

cuTex®

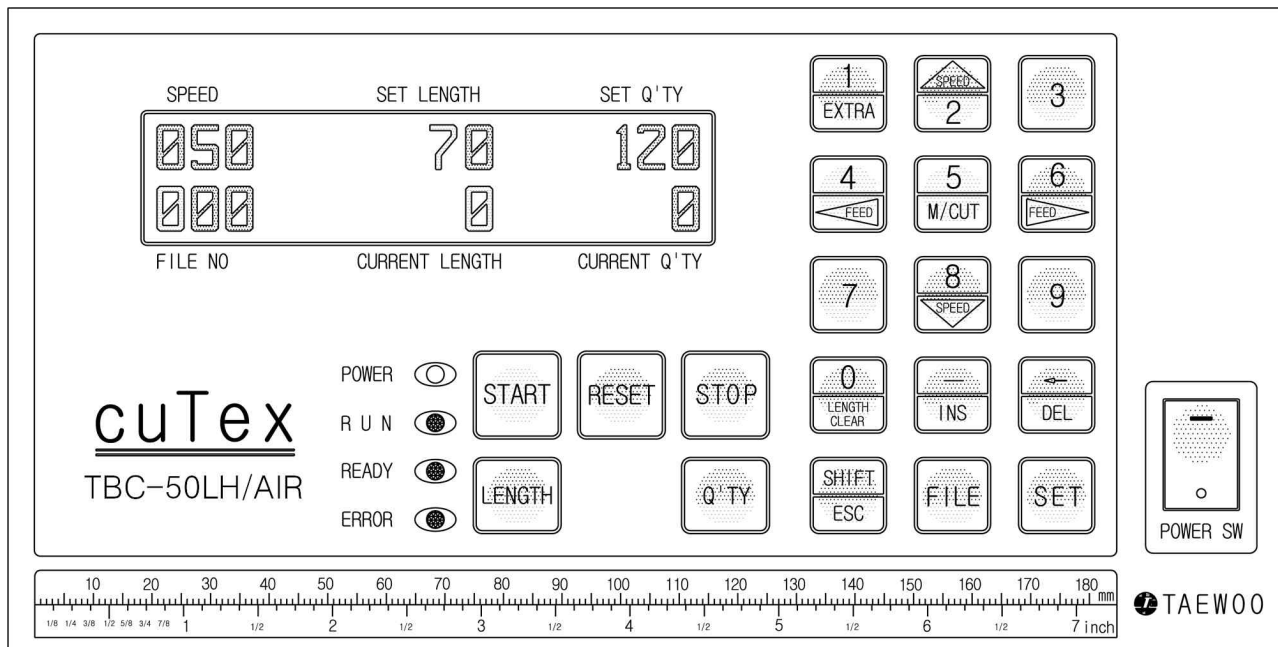
# AUTOMATIC PNEUMATIC WEBBING CUTTER

TBC-50LH/AIR



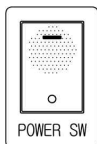
TAEWOO CO., LTD

## How to operate TBC-50LH/AIR



### 1. An example (Cutting length : 70mm, Cutting quantity : 120 pcs)

- ▷ Turn on the POWER SW.



- ▷ Set the temperature. (It is normally used at 250°~350℃. About 5 minutes after turn-on, it will be reached to set-temperature with the red LED turned off automatically.)

※ Caution : When a work is over, set the temperature at zero and turn the cooling fan 10 minutes or so and power off.

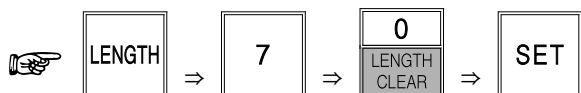
- ▷ Adjustment of cutting time

Set the FILE NO. from 0 to 9 according to the character of materials.

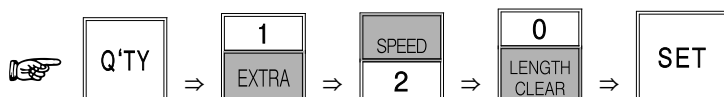
| FILE NO      | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | Remarks                            |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------------------------|
| CUTTING TIME | 0.3sec | 0.5sec | 0.7sec | 0.9sec | 1.0sec | 1.2sec | 1.3sec | 1.4sec | 1.5sec | 1.6sec | small webbing : 0<br>seat-belt : 4 |

### FILE NO : 0~1

- ▷ Set cutting length. (Press the following buttons in order.)

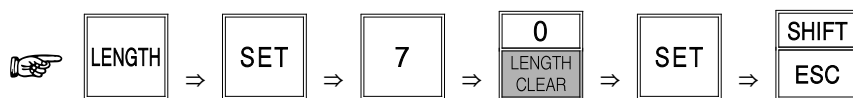


- ▷ Set cutting quantity.

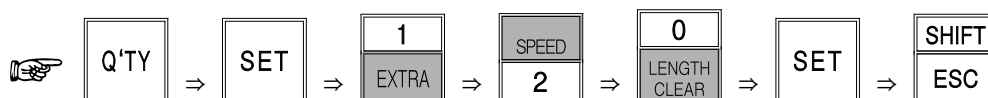


**FILE NO : 2~9**

- ▷ Set cutting length. (Press the following buttons in order.)



- ▷ Set cutting quantity.



- ▷ Connect the air-compressor(capacity: 5 ~ 7kgf/cm<sup>2</sup>)

- ▷ Press START button.



**2. Key functions**



: Current length on display will be back to "0" at a stop.



: Adjustment of cutting-time for perfect melting.



: All of current length and current q'ty on display will be back to "0".



: Moving knife only.

- ① to cut the material for test.
- ② to take out the material jammed between knife blades.
- ③ for balancing of knife blades in exchange.



: Cutting additional one.



: Restoring to normal condition in ERROR(red LED) and inputting parameter/program.



: to move the roller manually for mounting the material on the machine or for feeding it forwards or backwards.



– Speed up (The current speed appears on the left-upside of LCD display with "%". Normal speed : 50%, Maximum speed : 100%)



– Speed up (The current speed appears on the left-upside of LCD display with "%". Normal speed : 50%, Maximum speed : 0%)

\* Speed up & down is possible in any time(operation or stop) and set-speed will not be changed even though you press RESET button or power off & on.



: to correct wrong data.

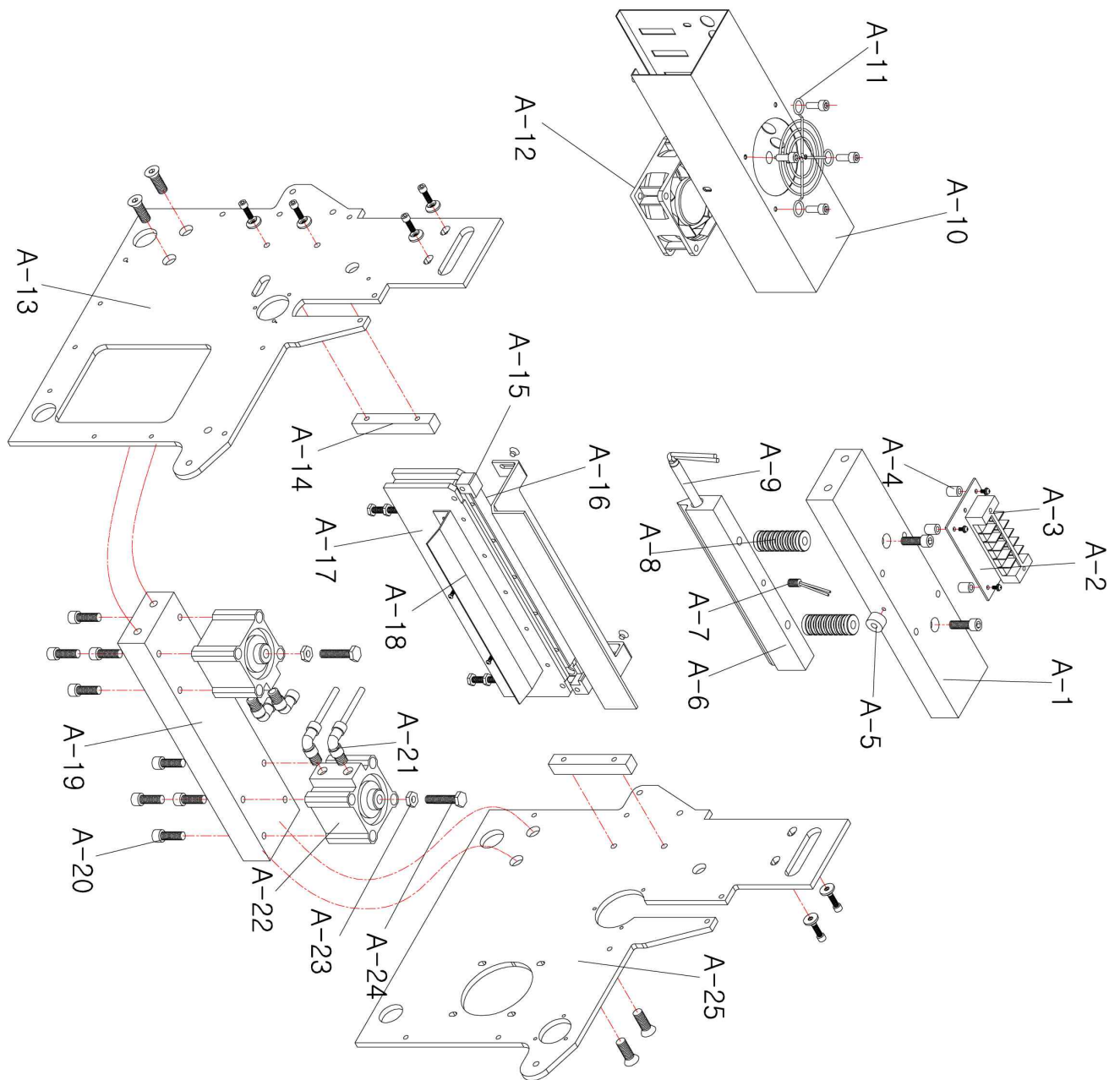
### 3. Specification

| Model No.                                  | Cutting Material   | Knife | Power Supply           | Max. Cutting Width | Range of Cutting Length | Cutting speed (length : 1M) | Machine Size (Net Weight) | Packing Size (Gross Weight) |
|--|--------------------|-------|------------------------|--------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|
| TBC-50LH/AIR<br>(Pneumatic Webbing Cutter) | Webbing, Seat Belt | Hot   | AC110/220V,<br>50/60Hz | 200mm              | 30mm ~ 300M             | 18 ~ 30 cuts                | 510×690×940<br>(85kgs)    | 830×560×770<br>(86kg)       |

### 4. Caution for use

- Before use, please confirm the voltage and make the ground(earth) connection.
- **In case of cutting double or triple rolls at the same time, make materials fed oppositely(↶ & ↷), to prevent slipping by roll tension.**
- Do not access hands or any object close to the working knife. (for safety)
- When the knife blade becomes dull, please use it after grinding with the grinding machine. (Please do not let the unskilled person grind manually or install the knife blade.)

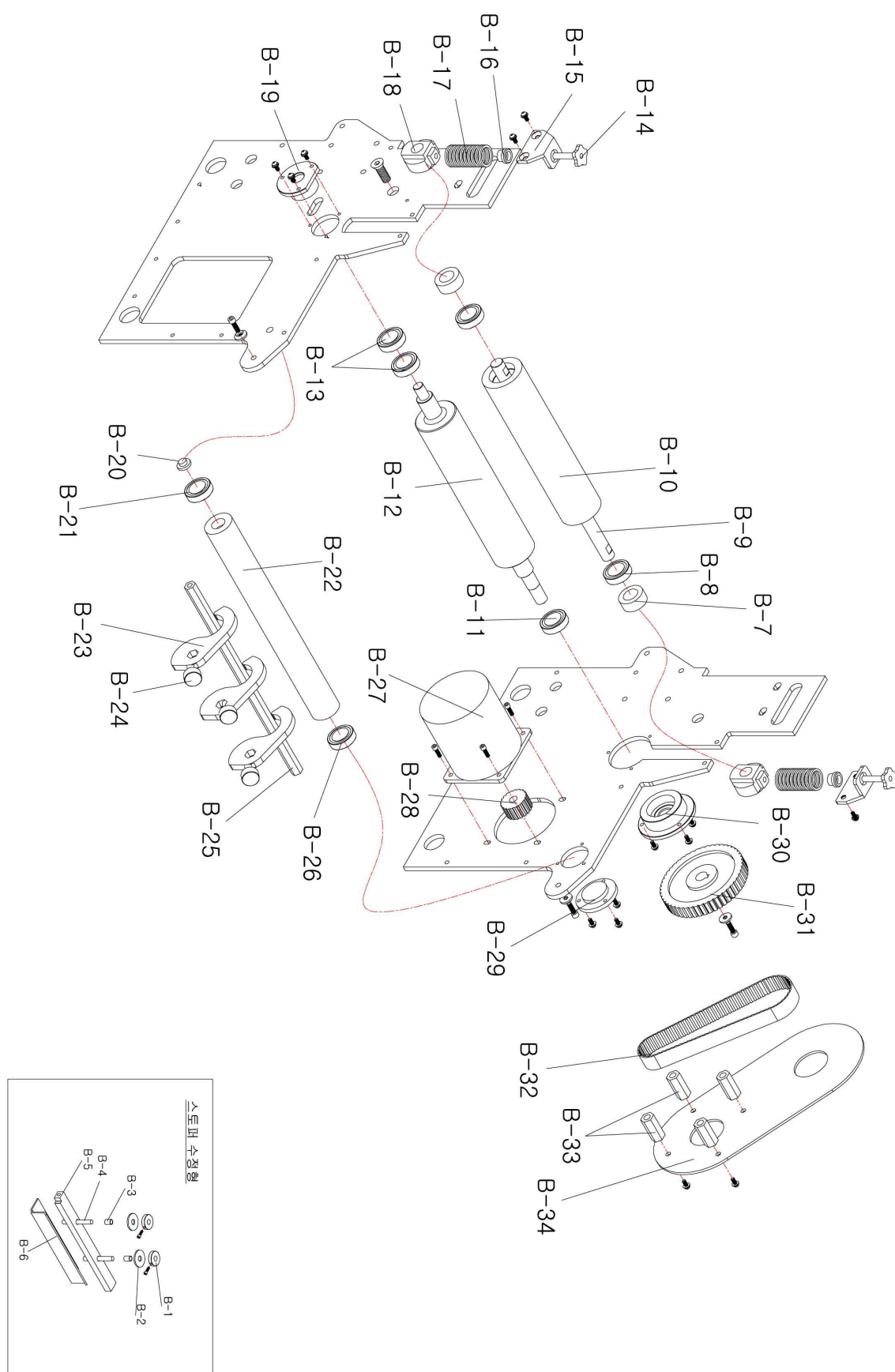
# TBC-50LH/AIR Part Drawing A



## TBC-50LH/AIR Part List A

| Part No. | Description                | Part No. | Description                |
|----------|----------------------------|----------|----------------------------|
| A-1      | UPPER KNIFE MAIN FRAME     | A-21     | TUBE FEEDING               |
| A-2      | TERMINAL HEAT PLATE        | A-22     | AIR CYLINDER               |
| A-3      | TERMINAL                   | A-23     | CYLINDER CONTROL-NUT       |
| A-4      | CLAMPING BOLT              | A-24     | CYLINDER CONTROL-BOLT(M10) |
| A-5      | STAINLESS COVER BRACKET    | A-25     | LEFT FRAME                 |
| A-6      | UPPER KNIFE                |          |                            |
| A-7      | TEMPERATURE SENSOR         |          |                            |
| A-8      | UPPER KNIFE BRACKET        |          |                            |
| A-9      | HEATER                     |          |                            |
| A-10     | UPPER KNIFE COVER          |          |                            |
| A-11     | COOLING FAN SAFETY COVER   |          |                            |
| A-12     | COOLING FAN                |          |                            |
| A-13     | RIGHT FRAME                |          |                            |
| A-14     | RAM GUIDE                  |          |                            |
| A-15     | PRESSURE PLATE CLAMP       |          |                            |
| A-16     | HEATING PRESSURE PLATE     |          |                            |
| A-17     | PRESSURE FRAME             |          |                            |
| A-18     | ROLLER SPACE PLATE         |          |                            |
| A-19     | CYLINDER FRAME             |          |                            |
| A-20     | CYLINDER CLAMPING BOLT(M6) |          |                            |

TBC-50LH/AIR Part Drawing B

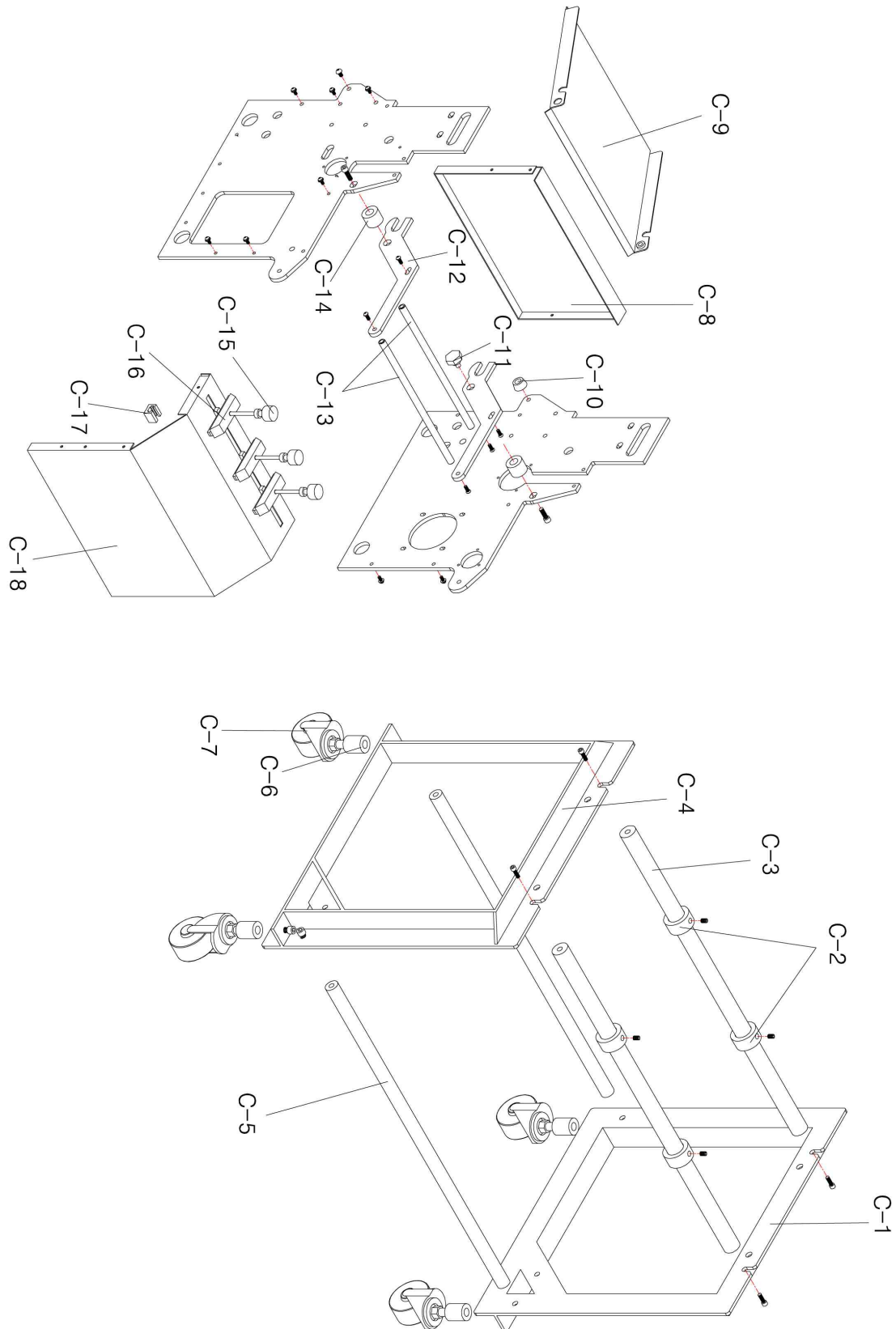


## TBC-50LH/AIR Part List B

| Part No. | Description                    | Part No. | Description                   |
|----------|--------------------------------|----------|-------------------------------|
| B-1      | STOPPER CONTROL RING           | B-21     | BEARING                       |
| B-2      | SILICON WASHER (ANTI-NOISE)    | B-22     | GUIDE ROLLER                  |
| B-3      | OILESS                         | B-23     | REAR GUIDE                    |
| B-4      | STOPER CONNECTION SHAFT        | B-24     | KNOB HANDLE BOLT              |
| B-5      | STOPPER BRACKET                | B-25     | REAR GUIDE PIN                |
| B-6      | STOPPER                        | B-26     | BEARING                       |
| B-7      | ACETAL CLAMPING RING           | B-27     | STEPPING MOTOR                |
| B-8      | BEARING (#6002)                | B-28     | TIME GEAR(S)                  |
| B-9      | UPPER ROLLER SHAFT             | B-29     | ROLLER BEARING HINGE          |
| B-10     | UPPER ROLLER                   | B-30     | ROLLER BEARING HOUSING (LEFT) |
| B-11     | BEARING(#6202)                 | B-31     | TIME GEAR (L)                 |
| B-12     | LOWER ROLLER                   | B-32     | TIMING BELT (200XL)           |
| B-13     | BEARING (#6202)                | B-33     | STEPPING MOTOR SUPPORT        |
| B-14     | PRESSURE-CONTROL BOLT          | B-34     | STEPPING MOTOR GEAR COVER     |
| B-15     | ROLLER TENSION BRACKET         |          |                               |
| B-16     | SPRING CAP                     |          |                               |
| B-17     | PRESSURE CONTROL SPRING        |          |                               |
| B-18     | UPPER ROLLER GUIDE BLOCK       |          |                               |
| B-19     | ROLLER BEARING HOUSING (RIGHT) |          |                               |
| B-20     | BEARING HINGE                  |          |                               |



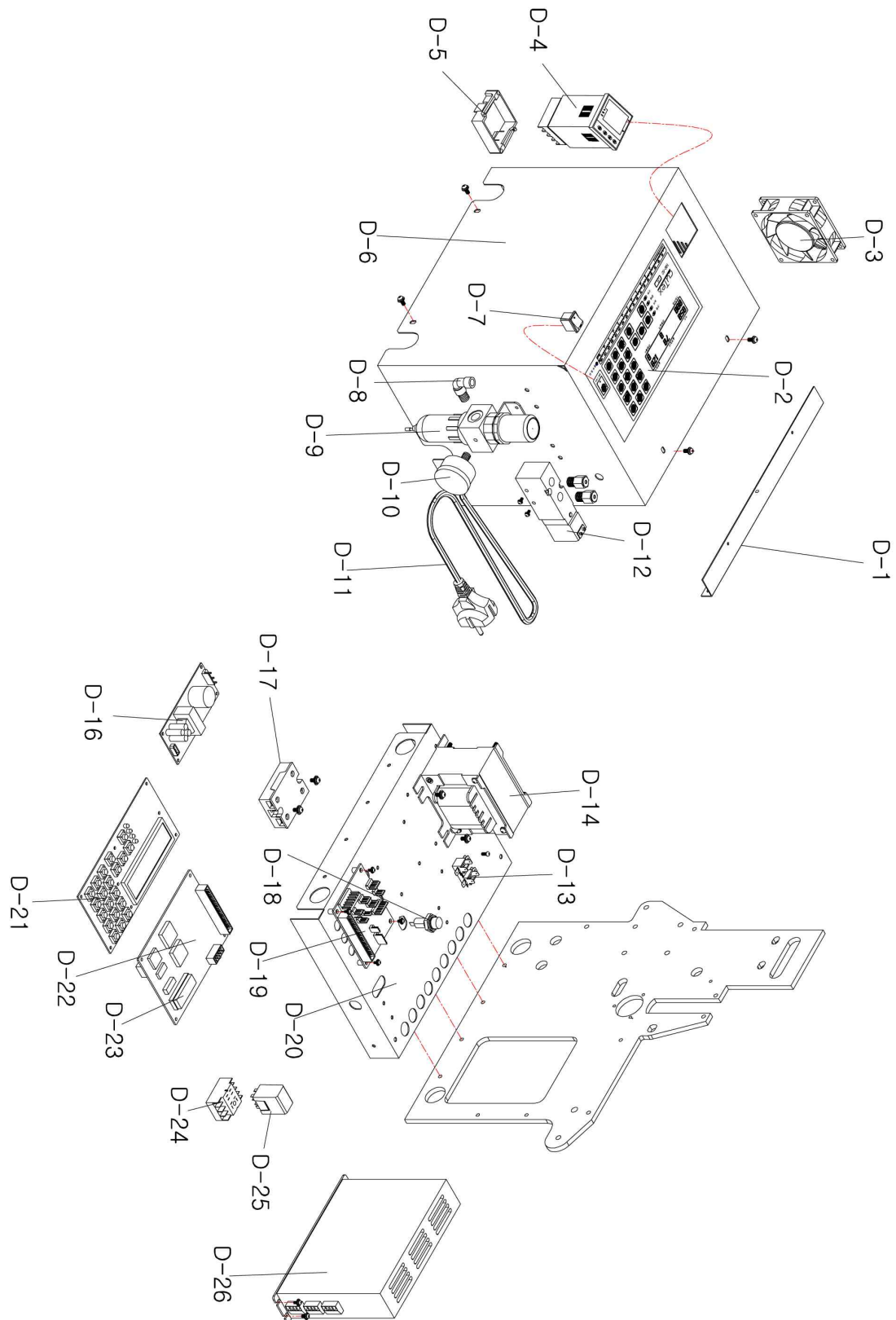
# TBC-50LH/AIR Part Drawing C



## TBC-50LH/AIR Part List C

| Part No. | Description              | Part No. | Description |
|----------|--------------------------|----------|-------------|
| C-1      | ANGLE FRAME (LEFT)       |          |             |
| C-2      | FRAME CLAMPING RIING     |          |             |
| C-3      | ANGLE SHAFT A            |          |             |
| C-4      | ANGLE FRAME (RIGHT)      |          |             |
| C-5      | ANGLE SHAFT B            |          |             |
| C-6      | WHEEL CLAMPING NUT       |          |             |
| C-7      | WHEEL                    |          |             |
| C-8      | FRONT COVER              |          |             |
| C-9      | TAPE GUIDE               |          |             |
| C-10     | RUBBER PAD               |          |             |
| C-11     | LEVER CLAMPING BOLT (M8) |          |             |
| C-12     | LEVER                    |          |             |
| C-13     | LEVER SHAFT              |          |             |
| C-14     | LEVER CLAMPING NUT       |          |             |
| C-15     | GUIDE BOLT               |          |             |
| C-16     | GUIDE                    |          |             |
| C-17     | CUIDE LOCKING BOLT       |          |             |
| C-18     | REAR COVER               |          |             |
|          |                          |          |             |
|          |                          |          |             |

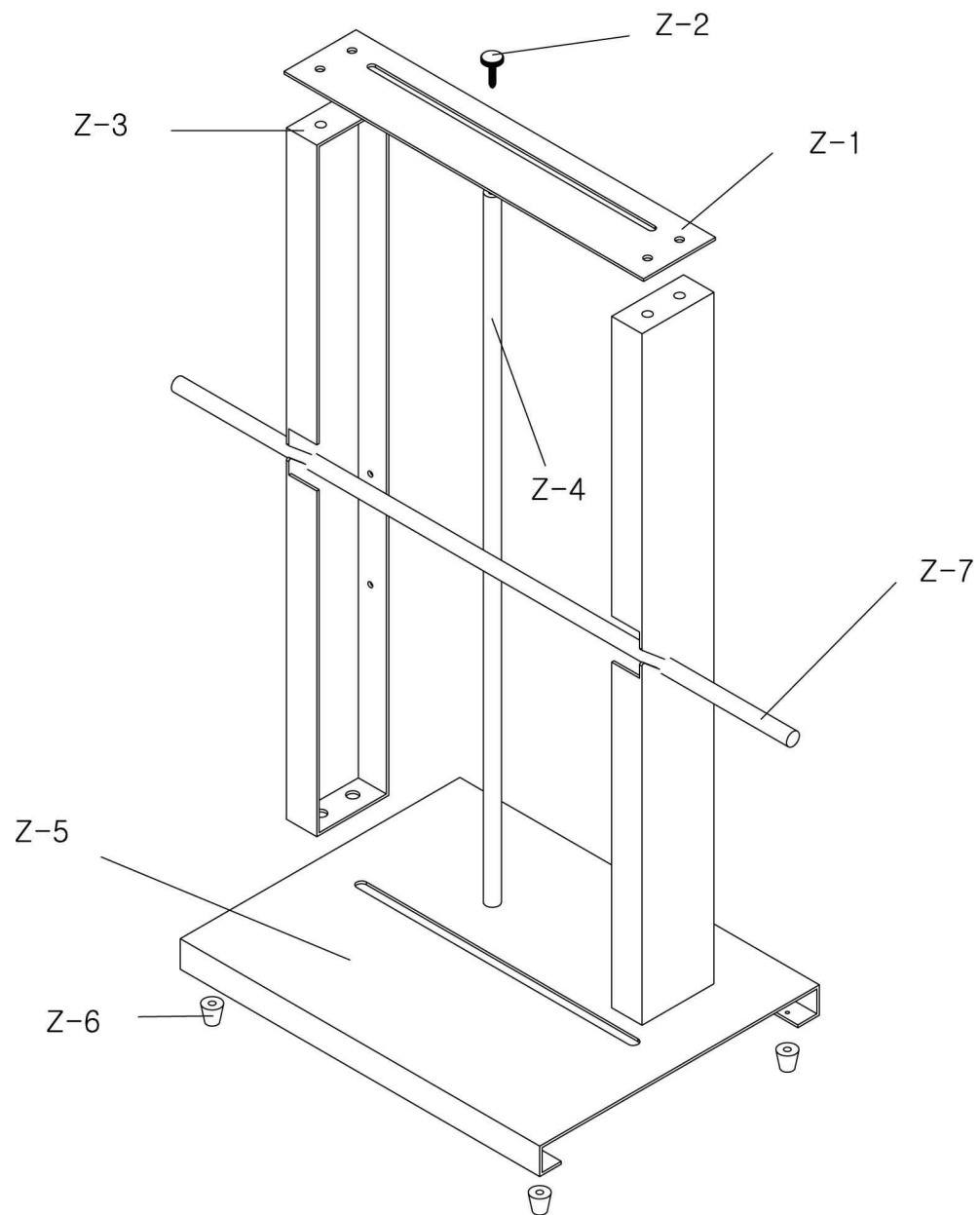
# TBC-50LH/AIR Part Drawing D



## TBC-50LH/AIR Part List D

| Part No. | Description                   | Part No. | Description        |
|----------|-------------------------------|----------|--------------------|
| D-1      | CONTROL SIDE BASE             | D-22     | CONTROL BOARD (MB) |
| D-2      | PANEL                         | D-23     | ROM                |
| D-3      | COOLING FAN                   | D-24     | RELAY SOCKET       |
| D-4      | TEMPERATURE CONTROLLER        | D-25     | RELAY              |
| D-5      | TEMPERATURE CONTROLLER SOCKET | D-26     | DRIVER (BLACK BOX) |
| D-6      | CONTROL CASE                  |          |                    |
| D-7      | SWITCH                        |          |                    |
| D-8      | TUBE FEEDING                  |          |                    |
| D-9      | FILTER & REGULATOR            |          |                    |
| D-10     | PRSSURE GAUGE                 |          |                    |
| D-11     | POWER CORD                    |          |                    |
| D-12     | SOLENOID VALVE                |          |                    |
| D-13     | TERMINAL                      |          |                    |
| D-14     | TRANSFORMER                   |          |                    |
| D-16     | SMPS (POWER SUPPLY)           |          |                    |
| D-17     | SSR (SOLID STATE RELAY)       |          |                    |
| D-18     | FUSE BOX                      |          |                    |
| D-19     | DRIVE BOARD (DR)              |          |                    |
| D-20     | CONTROL BASE                  |          |                    |
| D-21     | OPERATION BOARD (OP)          |          |                    |

# TBC-50LH/AIR REEL HANGER



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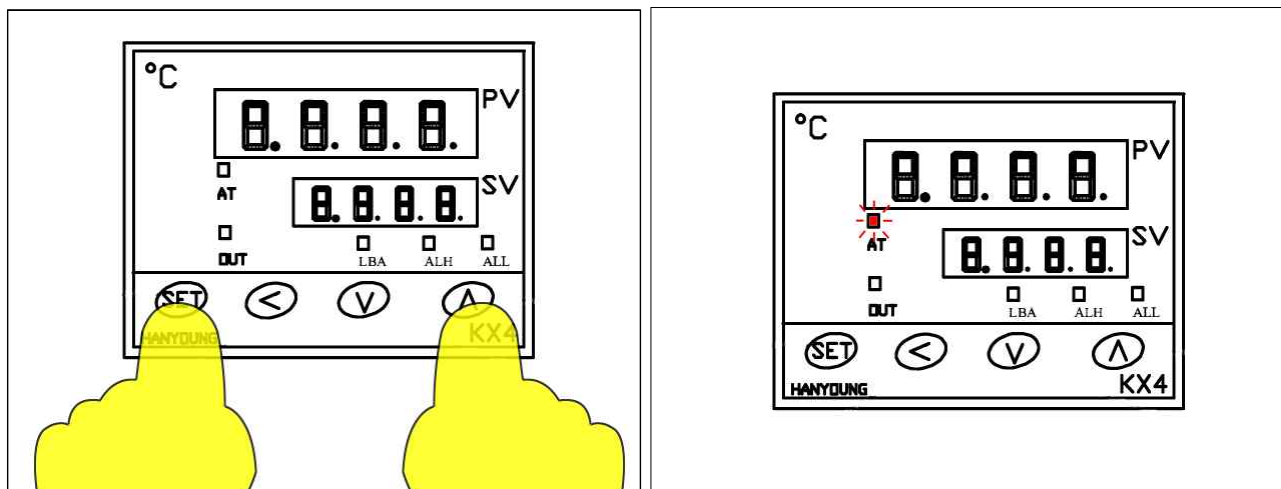
## HOW TO DO AUTO-TUNING

After changing a part or parts (temp. sensor or heater or temp. controller), you can experience that there are much temperature-deviation between set temperature(SV) and present temperature(PV).

In this case, by auto-tuning, you can reduce temperature-deviation between SV and PV.

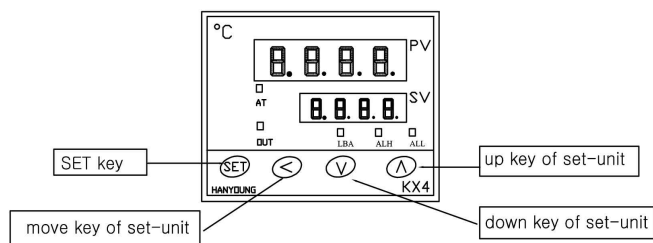
Please do follow steps for auto-tuning.

- Referring manual, please set your common temperature. (ex, 300°C)
- After PV's reaching set temperature, press “**SET**” and “**Λ**” simultaneously.  
(referring to below image(left))  
If so, with AT lamp blinks, auto-tuning begins.

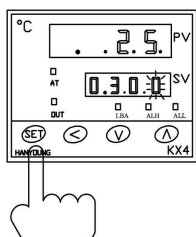


- After finishing auto-tuning, AT lamp will turn off.
- While auto-tuning, if you want to stop auto-tuning, please press “**SET**” and “**Λ**” simultaneously. If so, AT lamp turns off and auto-tuning stops.
- If you change SV (set temperature) during auto-tuning, auto-tuning stops and temp. controller will use previous parameter.

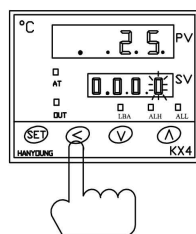
# ( How to use Temperature Controller KX4 )



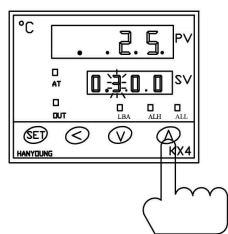
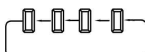
When you power on the controller, PV shows current room temperature and SV shows set temperature.  
Recommendation is 250℃ ~ 350℃.  
After turn-on & set, within 10 minutes, it reaches to set temperature.



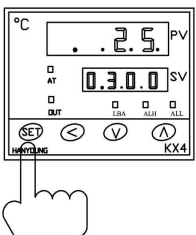
- ① You can enter set mode by pressing **SET** key, you may see one cipher blinks. It means it can be changed.



- ② By pressing **←** key, you can move between numbers of four ciphers. as follows.



- ③ Set desirous temperature by pressing **↑** and **↓** keys.(i.e :300℃). Set-temperature will be increased by **↑** key and it will decreased by **↓** key.



- ④ After finshing setting, press **SET** key once more. Then, it stops blinking. And the controller will return to auto-tuning mode.

## ⚠ CAUTION

At beginning, when you power on, there will be some variation in temperature. But it will be automatically reached to the set temperature soon.



## Trouble-shooting of TBC-50 series

| No | Troubles   |                                      | Applicable model           | Causes & Measures  |
|----|--|--------------------------------------|----------------------------|--|
| 1  | No power supply  |                                      | All models                 | <ul style="list-style-type: none"> <li>- Check if electric cord is connected well.</li> <li>- Check if the fuse blows out or not.</li> </ul>   |
| 2  | Power is on, but no work   | Feeding roller doesn't work.         | All models                 | <ul style="list-style-type: none"> <li>- Check if there is inserted any alien substance in roller.</li> <li>- If current length on display is changed, exchange drive board.</li> <li>- If current length on display is not changed, exchange Control board(MB).</li> </ul>  |
|    |  | Knife doesn't work.                  | All models                 | <ul style="list-style-type: none"> <li>- Check if pressure plates of upper knife are too much fastened or not.</li> </ul>  |
|    |  | LCD display doesn't work.            | All models                 | <ul style="list-style-type: none"> <li>- After opening the cover, check the connetion. (especially between Operation &amp; MB board)</li> </ul>  |
|    |  | All functions don't work             | All models                 | <ul style="list-style-type: none"> <li>- Check if auto-stop device lies down. If any, raise it up.</li> </ul>  |
| 3  | Material is not cut.   |                                      | Hot cutter (H, LH, SH, HX) | <ul style="list-style-type: none"> <li>- Check if temperature goes up to set-degree.</li> <li>- Check if knife blades are even(parallel).</li> </ul>   |
| 4  | Material is cut onesidedly.  |                                      | All models                 | <ul style="list-style-type: none"> <li>- Check if blades are damaged or weared.</li> <li>- After making both knives close each other by M/CUT button and check if they are even or not. (If they are not even, adjust them by bolts)</li> </ul>  |
| 5  | Cut-length is different from set-length.   |                                      | All models                 | <ul style="list-style-type: none"> <li>- Test cutting after loosening material from the reel by hand or attaching feeding device.</li> </ul>   |
| 6  | It cuts before the cutting line of labels.   |                                      | Label cutter (S, SH)       | <ul style="list-style-type: none"> <li>- Move the sensor towards knife side as long as the difference by pushing.</li> </ul>   |
| 7  | It cuts after the cutting line of labels.  |                                      | Label cutter (S, SH)       | <ul style="list-style-type: none"> <li>- Move the sensor towards counter-knife side as long as the difference by pushing.</li> </ul>   |
| 8  | ERROR on LCD & LED   | ERROR CODE [064]<br>>Sensor check Er | Label cutter (S, SH)       | <ul style="list-style-type: none"> <li>- Trouble in Mark sensor →</li> <li>· Check if the sensor is connected well or not.</li> <li>· Check if the sensor is adjusted well or not. (FILE NO 001)</li> <li>· Check if it is label problem or not.</li> </ul>  |
|    |  | ERROR CODE [065]<br>>CUT I/O Error!  | All models                 | <ul style="list-style-type: none"> <li>- Trouble in cutting motor or cutting sensor →</li> <li>· Upper knife moves 1~3 sec. and ERROR on display. Check the connection of cutting sensor. If not, exchange the cutting sensor.</li> <li>· Upper knife doesn't move and ERROR on display. Exchange the cutting motor or drive board.</li> </ul>                       |
|    |  | STOP INPUT !!<br>CHECK STOP INP!     | All models                 | <ul style="list-style-type: none"> <li>- Auto stop device is pressed down or shortage. → raise up the device and check shortage.</li> </ul>  |
|    |  | (C)ACORD CTRL-OP<br>AMC-T3KA VER1.7D | All models                 | <ul style="list-style-type: none"> <li>- Bad connected ROM → Press ROM by hand or connect it again. (If not, change MB board)</li> </ul>   |
|    |  | ERROR CODE[065]<br>>CHECK CODE[003]  | All models                 | <ul style="list-style-type: none"> <li>- Change of FILE 003 in program by noise or mis-operation → <a href="#">Initialize the controller</a>.</li> <li>※ <a href="#">How to Initialize</a>(programs to be initial) :<br/>press <b>SET+SHIFT/ESC</b> buttons and <b>RESET</b> button at the same time.<br/>(Press <b>RESET</b> later than other two keys.)</li> </ul> |
| 9  | Operator feels electric current in touch of machine.   |                                      | All models                 | <ul style="list-style-type: none"> <li>- Connect the earth cord(green) to any bolt of backside of machine.</li> </ul>  |
| 10 | After exchange ROM, you should do <a href="#">initialize the controller</a> , due to error message, if you cannot do initialization, please press "SHIFT/ESC" button to escape error message screen and then <a href="#">initialize the controller</a> . |                                      |                            |  |

Please contact following address for further information.



**(주)태우정밀**  
**TAEWOO CO., LTD.**

ADDRESS: B-501, 234, DEOKSO-RO, WABU-EUP  
NAMYANGJU-SI, GYEONGGI-DO, KOREA  
(Postcode : 472-908)  
TEL : +82 31 521-6904~7  
FAX : +82 31 521-6908  
E-mail : [taewoo@cutex.co.kr](mailto:taewoo@cutex.co.kr)  
Web : <http://cutex.co.kr>

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If you disassemble / modify machine or its part, you cannot receive warranty/after-sales service.