

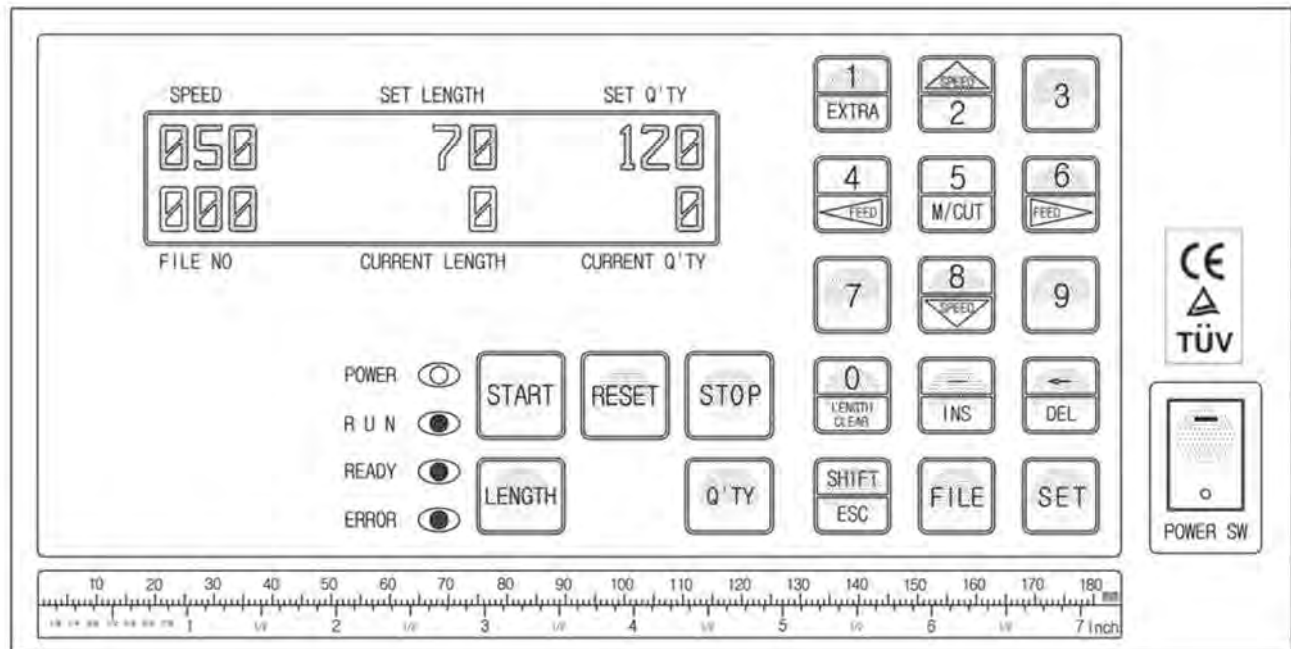


AUTOMATIC BELT LOOP CUTTER

TBC-50



How to operate TBC-50

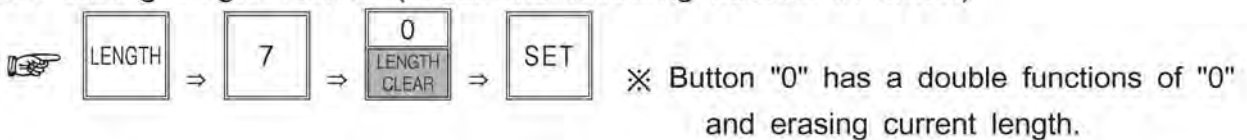


1. An example (Cutting length : 70mm, Cutting quantity : 120 pcs)

▷ Turn on the POWER SW.



▷ Set cutting length 70mm. (Press the following buttons in order.)



▷ Set cutting quantity 120 pcs.



▷ Press START button.



2. Key functions



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



: 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 or 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 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.



– Speed down (The current speed appears on the left-upside of LCD display with "%". Normal speed : 50%, Minimum speed : 0%)
* Speed 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 insert new program between inputted programs already in time of program-input.



: to delete the wrong program in time of program-input. (All things of the STEP will be deleted.)

3. Specification

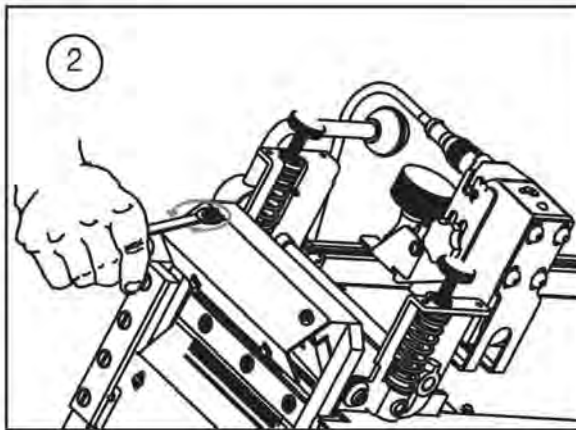
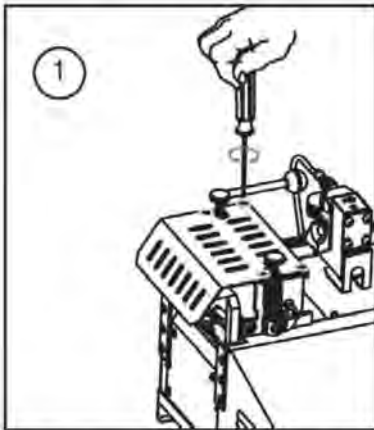
| Model Name | Main Cutting Materials | Cutting Knife | Power Supply | Max. Cutting Width | Range of Cutting Length | Cutting Q'ty/min. (Length: 50mm) | Machine Size (Net Weight) | Packing Size (Gross weight) |
|---------------------------|--------------------------------------|---------------|---------------------|--------------------|-------------------------|----------------------------------|---------------------------|-----------------------------|
| TBC-50 (Belt Loop cutter) | Belt Loop, String, Tube, Velcro tape | Cold | AC110/220 V 50/60Hz | 1mm~110mm | 1mm~300M | 120~140 cuts | 850×320×380 (18.6kgs) | 540×430×340 (22.1kgs) |

4. Caution for use

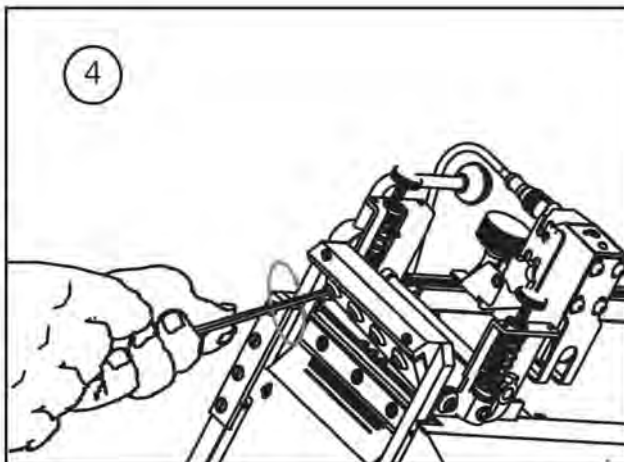
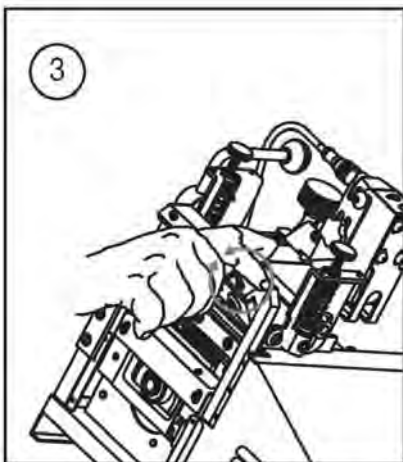
- Before use, please confirm the voltage and make ground(earth) connection. (Static-electricity will be reduced to a half.)
- Do not access hands or any object close to the working knife. (for safety)
- When the knife blade becomes dull, please use it after grinding with the grinding machine. (Please do not let the unskilled person grind manually or install the knife blade.)

EXCHANGE OF KNIFE

- ① First of all, unscrew 4 bolts on safety cap and take off the cap.
- ② Take off stopper.

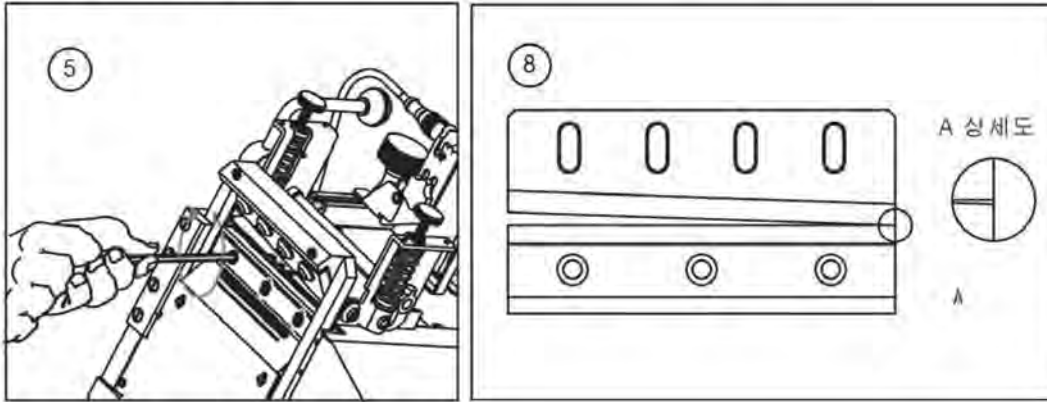


- ③ Unscrew 2 control bolts of upper knife by 2.5mm-wrench.(Don't take off.)
- ④ Unscrew 4 fixing bolts by 4mm-wrench and take off upper knife.



- ⑤ Unscrew 3 fixing bolts of lower knife by 4mm-wrench and take off lower knife.
- ⑥ Vice versa, install new lower knife and fasten it firmly.
- ⑦ Move up upper knife frame and install new upper knife and fix it but don't fasten it firmly.
- ⑧ By soft touch of M/CUT button, if right bottom of upper knife contacts top of lower knife, screw the control bolt of upper knife slightly.

- ⑨ Try to test with paper or tissue (at right, middle, left of knife) by M/CUT button and adjust control bolt of upper knife finally.
- ⑩ If cutting is normal, fasten the control bolts of upper knife firmly.
- ⑪ Attach Stopper again.



Mount of roll

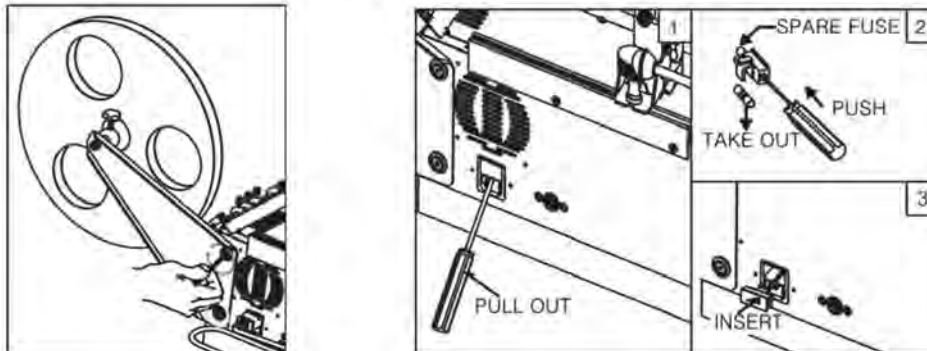
Fix the roll triangle by 4mm-wrench.

Exchange of fuse

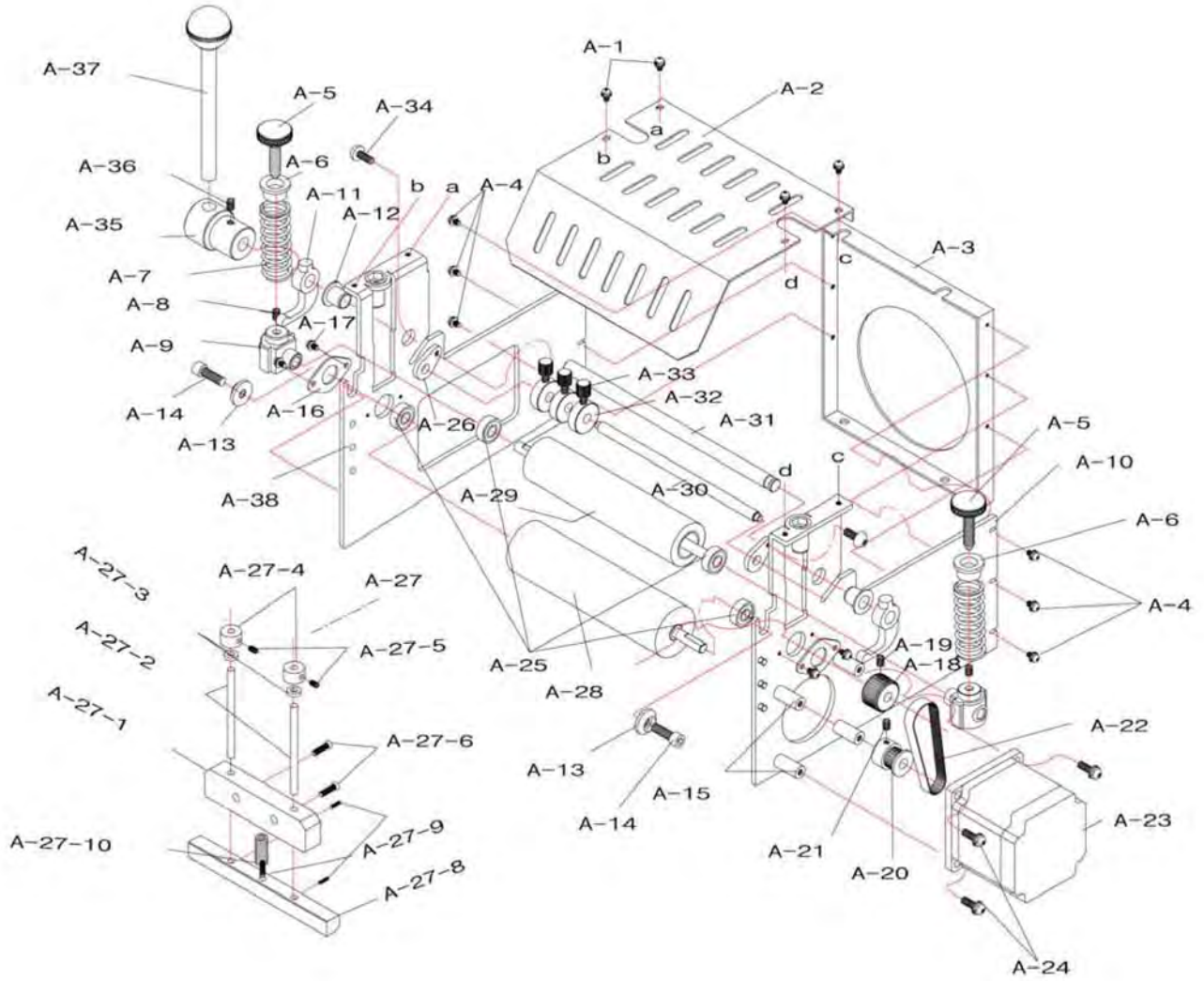
Take off the power plug and exchange as picture.

Cleaning of anti-static brush

If anti-static function becomes weak, clean the anti-static brush by other brush.



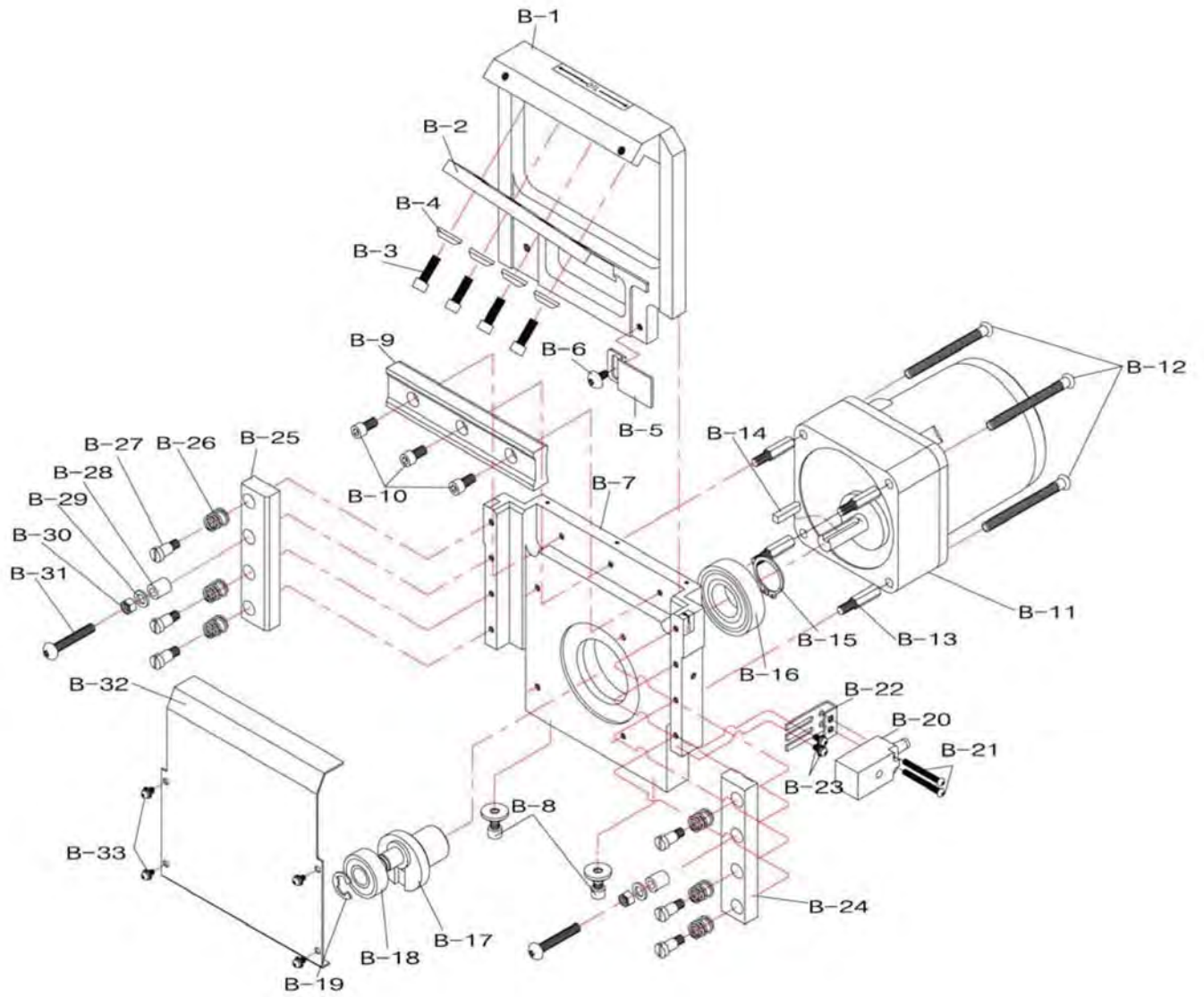
TBC-50 Part Drawing A (Feeding part)



TBC-50 Part List A (Feeding part)

| Part No. | Description | Part No. | Description |
|----------|-------------------------------|----------|-------------------------|
| A-1 | Clamping Bolt | A-26 | Guide-clamping Bracket |
| A-2 | Knife Safety Cover | A-27 | Stopper Set |
| A-3 | Space Plate of Roller Bracket | A-27-1 | Stopper Bracket |
| A-4 | Clamping Bolt | A-27-2 | Press Stopper Shaft |
| A-5 | Pressure-control Bolt | A-27-3 | Rubber Ring |
| A-6 | Pressure-control Spring Cover | A-27-4 | Clamping Ring |
| A-7 | Pressure-control Spring | A-27-5 | Clamping Bolt |
| A-8 | Detent Screw | A-27-6 | Clamping Bolt |
| A-9 | Slide Block of Upper Roller | A-27-7 | Clamping Bolt |
| A-10 | Right Roller Bracket | A-27-8 | Stopper |
| A-11 | Slide Lever | A-27-9 | Spring Clamping Bolt |
| A-12 | Oilless | A-27-10 | Spring |
| A-13 | Clamping Washer | A-28 | Lower Roller |
| A-14 | Wrench Bolt | A-29 | Upper Roller |
| A-15 | Tie Bar of Stepping Motor | A-30 | Front-guide Pin |
| A-16 | Bearing Cover | A-31 | Lever Shaft |
| A-17 | Clamping Bolt | A-32 | Guide Ring |
| A-18 | Feed-timing Gear(MXL30T) | A-33 | Knob Bolt of Guide Ring |
| A-19 | Detent Screw | A-34 | Round Screw |
| A-20 | Drive-timing Gear(MXL20T) | A-35 | Lever Bracket |
| A-21 | Detent Screw | A-36 | Detent Screw |
| A-22 | Timing Belt(MXL75) | A-37 | Lever |
| A-23 | Stepping Motor | A-38 | Left Roller Bracket |
| A-24 | Clamping Bolt | | |
| A-25 | Ball Bearing | | |

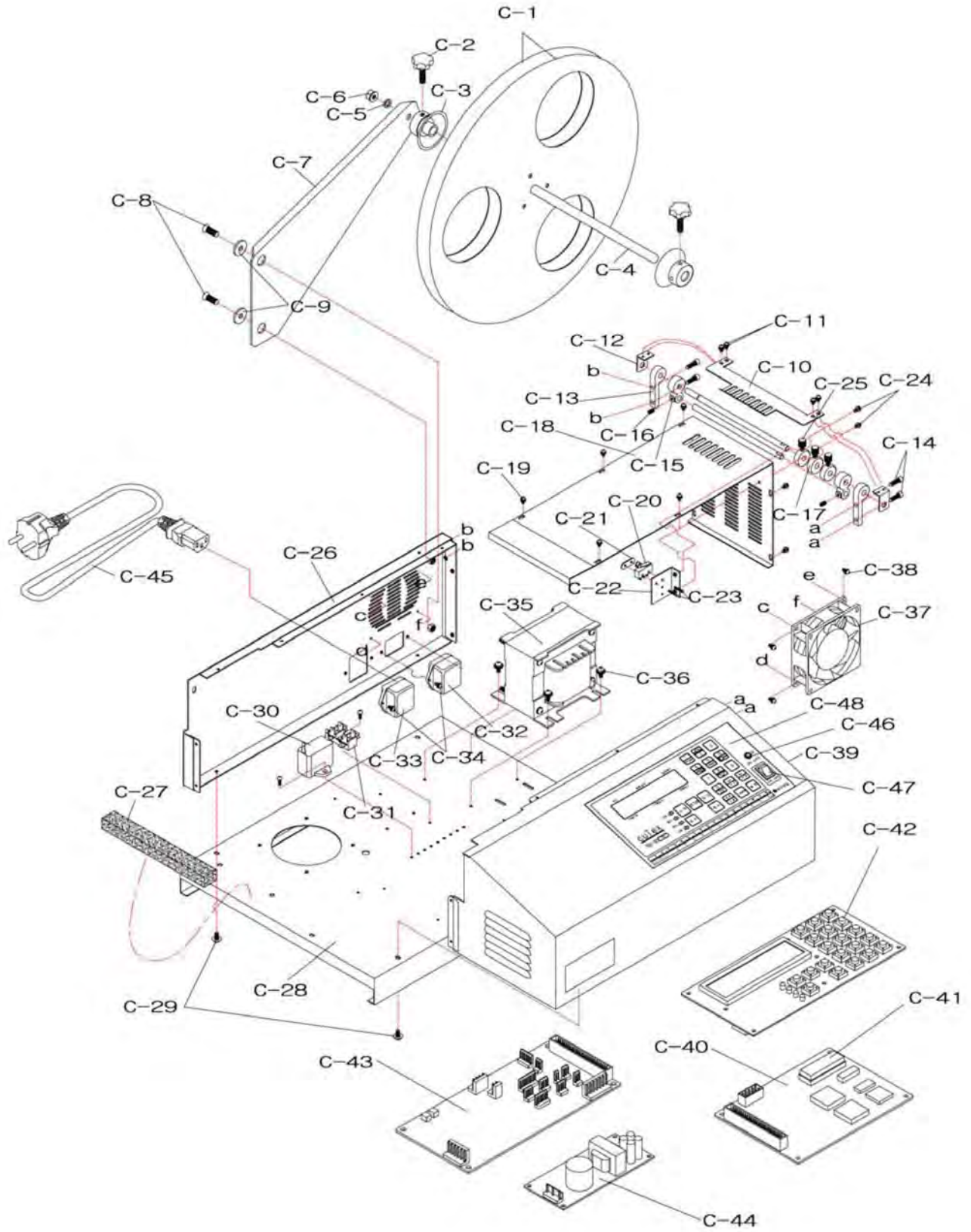
TBC-50 Part Drawing B (Cutting part)



TBC-50 Part List B (Cutting part)

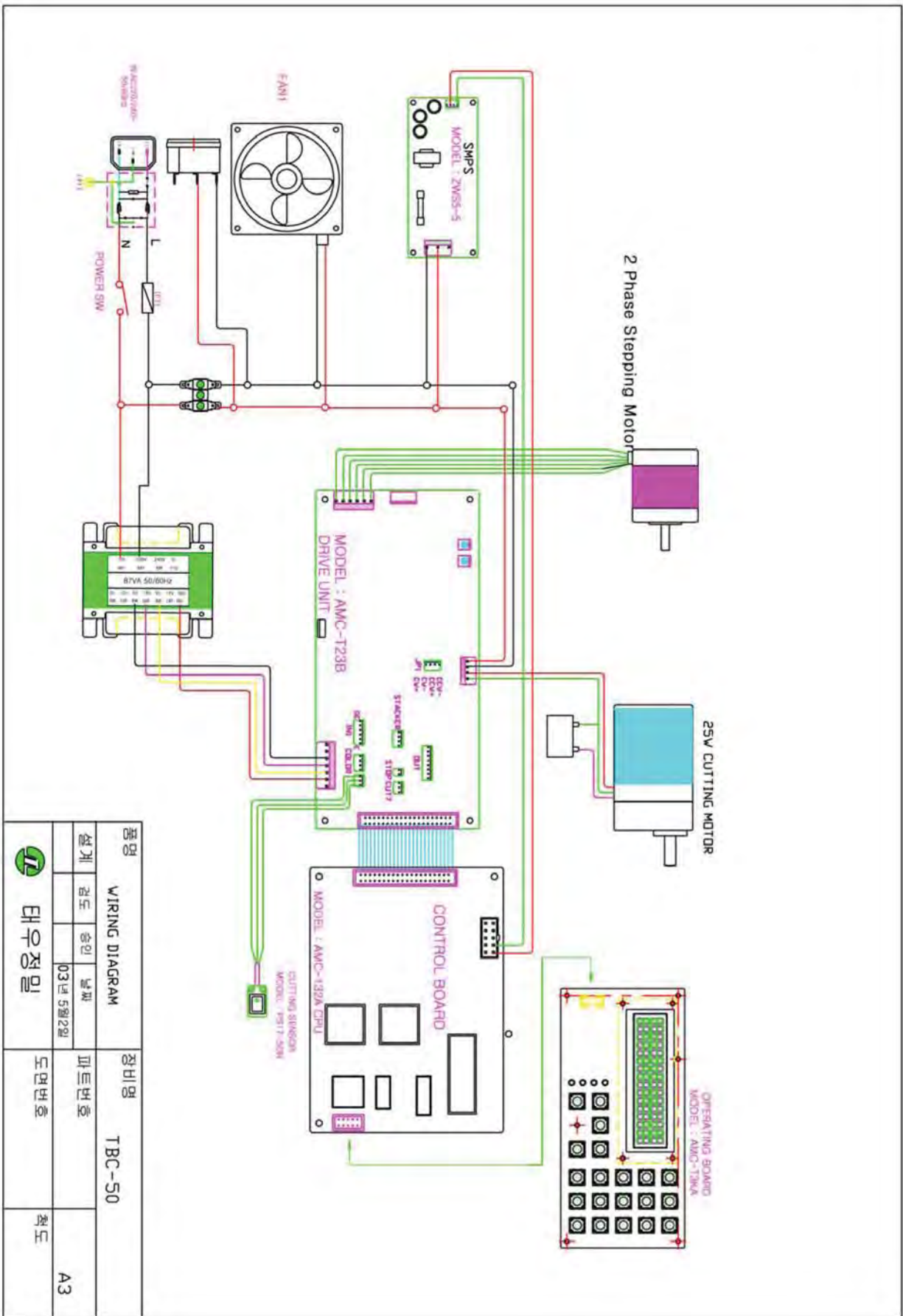
| Part No. | Description | Part No. | Description |
|----------|-------------------------|----------|------------------------------------|
| B-1 | Upper Knife Case | B-21 | Clamping Bolt |
| B-2 | Upper Knife | B-22 | Clamping Bracket |
| B-3 | Wrench Bolt | B-23 | Clamping Bolt |
| B-4 | Neck Washer | B-24 | Right Pressure Plate |
| B-5 | Counting-sensor Bracket | B-25 | Left Pressure Plate |
| B-6 | Clamping Bolt | B-26 | Pressure Spring |
| B-7 | Lower Knife Case | B-27 | Clamping Bolt of Pressure Plate |
| B-8 | Wrench Bolt | B-28 | Urethane Bush |
| B-9 | Lower Knife | B-29 | Tension-control Washer |
| B-10 | Wrench Bolt | B-30 | Tension-control Nut |
| B-11 | Motor + Reduction Gear | B-31 | Tension-control Bolt |
| B-12 | Clamping Bolt | B-32 | Front Cover |
| B-13 | Motor Supporter | B-33 | Clamping Bolt |
| B-14 | Motor Key | | |
| B-15 | Snap Ring | | |
| B-16 | Ball Bearing | | |
| B-17 | Crank Bundle | | |
| B-18 | Ball Bearing | | |
| B-19 | E-Ring | | |
| B-20 | Counting Sensor | | |

TBC-50 Part Drawing C (Other part)



TBC-50 Part Drawing C (Other part)

| Part No. | Description | Part No. | Description |
|----------|----------------------------|----------|-----------------------------|
| C-1 | Roll-hanger Wheel | C-26 | Left Cover |
| C-2 | Clamping Bolt of Holder | C-27 | Sponge |
| C-3 | Holder | C-28 | Base |
| C-4 | Roll-hanger Shaft | C-29 | Clamping Bolt |
| C-5 | Roll-hanger Shaft Washer | C-30 | Condenser |
| C-6 | Check Nut | C-31 | Terminal |
| C-7 | Roll-hanger | C-32 | AC Connector(OUT-PUT) |
| C-8 | Flat-head Bolt | C-33 | AC Connector(IN-PUT) |
| C-9 | Neck Washer of Roll-hanger | C-34 | Clamping Bolt |
| C-10 | Existence Detector | C-35 | Transformer |
| C-11 | Clamping Bolt | C-36 | Clamping Bolt |
| C-12 | Clamping Bracket | C-37 | Cooling Fan |
| C-13 | Rear Guide-pin Bracket | C-38 | Clamping Bolt |
| C-14 | Wrench Bolt | C-39 | Control Cover |
| C-15 | Rear Tension-guide Block | C-40 | Control Circuit Board(MB) |
| C-16 | Detent Screw | C-41 | ROM |
| C-17 | Guide Ring | C-42 | Operation Circuit Board(OP) |
| C-18 | Upper Guide Plate | C-43 | Drive Circuit Board(DR) |
| C-19 | Clamping Bolt | C-44 | SMPS(Power Supply) |
| C-20 | Micro Limit Switch | C-45 | Power Cord |
| C-21 | Plate-nut | C-46 | Toggle Switch |
| C-22 | Limit Switch Bracket | C-47 | Power Switch |
| C-23 | Clamping Bolt | C-48 | Urethane Panel |
| C-24 | Clamping Bolt | | |
| C-25 | Knob Bolt | | |



| | | | | |
|------|----------------|----|----------|--------|
| 품명 | WIRING DIAGRAM | | 정비명 | TBC-50 |
| 선계 | 검도 | 승인 | 날짜 | 파트번호 |
| | | | 03년 5월2일 | 도면번호 |
| 태우정밀 | | | | 책도 |
| | | | | A3 |

Trouble-shooting of TBC-50 series

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