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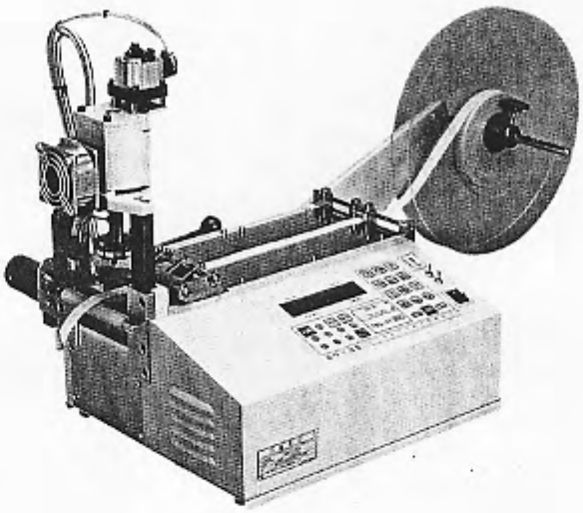
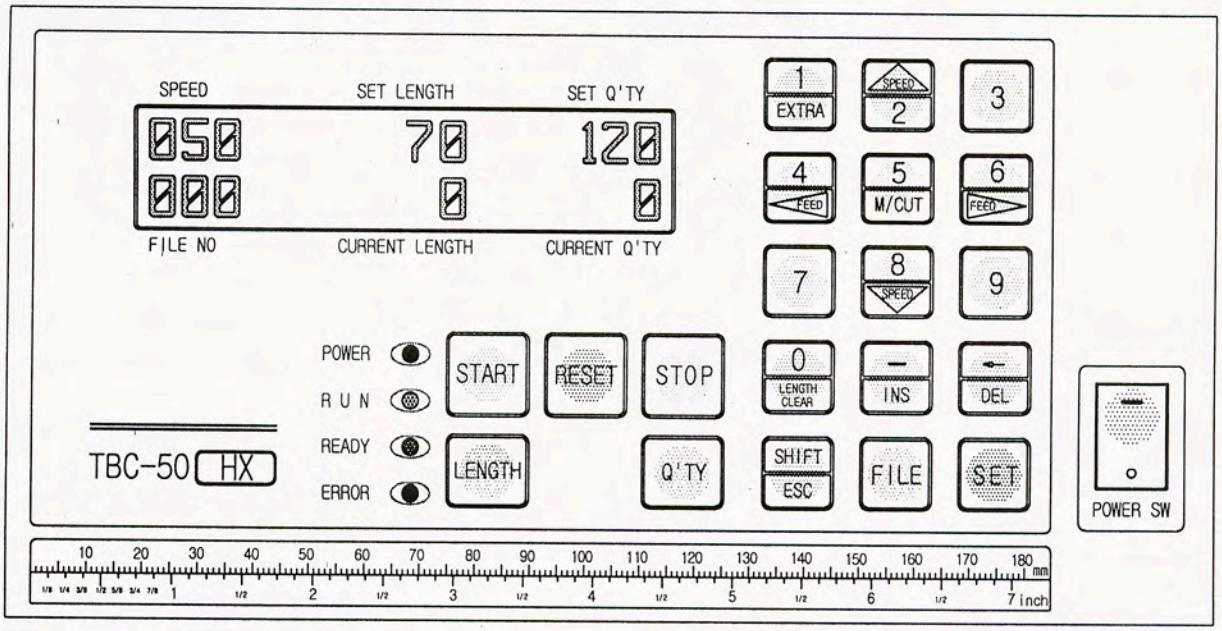
How to operate Automatic Angle Cutter

(Model No. : TBC-50HX)

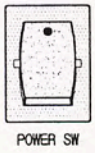


How to operate TBC-50HX



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

▷ Turn on the POWER SW.



▷ Set the temperature.
Fit TEMP. VOLUME(thick ribbon - 9, thin ribbon - 7 or 8). The knife blade will be heated after 10~15 minutes.

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

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

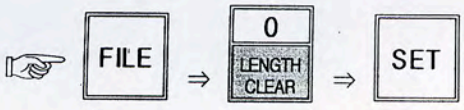
☞ [LENGTH] ⇒ [7] ⇒ [0 LENGTH CLEAR] ⇒ [SET]

▷ Set cutting quantity.

☞ [Q'TY] ⇒ [1 EXTRA] ⇒ [SPEED 2] ⇒ [0 LENGTH CLEAR] ⇒ [SET]

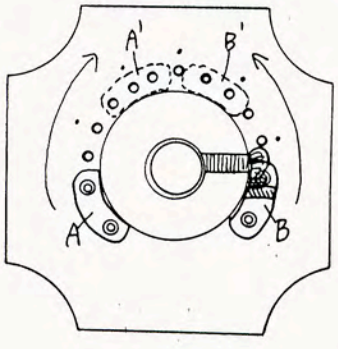
▷ Turn on the MOTOR SW.

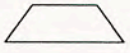
▷ Set function.(FILE NO)

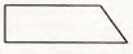


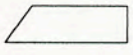
▷ Adjust cutting angle.

☒ Automatic angle cutting : Connect the air-compressor and set the pressure gauge at 2.5kgf/cm^2 or 3kgf/cm^2.



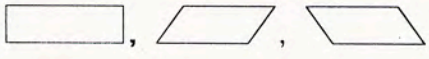
 : Automatic angle (normal condition)

 : Automatic angle (adjust of angle)
A → A′ (unscrew A, and move & rescrew to A′ by 2mm wrench)

 : Automatic angle (adjust of angle)
B → B′ (unscrew B, and move & rescrew to B′ by 2mm wrench)

※ Minute adjustment possible with both of 7mm spanner & 2mm wrench

☒ Manual angle cutting : remove air compressor and adjust angle of knife by hands.

 : Manual angle

▷ Press START button.

2. Key functions

: Function setting (Non-label auto angle : 0)

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

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

5 M/CUT : 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.

1 EXTRA : Cutting additional one.

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

4 FEED 6 FEED : to move the roller manually for mounting the material on the machine or for feeding it forwards or backwards.

SPEED 2 — Speed up (The current speed appears on the left-upside of LCD display with "%". Normal speed : 50%, Maximum speed : 100%)

8 SPEED — 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.**

← DEL : to correct wrong data.

MOTOR SW : to prevent the cutted material from clinging to the knife blade.
(This switch is installed to Model TBC-50H, TBC-50SH, TBC-50HX only.)

3. Specification

Model Name	Main Cutting Materials	Cutting Knife	Power Supply	Max. Cutting Width (Tape)	Range of Cutting Length	Cutting Q'ty/min. (Length: 50mm)	Machine Size (Net Weight)	Packing Size (Gross Weight)
TBC-50HX (Automatic Angle cutter)	Ribbon Tape	Hot	AC110/220V 50/60Hz	Straight: 45mm Oblique: 30mm	40mm~ 99,999mm	120~140 cuts	900×380×430 (26.5kg)	620×480×540 (30.7kg)

4. Caution for use

- Please keep pressure gauge (#D-11) below "2", referring left image. Because high air pressure makes heater wire damaged easily.
- 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.)
- Please contact following address for further information.

Trouble-shooting of TBC-50 series

No	Troubles		Appicable model	Causes & Measures
1	No power supply		All models	- 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	- 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	- Check if pressure plates of upper knife are too much fastened or not.
		LCD display doesn't work.	All models	- After opening the cover, check the connetion. (especially between Operation & MB board)
		All functions don't work	Al models	- Check if auto-stop device lies down. If any, raise it up.
3	Material is not cut.		Hot cutter (H, LH, SH, HX)	- Check if temperature goes up to set-degree. - Check if knife blades are even(parallel).
4	Material is cut onesidedly.		All models	- 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	- 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)	- 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)	- 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)	- 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	- Trouble in cutting motor or counting sensor → · Upper knife moves 1~3 sec. and ERROR on display. Check the connection of counting sensor. If not, exchange the counting sensor. · Upper knife doesn't move and ERROR on display. Exchange the cutting motor or drive board.
		STOP INPUT !! CHECK STOP INP!	All models	- 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	- Bad connected ROM → Press ROM by hand or connect it again. (If not, change MB board)
		ERROR CODE[065] >CHECK CODE[003]	All models	- 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	- Connect the earth cord(green) to any bolt of backside of machine.

※ A/S center :

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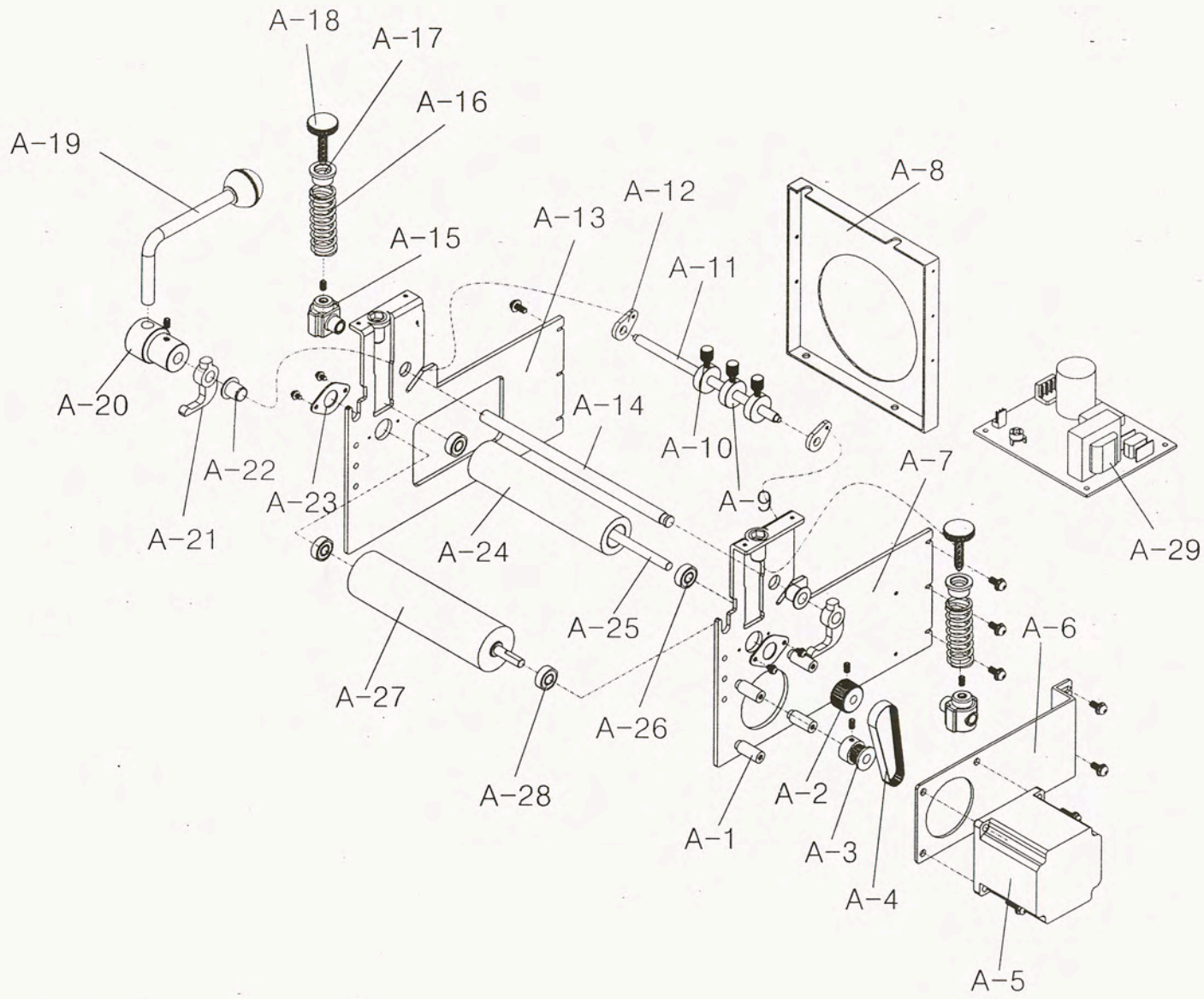
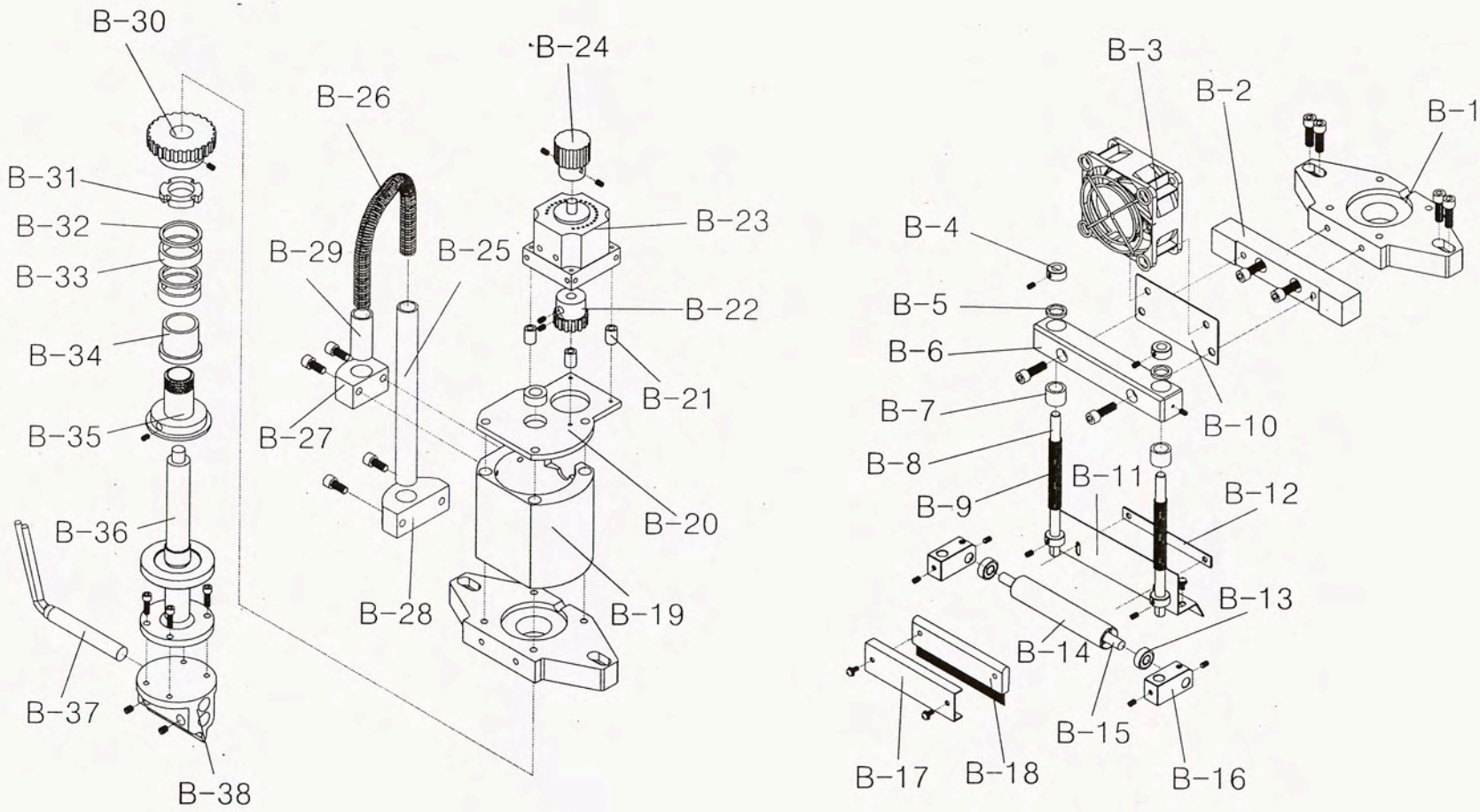
TBC-50HX Part Drawing A (Feeding Part)



TBC-50HX PART LIST A (Feeding Part)

Part No.	Description	Part No.	Description
A-1	Tie Bar of Stepping Motor	A-21	Slide Lever
A-2	Feed-timing Gear(MXL30T)	A-22	Oilless
A-3	Drive-timing Gear(MXL20T)	A-23	Bearing Cover
A-4	Timing Belt((MXL75)	A-24	Upper Roller
A-5	Stepping Motor	A-25	Upper Roller Shaft
A-6	Radiating Plate of Stepping Motor	A-26	Bearing(#696)
A-7	Right Roller Bracket	A-27	Lower Roller
A-8	Space Plate of Roller Bracket	A-28	Bearing(#696)
A-9	Guide Ring	A-29	Control circuit-board of Heater
A-10	Knob Bolt of Guide Ring		
A-11	Front-guide Shaft		
A-12	Guide-clamping Bracket		
A-13	Left-roller Bracket		
A-14	Lever Shaft		
A-15	Slide Block of Upper Roller		
A-16	Pressure-control Spring		
A-17	Pressure-control Spring Cover		
A-18	Pressure-control Bolt		
A-19	Lever		
A-20	Lever Bracket		

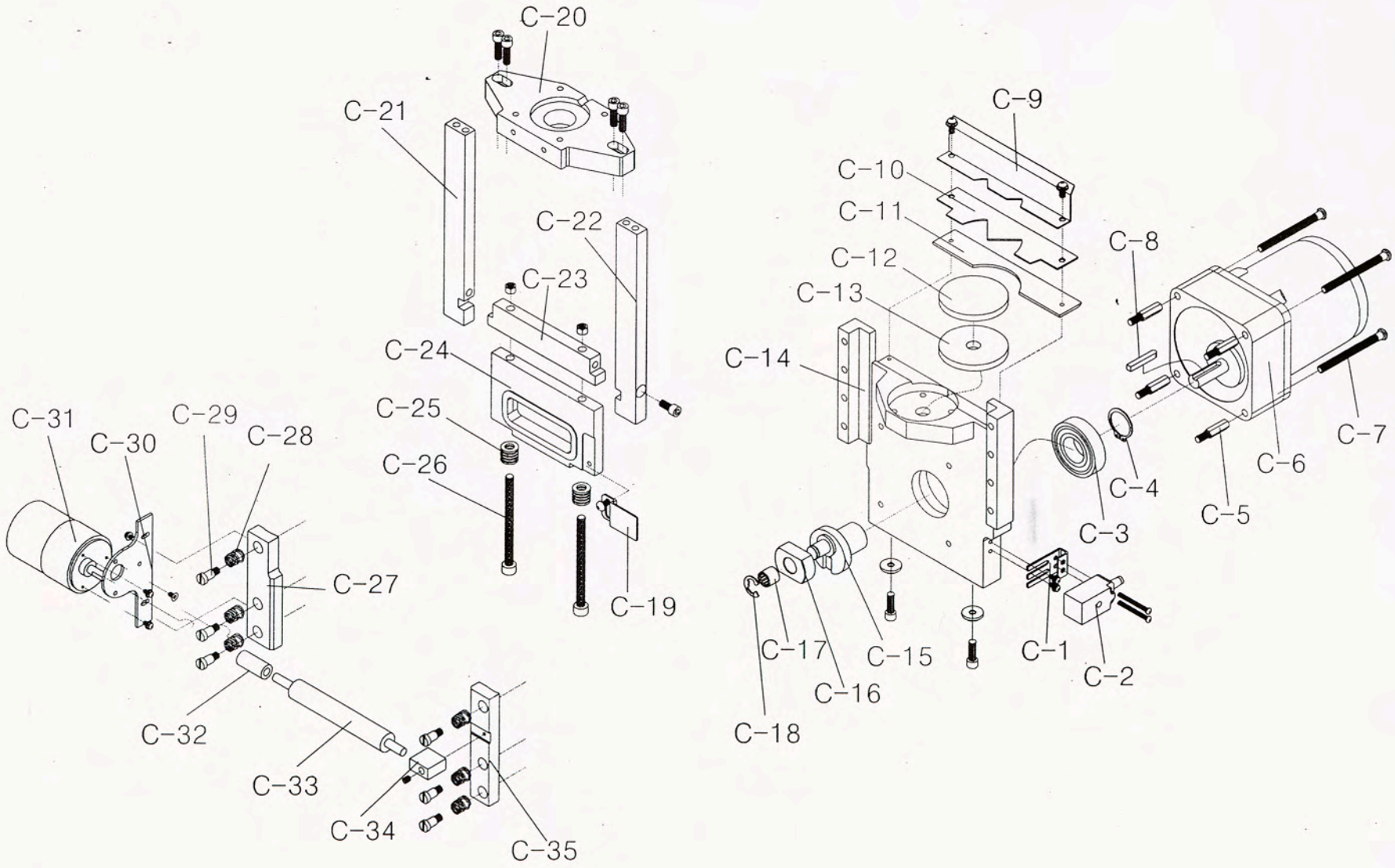
TBC-50HX Part Drawing B (Cutting Part)



TBC-50HX PART LIST B (Cutting Part)

Part No.	Description	Part No.	Description
B-1	Upper Knife Case Cover	B-21	Ring
B-2	Anti-static Bracket	B-22	Cylinder Gear
B-3	Space Bracket	B-23	Rotating Cylinder
B-4	Shaft Ring	B-24	Cylinder Clamping Ring
B-5	Shaft Rubber-bushing	B-25	Heater Wiring Pipe(A)
B-6	LM Guide	B-26	Heater Wiring Spring
B-7	LM Bearing	B-27	Pipe Bracket (upper)
B-8	Vertical Axle	B-28	Pipe Bracket (lower)
B-9	Vertical Axle Spring	B-29	Heater Wiring Pipe(B)
B-10	Fan-support Bracjet	B-30	Rotating Axle Gear
B-11	Presing Plate Cover	B-31	Commutator Set A
B-12	Control-plate Nut	B-32	Commutator Set B
B-13	Ball Bearing(#686)	B-33	Commutator Set C
B-14	Pressing Roller	B-34	Commutator Set D
B-15	Pressing Roller Shaft	B-35	Commutator Set E
B-16	Roller Clamping racket	B-36	Rotating Axle
B-17	Brush Cover	B-37	Heater
B-18	Anti-static Brush	B-38	Rotating Knife(Upper Knife)
B-19	Commutator Cover		
B-20	Rotating Cylinder Bracket		

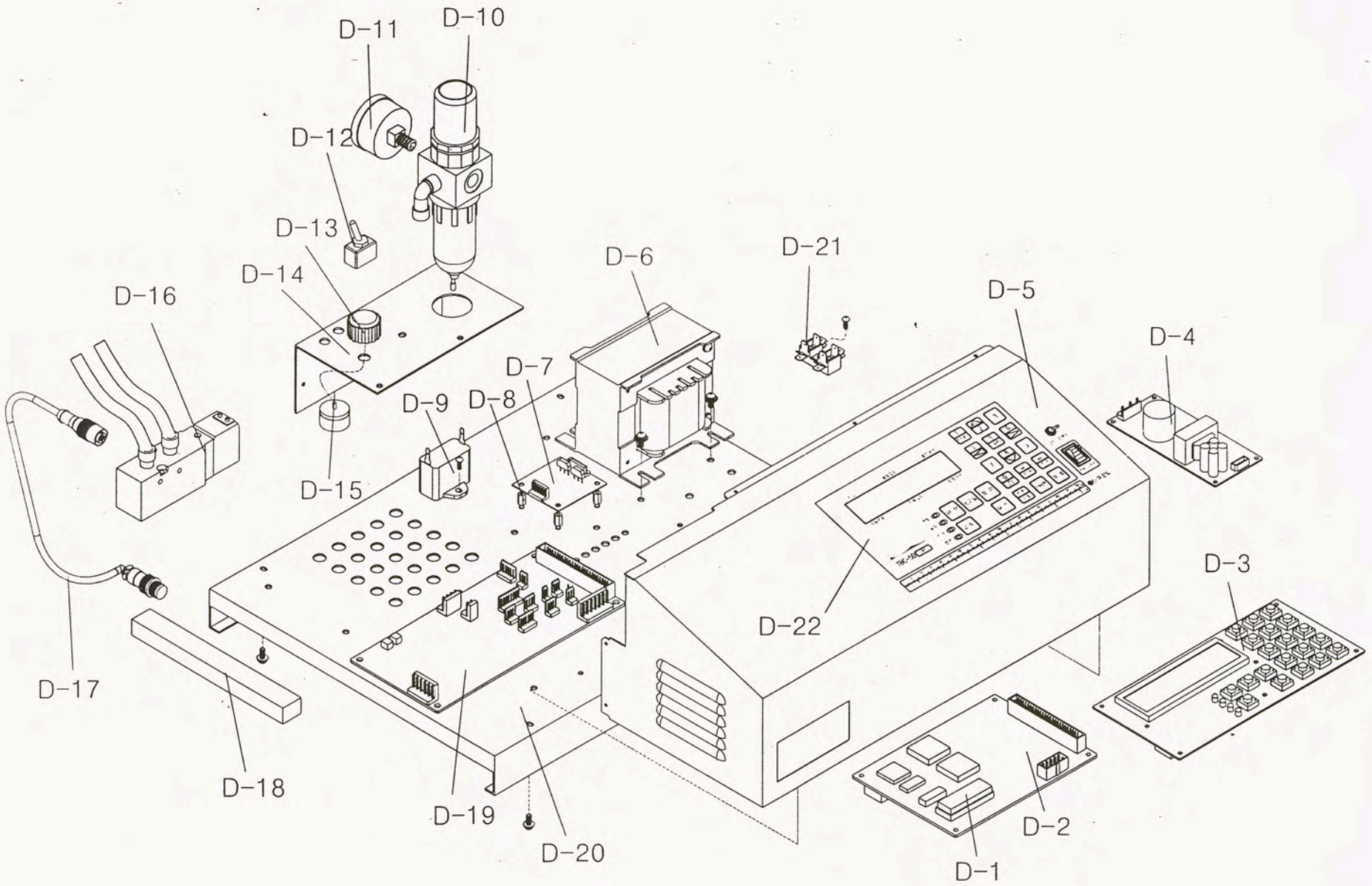
TBC-50HX Part Drawing C (Driving Part)



TBC-50HX PART LIST C (Driving Part)

Part No.	Description	Part No.	Description
C-1	Clamping Bracket	C-21	Upper Knife Case Bracker (left)
C-2	Counting Sensor	C-22	Upper Knife Case Bracker (right)
C-3	Ball Bearing(#6004)	C-23	Connecting Bracket
C-4	Snap Ring	C-24	Slide Ram
C-5	Motor Support	C-25	Flat Washer Spring
C-6	Motor & Reduction Gear	C-26	Clamping Bolt
C-7	Clamping Bolt	C-27	Pressure Plate (left)
C-8	Motor Key	C-28	Pressure Spring
C-9	Clamping Stopper Bracket	C-29	Clamping Bolt of Pressure Plate
C-10	Clamping Stopper	C-30	DC Motor Bracket
C-11	Roller Space Plate	C-31	DC Motor
C-12	Round Pressure Plate	C-32	Front Feeding Sub-roller
C-13	Urethane Plate	C-33	Front Feeding Roller
C-14	Lower Knife Case	C-34	Roller Shaft Bracket
C-15	Crank Bundle	C-35	Pressure Plate (right)
C-16	Cam		
C-17	Niddle Bearing		
C-18	E-Ring		
C-19	Counting Sensor Bracket		
C-20	Upper Knife Case Cover		

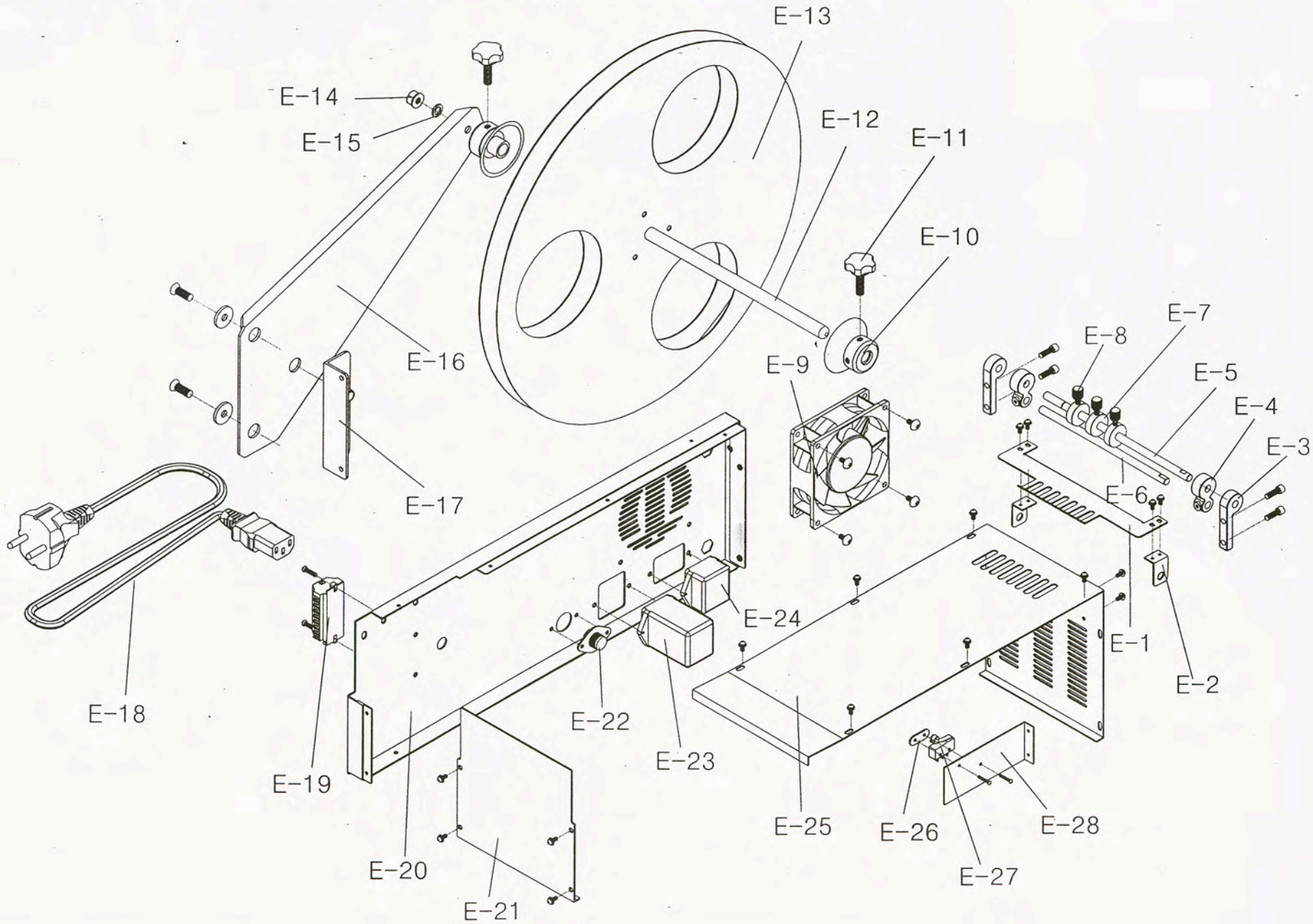
TBC-50HX Part Drawing D (Control Part)



TBC-50HX PART LIST D (Control Part)

Part No.	Description	Part No.	Description
D-1	ROM	D-21	Terminal
D-2	Control Board (MB)	D-22	Urethane Panel
D-3	Operation Board (OP)		
D-4	SMPS (Power Supply, SP)		
D-5	Control Cover		
D-6	Transformer		
D-7	Rectification Board		
D-8	Board Support		
D-9	Consenser		
D-10	Filter & Regulator		
D-11	Pressure Gauge		
D-12	Toggle Switch		
D-13	Volume Knob		
D-14	Solenoid Cover		
D-15	Temperature Volume		
D-16	Solenoid Valve		
D-17	Sensor Connector		
D-18	Sponge		
D-19	Drive Board (DR)		
D-20	Base		

TBC-50HX Part Drawing E (Other Part)



TBC-50HX PART LIST E (Other Part)

Part No.	Description	Part No.	Description
E-1	Existence Detector	E-21	Front Cover
E-2	Clamping Bolt	E-22	Sensor Connector Bracket
E-3	Rear Guide-pin Bracket	E-23	AC Connection Jack (IN-PUT)
E-4	Rear Tension-guide Block	E-24	AC Connection Jack (OUT-PUT)
E-5	Rear Guide Shaft	E-25	Upper-guide Plate
E-6	Rear Tension Shaft	E-26	Plate Nut
E-7	Guide Ring	E-27	Micro Limit Switch
E-8	Knob Bolt	E-28	Limit Switch Bracket
E-9	Cooling Fan		
E-10	Holder		
E-11	Holder Knob Bolt		
E-12	Roll-hanger Shaft		
E-13	Roll-hanger Wheel		
E-14	Clamping Nut		
E-15	Washer		
E-16	Roll-hanger Bar		
E-17	Roll-hanger Bar Bracket		
E-18	Power Cord		
E-19	Separated Terminal		
E-20	Left Cover		