



We Are Dispensers

Non-Adhesive Cutters

Wire Harnessing

VHB Application

APPLIANCE

Barcodes
Promotional Labels

ELECTRONICS

pharmaceutical

Safety Seal AUTOMOTIVE

MANUFACTURING

PACKAGING Die-Cut Gaskets

Heat Shrink Tubing

Tape Dispensers

Product ID

SOLAR & WIND POWER
Battery Manufacturing

Parts Assembly FOOD & BEVERAGE

RFID

MEDICAL

Label Dispensers

TBC-50

AUTOMATIC
BELT LOOP CUTTER



START International
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www.STARTInternational.com



CONTENTS

Read this user's manual before use to ensure proper operation. Keep the manual on hand for reference in case there is a problem.

WARRANTY POLICY FOR LD SERIES LABEL DISPENSERS

START International warrants all parts on TBC50 series tape dispensers against defects in design, materials and workmanship for a period of 180 days. Parts excluded from this are: cutting blades, silicone rollers and cutter liners; these parts are considered "wear parts". Labor to replace defective parts will be performed at no charge for the first 90 days after date of purchase. Warranty does not cover transportation costs.

START International's sole obligation under this warranty is limited to repair, replacement or credit of the purchase price, at our option, which do not properly perform the function for which they were designed.

Warranty repair is contingent upon START's examination and determination that alleged defects have not been caused by misuse, abuse, improper installation or application, repair, alteration, accident or neglect in use, storage, transportation or handling.

The above warranty and remedy constitutes START International's sole liability hereunder and are in lieu and exclusive of all other warranties and remedies expressed, implied, or statutory, including, but not limited to, those of merchantability and fitness for a particular purpose.

REPAIR POLICY

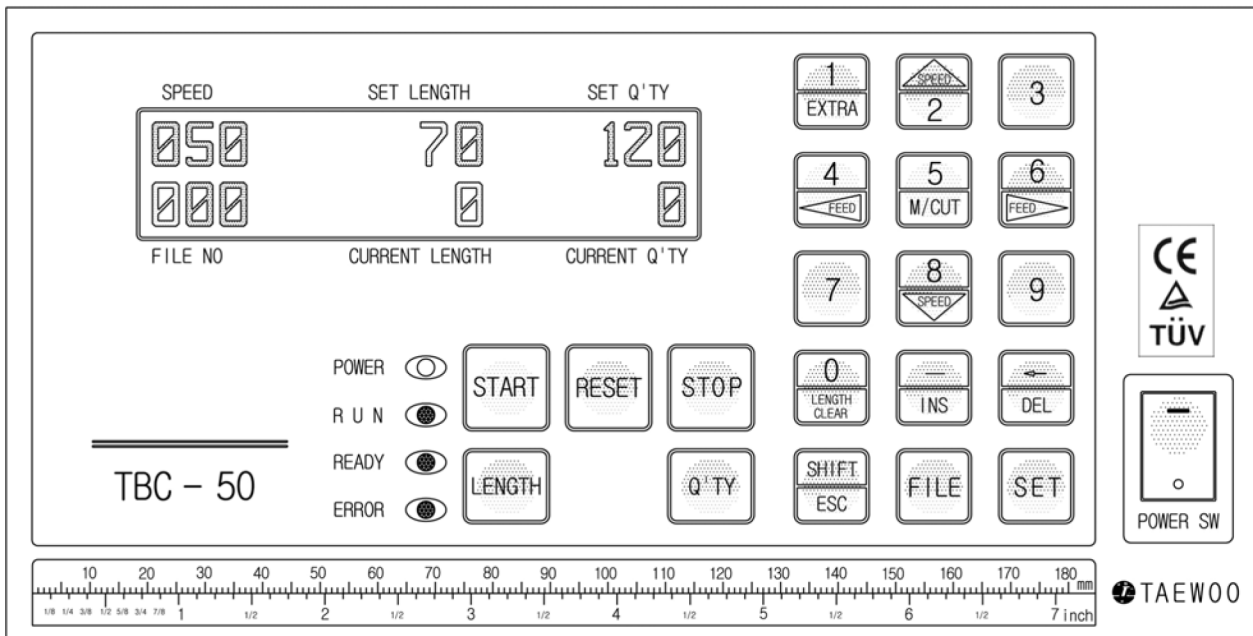
Contact START INTERNATIONAL to determine nature of problem.

Furnish START with the following information:

1. Who the unit was purchased from.
2. Model number and serial number.
3. Date purchased (copy of invoice or packing slip required).

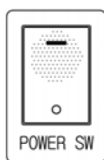
START will issue an RMA (Return Material Authorization) for the repair. Return machine to START by freight, insured and prepaid. START will notify the customer if there is a repair charge. A \$25.00 evaluation charge will apply to all non-warranty repairs, which will be applied to repair charge. For the full Warranty & Repair policy please visit www.STARTInternational.com

HOW TO OPERATE TBC-50

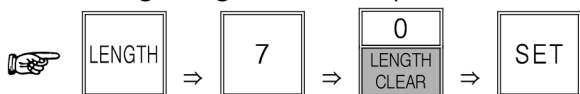


1. An example (Cutting length : 70mm, Cutting quantity : 120 pcs)

▷ Turn on the POWER SW.

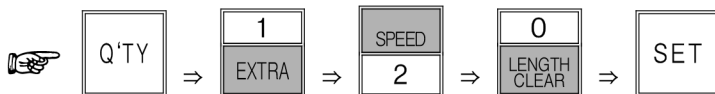


▷ Set cutting length 70mm. (Press the following buttons in order.)



※ Button "0" has a double functions of "0" and erasing current length.

▷ Set cutting quantity 120 pcs.



▷ Press START button.



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.

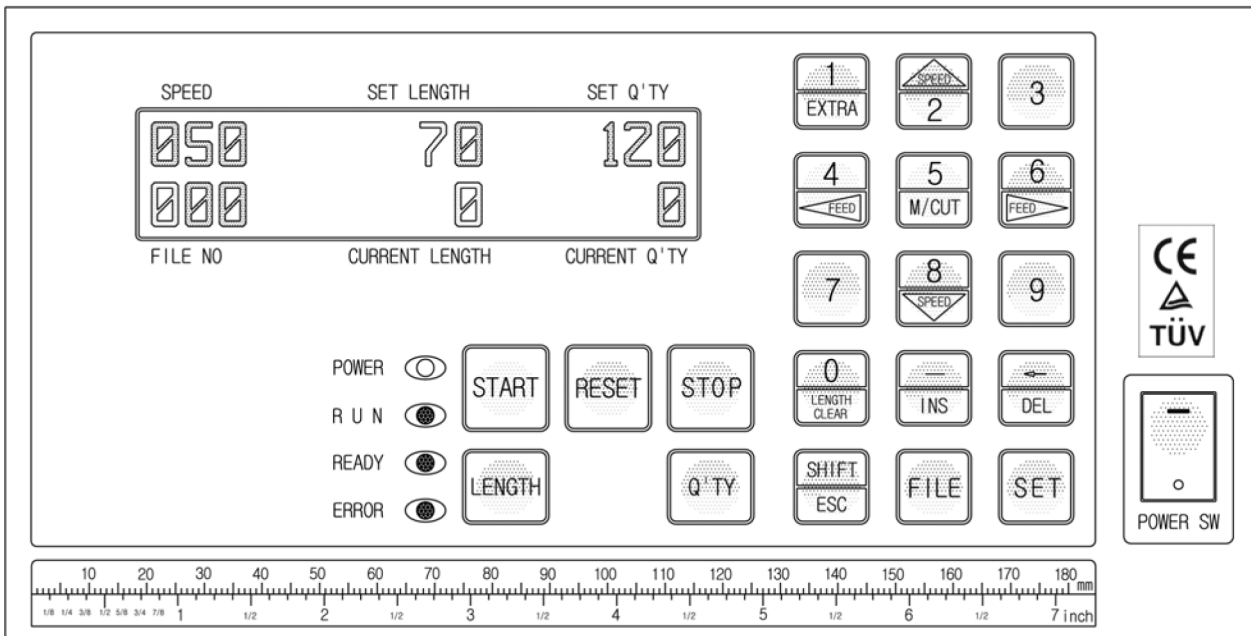


: to delete the wrong program in time of program-input. (All things of the STEP will be deleted.)

TBC-50 Memory Programming Sequence

NOTE: When the 10 memory chip is installed in a TBC50S the sequence to set Length and Quantity change from a standard TBC50S machine.

NOTE: Use FILE 0 for normal sensor cutting and FILES 1 through 9 for memory pairs (Length & Qty).



To initialize or clear all 10 memory locations at any time.



1. Start from the HOME screen or press SHIFT/ESC > RESET to go HOME first.







2. Press and hold the following buttons in sequence... SET – SHIFT/ESC – RESET (Reset must be pressed last)



TBC-50 Memory Programming Sequence - Cont.


To initialize or clear all 10 memory locations at any time. use the following sequence.


1. Start from the HOME screen or press SHIFT/ESC > RESET to go HOME first.




2. Press LENGTH >


3. Press 6 repeatedly until you get up to the desired memory location number, OR, press 4 repeatedly to go down in memory location number. Do this until you see the desired memory location in the top right corner of the display.



4. Press SET




5. Enter the desired length (Example: 100)
6. Press SET again.
7. If you want to program more lengths / locations... Go Back To Step 3... if you are done Go To Step 8.
8. After you have programmed all desired lengths and locations press SHIFT/ESC (Display = USER DATA STORE) to store memories and return to Home.






Note: The sequence looks like this... LENGTH > 6...6 (until you see desired memory number)> SET > 100> SET > SHIFT/ESC


To set, change or review a specific quantity in a specific memory location, use the following sequence.


1. Start from the HOME screen or press SHIFT/ESC > RESET to go HOME first.



2. Press QTY >


3. Press 6 repeatedly until you get up to the desired memory location number, OR, press 4 repeatedly to go down in memory location number. Do this until you see the desired memory location in the top right corner of the display.



4. Press SET

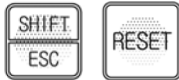

5. Enter the desired quantity (Example: 10)
6. Press SET again.
7. If you want to program more quantities / locations... Go Back To Step 3... if you are done Go To Step 8.
8. After you have programmed all desired lengths and locations press SHIFT/ESC to return to Home. Note: The sequence looks like this... QTY > 6...6 (until you see desired memory number)> SET > 100 > SET > SHIFT/ESC



TBC-50 Memory Programming Sequence - Cont.

To recall a specific memory location use the following sequence.

Note: The current memory location number appears in the bottom left corner of the display just above FILE NO.



1. Start from the HOME screen or press SHIFT/ESC > RESET to go HOME first.



2. Press the following buttons in sequence. FILE > Desired Memory Location Number > SET > START.

Note: The new length and quantity will not appear in the display until the Start button is pressed

Example 1: Set Memory 1, 2 and 3 to sense and cut a Single label, 2 labels at a time and 3 labels at a time respectively.

This example assumes that the distance measured between each label (Mark-to-Mark) is 25mm and the quantity desired will be 5 for all 3 memories.



PRESS... LENGTH > 6 (you should see memory 1)> SET > 25 > SET > 6 > (you should see memory 2) > SET > 50 > SET > 6 (you should see memory 3)> SET > 75 > SET > SHIFT/ESC



PRESS... QTY > 6 (you should see memory 1)> SET > 5 > SET > 6 > (you should see memory 2)> SET > 5 > SET > 6 (you should see memory 3)> SET > 5 > SET > SHIFT/ESC

To recall memory 1, test...recall memory 2, test, recall memory 3 and test.



- 1) Start from home position... press **FILE > 1 > Set > Start** (single label cut 5 times)
- 2) Start from home position... press **FILE > 2 > Set > Start** (2 labels together cut 5 times)
- 3) Start from home position... press **FILE > 3 > Set > Start** (3 labels together cut 5 times)

Example 2: Change the Length in memory 4 to 100 and change the Qty in memory 4 to 5.
 PRESS... LENGTH > 6,6,6,6 (you should see memory 4)> SET > 100 > SET > SHIFT/ESC
 PRESS... Qty > 6,6,6,6 (you should see memory 4)> SET > 5 > SET > SHIFT/ESC

To recall memory 4 and test... Press FILE > 4 > Set > Start

SPECIFICATIONS

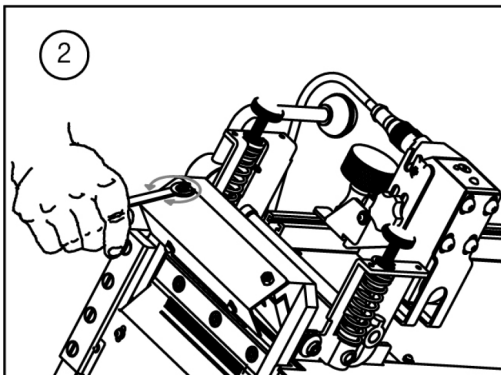
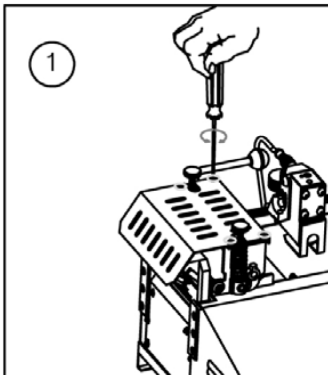
Model Name	Main Cutting Materials	Cutting Knife	Power Supply	Max. Cutting Width	Range of Cutting Length	Cutting Q'ty/min. (Length: 50mm)	Machine Size (Net Weight)	Packing Size (Gross weight)
TBC-50 (Belt Loop cutter)	Belt Loop, String, Tube, Velcro tape	Cold	AC110/220 V 50/60Hz	1mm~110mm	1mm~300M	120~140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

4. Caution for use

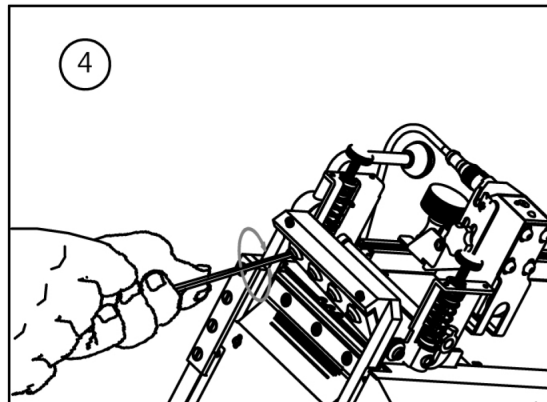
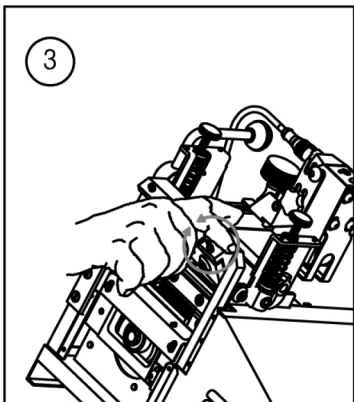
- Before use, please confirm the voltage and make ground(earth) connection. (Static-electricity will be reduced to a half.)
- Do not access hands or any object close to the working knife. (for safety)
- When the knife blade becomes dull, please use it after grinding with the grinding machine. (Please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

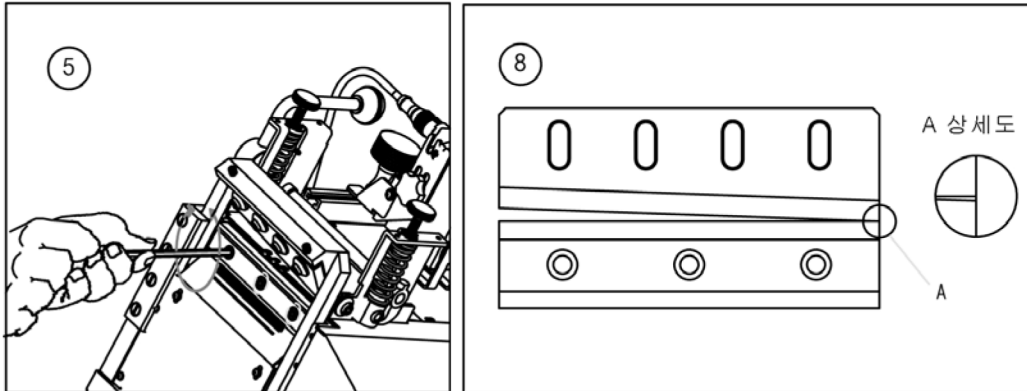


- ③ Unscrew 2 control bolts of upper knife by 2.5mm-wrench.(Don't take off.)
- ④ Unscrew 4 fixing bolts by 4mm-wrench and take off upper knife.



- 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

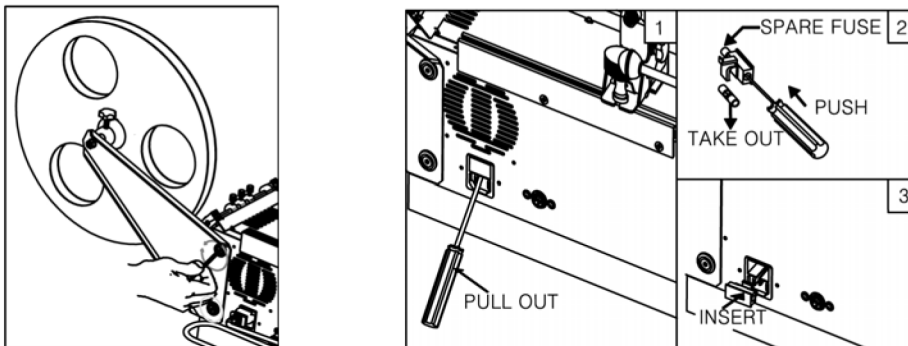
Fix the roll triangle by 4mm-wrench.

Exchange of fuse

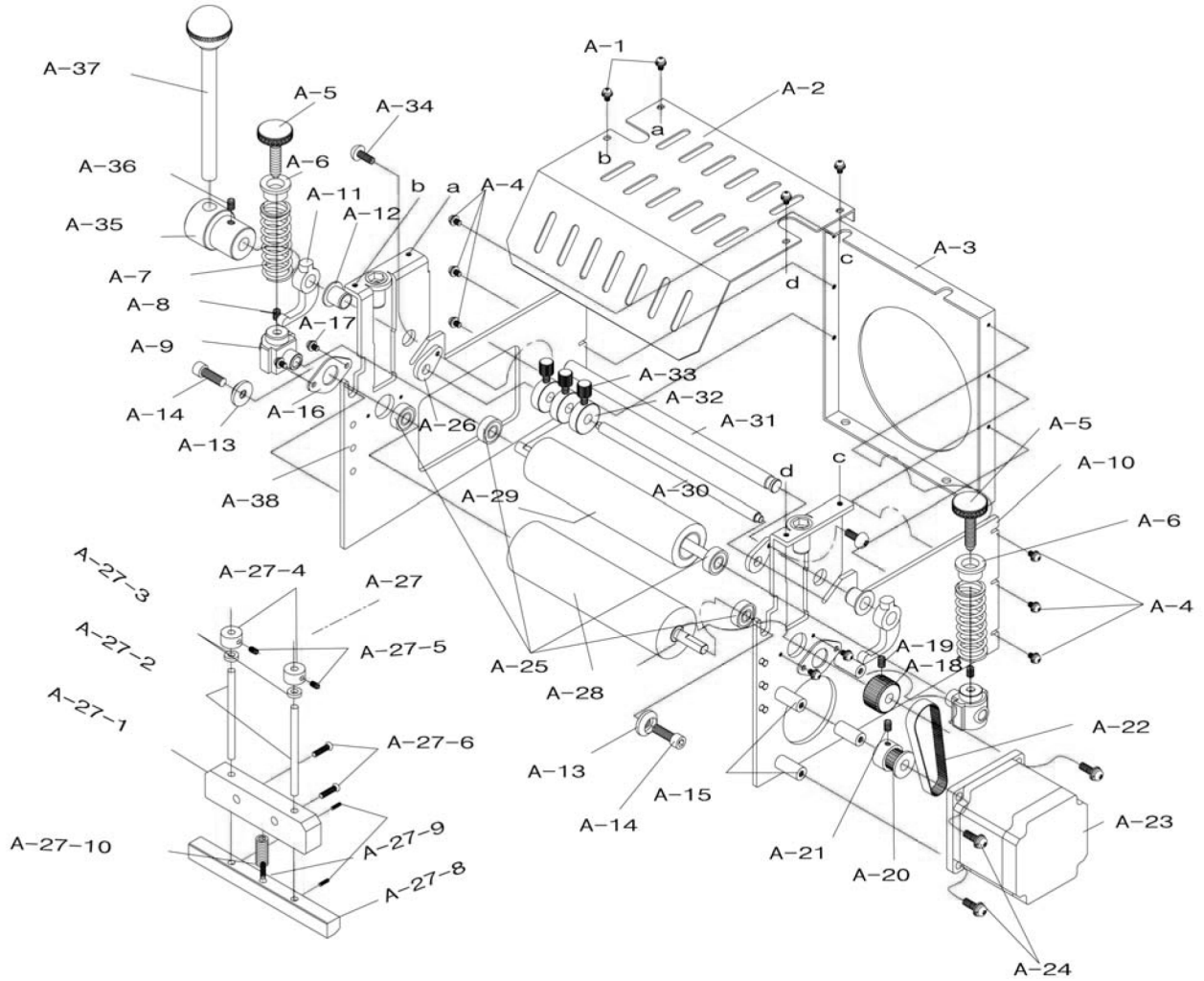
Take off the power plug and exchange as picture.

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)

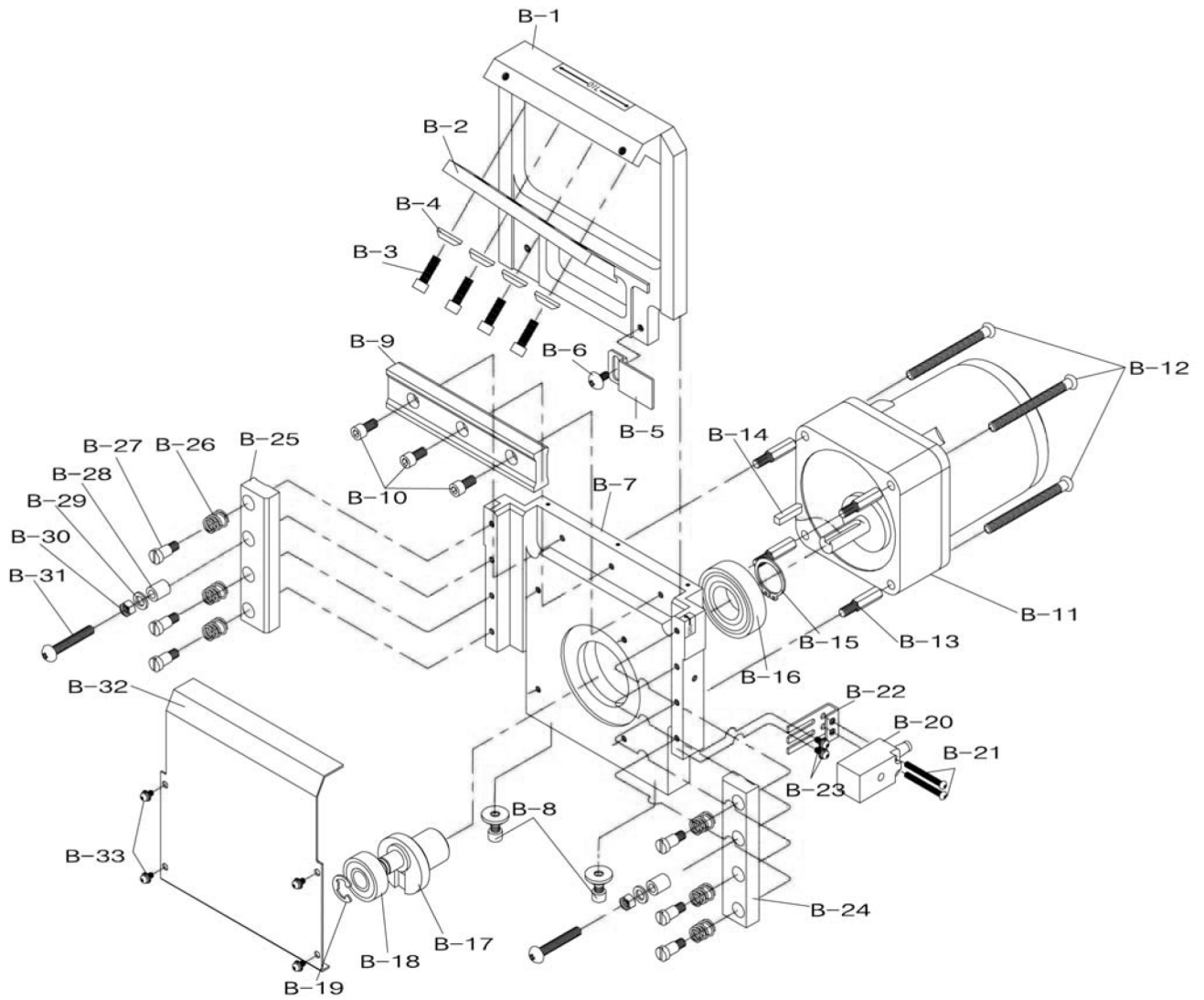




TBC-50 PART LIST A (Feeding part)

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)

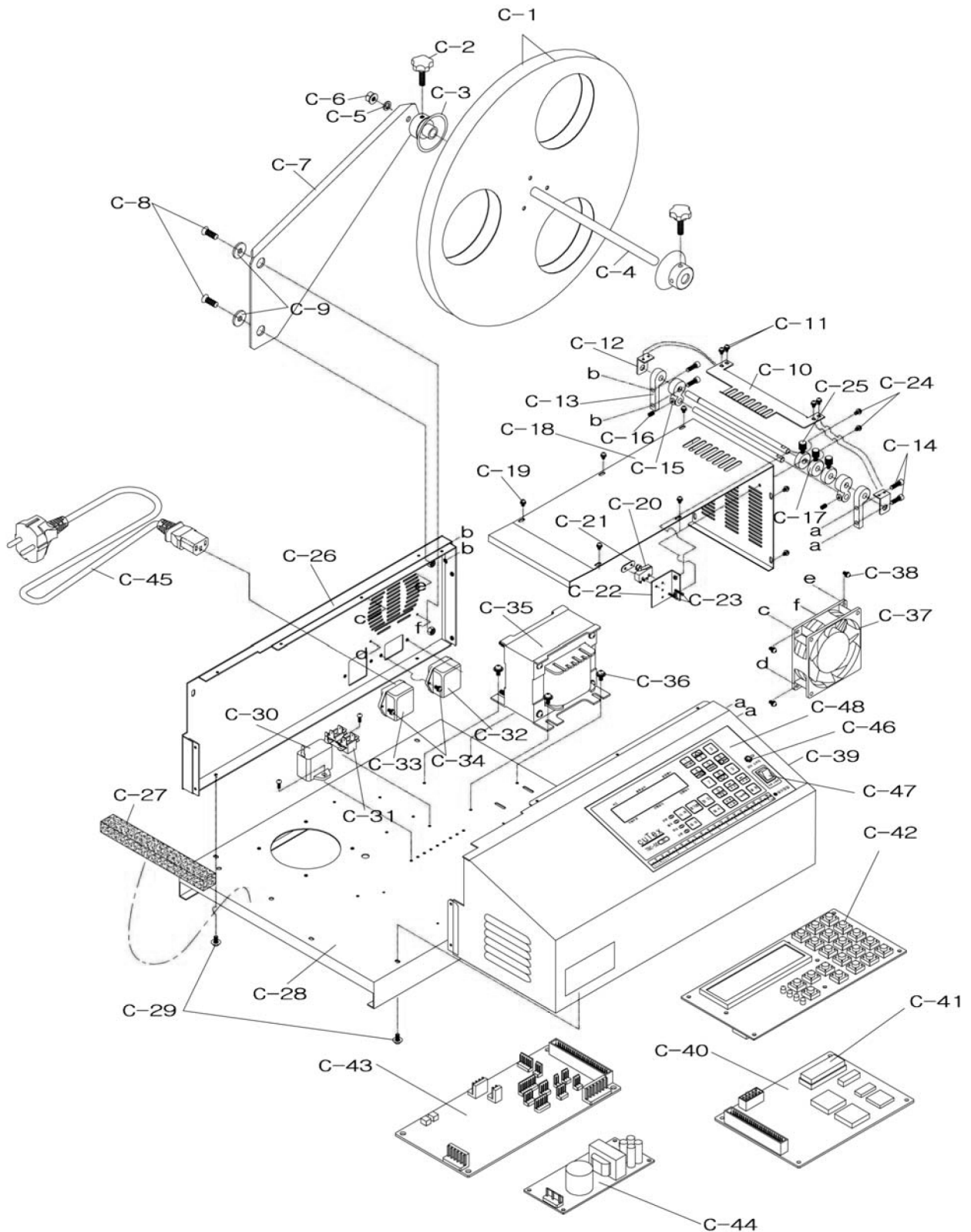




TBC-50 PART LIST B (CUTTING PART)

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		

EXPLODED VIEW

