there is 5V-output. If there isn't 5V-output, the motor can't work; if there is 5V-output, measure Foot 3 to see whether there are voltage changes (1V-5V). If there are some changes, it means there is something wrong with the motor or the driver, if not, maybe there is something with the controller.

Phenomenon 6: Feeding Motor without Direction

Reason 6: Maybe it is caused by wrong circuitry connection or no output, select the DC-voltage-gear of the digital universal



meter and measure Foot 11 on connecting-wire plate with the black end of it and then measure Foot 2 on connecting-wire plate to check whether there are voltage changes (1V-5V). Press <- key Foot 2 to output about 1 voltage, press -> Foot 4 to output about 5V. If there are some changes, it means there is something wrong with the driver.

Phenomenon 7: No static output

Reason 7: Press No. 9 on the panel and then enter into "test picture", on which press Key 2 to check if there is static output. Under the normal connecting condition, check if there is output change about Foot 24. If there are no changes, it means there is something wrong with the controller. If there are some changes, it means there is something wrong with MOC3041.

Phenomenon 8: Discharging motor can't work.

Reason 8: Touch COM ground with the black end of universal meter and measure IN foot of electrostatic plate with the red end of universal meter and then induce the materiel inductor with hand to check if there are changes



about this foot. If there are no changes, it means there is something wrong with the inductor. It there are some changes, measure the right welding point on 1K resistance under the 555 chip to check if there are some changes. If there are no changes, it means there is something wrong with 555 chips. If there are some changes, it means there is something wrong with MOC3041.

V Parts List of Cutter:

- 1. Heating Pipe One Piece
- 2. Electric Heating Pipe One Piece
- 3. Wrench One Set
- 4. Disaster Box Three Piece
- 5. Protective tube Three Piece
- 6. Blade Aluminium Triangle Two Piece
- 7.M3 hexagon socket head cap screw Six Piece
- 8. Thermal Baffle One Piece



JQ-3010 全自动商标 切机

使用说明书

(欢迎使用"景大"牌印机)



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合格证

兹证明本机已通过检验,符合我公司有关技术参数 及标准,准予出厂。

特此证明!

机器编号:	
Serial Number	
制造日期	
Manufacture Date	
色组总数	
Numbers of Color	
检验员	
Chief Checkout	
备注	
Remark	



瑞安市景大印刷机械有限公司验收 报告

机器型号:

机器出厂

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用户单位名称:

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邮编:

机器调试情况:

印刷:

经景大印机员工安装调试,本机器工作正常,印品良好,验收合格。

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经景大印机员工安装调试,本机器工作正常,印品良好,验收合格。

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供更好服务!

目录内容

- 1、 商标切机操作说明
- 2、参数设置及操作方法
- 3、调节切印带商标方法



商标切机操作说明:

商标长度: 预切商标的长度,根据实际切的长度可以相应的增加或减小:运行速度档次:分为5挡,5挡最快,1挡最慢。

切刀速度档次:分为5档,5档最快,1档最慢。

位置补偿: 可以得到+3mm 的长度补偿:

废麦长度:商标带中无用的长度,即空白带的长度,仅 在 F4 功能起作用:

商标周期:当商标带上有多余的空白带时,该功能起作用,计算为两个空白带(废麦)之间的商标的个数,仅在F4功能仅起作用。

废麦位置: 切带有空白商标带时,首次切时或追色错误是要设置切刀距废麦商标的个数,仅在F4功能作用。

切到位置: 切刀距检测色标点眼之间的商标个数。

商标底色: 与色标指示灯配合使用, 当电眼照在色块时,



灯灭则设定 0/

反之设定 1: 当电眼照在色块时, 灯亮, 则设定 1 反之定 0。

商标数量:设定单批产量数,启动全自动剪切后,电脑自动计数,达到设定值后自动停机:画面显示的单批商标数与已切商标数+1。

准确度: 所切的商标长度与设置商标长度 3 相差的准确读 (预留功能扩展)

参数设置及操作方法

进入工作画面"切机功能1",按上下键可以修改切机功能(1,2,3,4,)。

切机功能 1: 自动追色切无空白长度的商标带

切机功能 2: 自动追色切无空白长度的商标呆(教导切)

切机功能 3: 定长切, 不用电眼切商标带

切机功能 4: 自动追色切带空白长度的商标带。

按左(←)右(→)键可以移动商标带,按↓键可以进行 试切一刀,按 SET 键进入参数修改画面"商标长度", 按左(←)右(→)键选择参数和番业,找到要修改的 参数,按相应的数字键后,该数据值被修改,如果修改



"补偿位置"参数,按(↓)键进行数值正、负转换,按 左(←)右(→)键选择修改的参数。如果修改完毕, 按 ENTER 键保存退出。

按"0"进入测试画面, 检测输入、输出、控制器按键, 移动商标带上的空白块和颜色块在色标电眼发出的光斑 下来回移动,看显示的数字"12345678"中的"1"有无 颜色变化,如果没有变化,说明电眼不能 分辨颜色, 如果有变化,就可以商标带。调试前先将补偿位置的只 设为 零,切机功能1,切带有色标块的连续商标。 首先通过按控制器的左(←)右(→)键移动商标带, 使要切的位置与刀口对齐, 然后调整色标电眼的位置, 使电眼的位置放在商标带上深带, 色标电眼照在商标带 的标记,在调节认麦传感器的控制旋钮,使指示灯刚好 灭(亮")。然后拉动商标带,指示灯亮灭变化即可。 按(1)键切掉多余部分。按开始键,开始试切几刀, 按停止键,看切商标带的位置,如果切的位置超前,按 (SET)键进入修改参数画面,按(←或→)键选择"位 置补偿"参数,将该数值设为负数,如果大小与多切的 长度相近,再试切几刀,观察切的位置,如果超前将位



置补偿的值加大,如果位置落后。将位置补偿的值相应 减小。如果开始试切,切的位置落后,将补偿位置设为 正值,并将该值相应的加大,在试切并调较。

切机功能 4: 用于切带有空白商标带的剪切,调试方法与"切机功能 1"

功能相同,停试之前用"切机功能3"定长功能试切几刀,使切下的商标带与商标带上的商标的长度比较,使切下的长度与商标长度相近:另外,废麦长度的试切也同上。用"切机功能3"定长功能试切废麦长度。使切的长度与废麦长度相近,最好切的长度都相同。

切机配件:

- 1、 加热管1条
- 2、 电热管1条
- 3、 扳手1套
- 4、 保险盒 3 只
- 5、 保险管 3 只
- 6、 切刀铝三角 2 只
- 7、 M3 内六角螺丝 6 只
- 8、 隔热板 1 只