SERVICE MANUAL
&
PARTS CATALOGUE

E-100
E-100P
E-100M

3. 2002.

GENERAL INFORMATION

This service manual has been compiled for explaining repair procedures of this model.
This was produced based on up-to-date product specifications at the time of issue, but there may have been changes of specifications for the purpose of improvements.
Contact manufacturer or local sales company for information concerning such changes.

Brother Industries, Ltd.
Nagoya, Japan

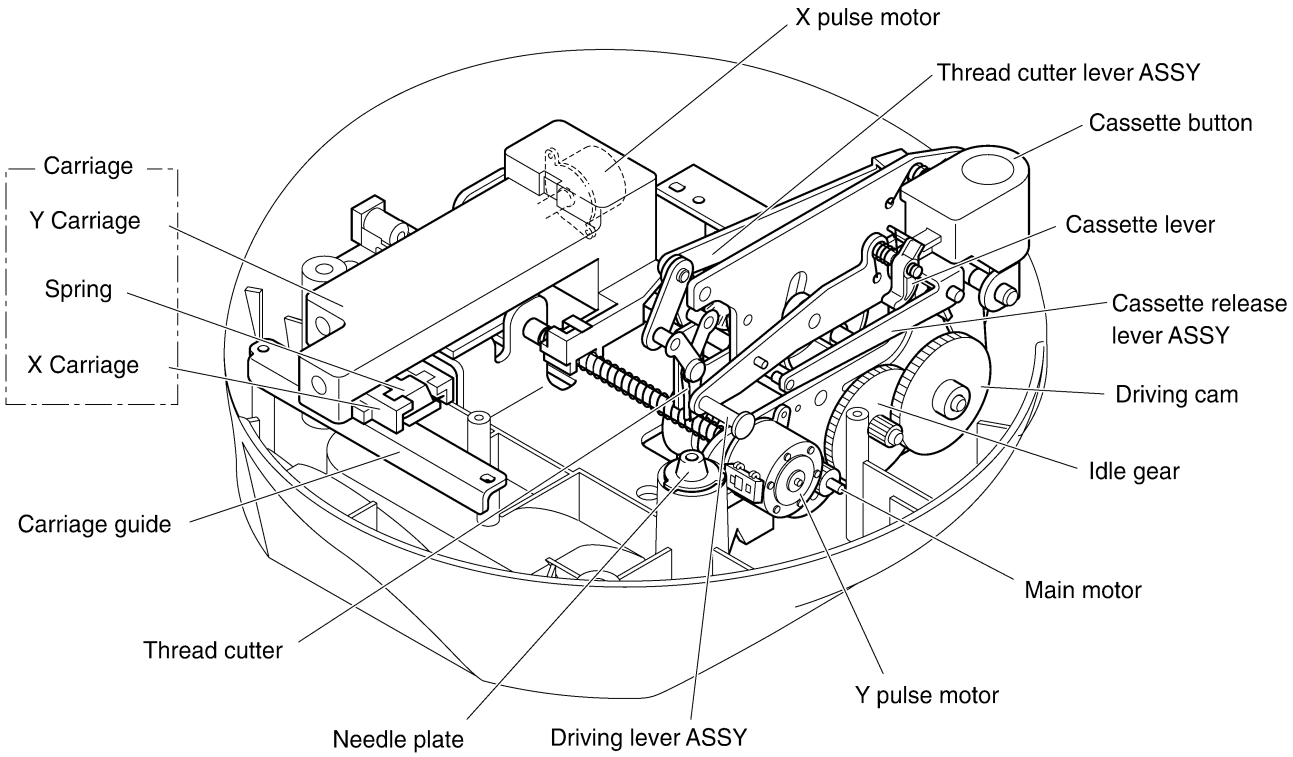
CONTENTS

CAUTION

1. Always use rubber gloves when handling printed circuit boards and never touch the metal portion of a printed circuit board with bare hands.
2. Keep your body earthed in order to avoid generating static electricity.
3. Pack printed circuit boards in aluminum foil and avoid subjecting them to any form of impact during storage or transportation.
4. Do not touch or damage the metal portion of a printed circuit board with a screwdriver or any other tool while making repairs or the like.

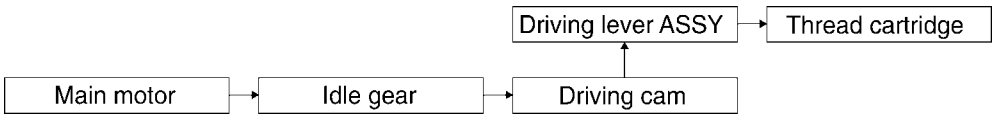
I. PRINCIPAL MECHANISMS

1. TECHNICAL DIAGRAMS

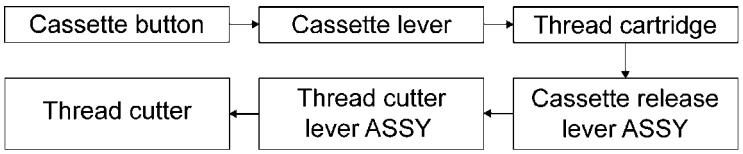


2. POWER TRANSMISSION CHART

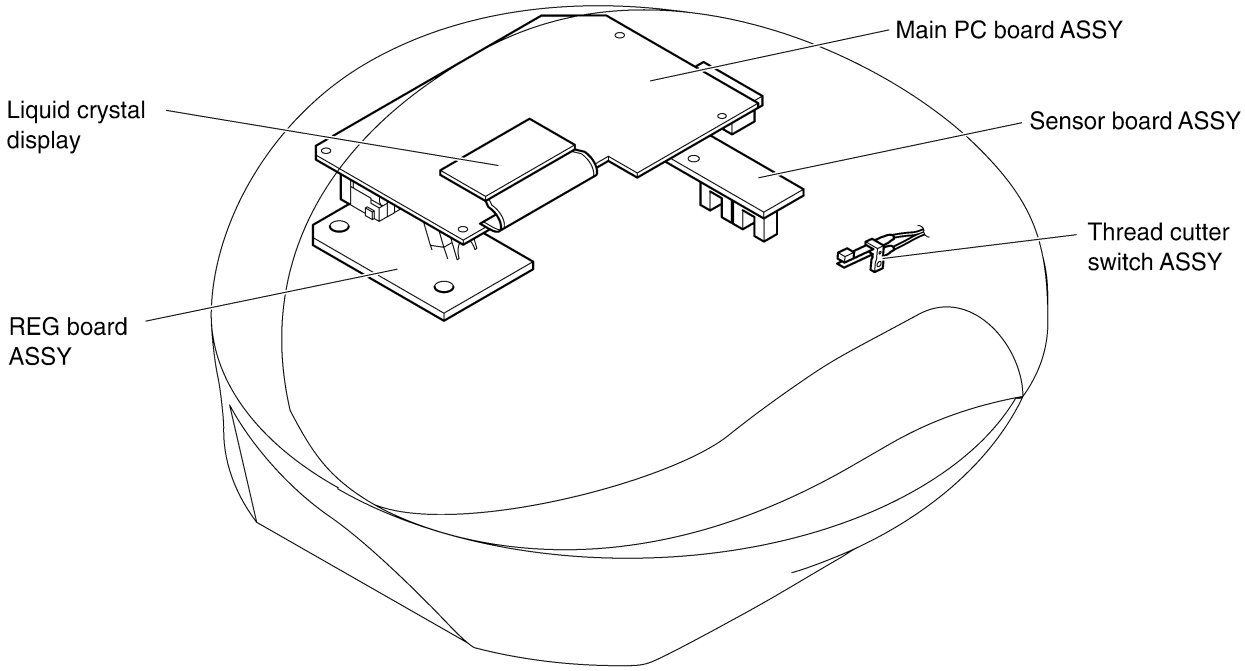
(A) Generating mechanism for the needle (thread cartridge)



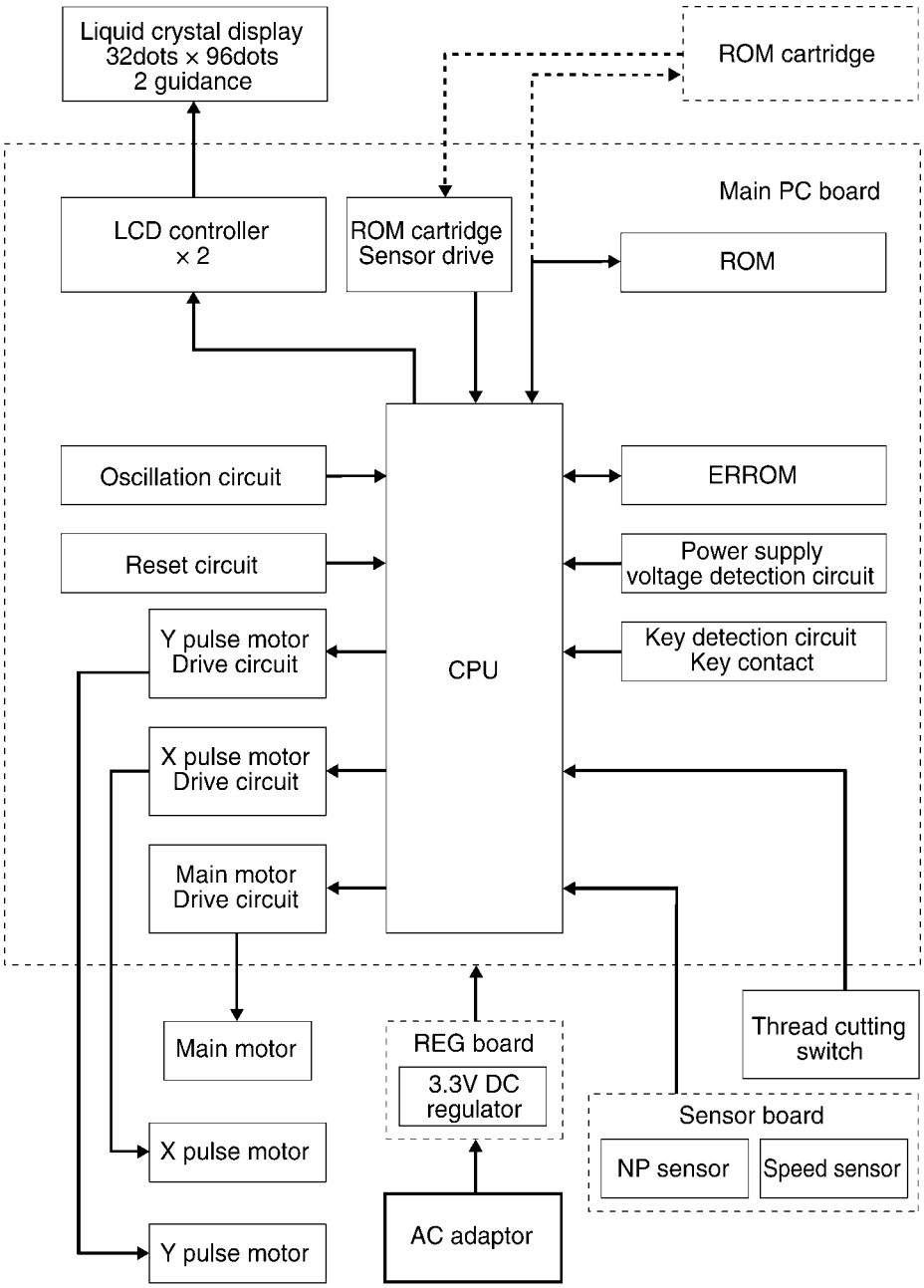
(B) Thread cartridge installation/removal and thread-cutting mechanism



3. WIRING DIAGRAM OF ELECTRONIC COMPONENTS



4. CONTROL SYSTEM BLOCK DIAGRAM



5. FUNCTIONS OF ELECTRONIC COMPONENTS

AC adaptor .....Used to supply power to the unit.
Be sure to use the specially designed AC adaptor

(Power) key.....Used to turn the unit on and off.
When the power supplied to the unit is cut, unplug the AC adaptor from the electrical outlet.

(Remove the embroidery frame) key.....Moves the embroidery frame to a position from where it can be removed.

(Start/Stop) key.....Used to start and stop embroidering.

, , & (Cursor) keys .....Press these keys to make a choice (for example, to find the pattern or letter that you want).

(OK) key .....Press this key to confirm the choice (for example, to select the chosen pattern or letter).

(Return) key.....Press this key to return to the previous screen.

Thread cutting switch .....Detects if a thread cartridge is installed, since there is a mechanism that cuts the thread when the thread cartridge is removed.

NP sensor.....Detects the timing for moving the embroidery frame and the stop position of the needle in the thread cartridge.

Speed sensor .....Detects the rotational speed of the main motor.

Main motor .....Drives the thread cartridge and forms the stitches.
Determines the sewing speed according to the stitch length.

X,Y pulse motor.....Drives the embroidery frame.

REG PC board .....Produces circuit power from power supplied by the AC adaptor.

LCD (Liquid crystal display).....Displays the machine status, operating procedures and the embroidery pattern.

II. DISASSEMBLY/REASSEMBLY AND INSPECTION PROCEDURES

1. DISASSEMBLING THE OUTER PARTS AND MAIN PARTS

1. With test mode 2, move the carriage to its removal position.

Selecting test mode 2

(1) Enter the test mode by holding down ▶ and ◎ while pressing ◎, then releasing ▶ and ◎.

(2) Press OK (to initialize) . | T-1
MESH PTN | appears.

(3) Press ▲. | T-2
DECOMPOSE POSS | appears.

(4) Press OK. | DECOMPOSE POSS | appears.

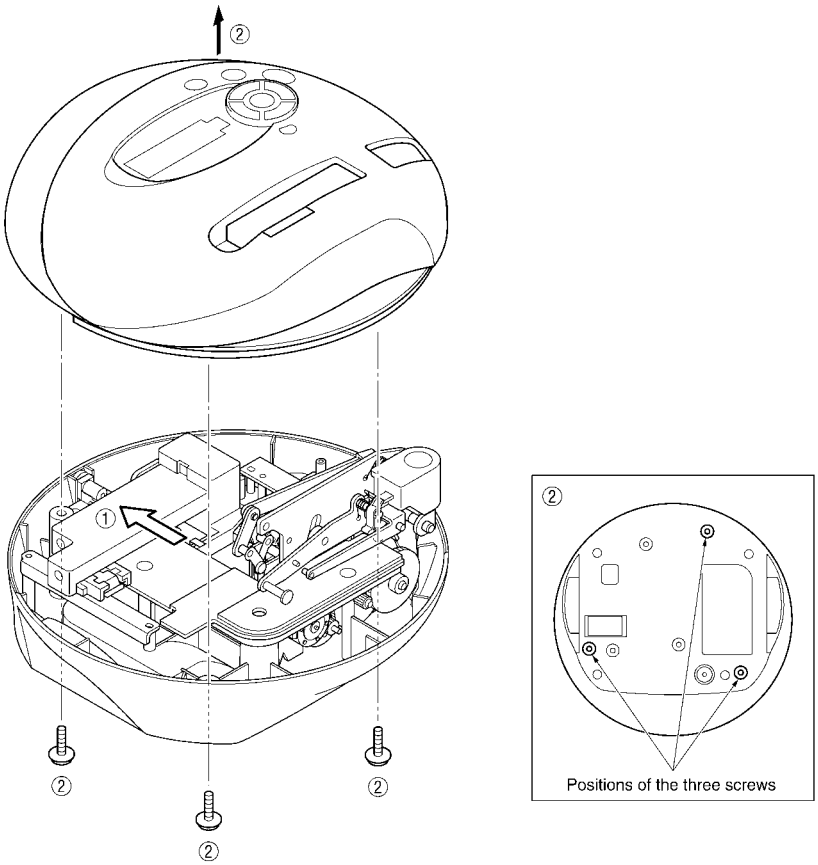
(5) Press ≫ to move the carriage to its removal position (innermost position).

(6) Press ◎ to turn off the unit.

2. Remove the three screws securing the under cover assy (refer to the bottom-view diagram below), and then lift off the upper cover assy.
3. Disconnect the six connectors, and then remove the upper cover assy.

Note

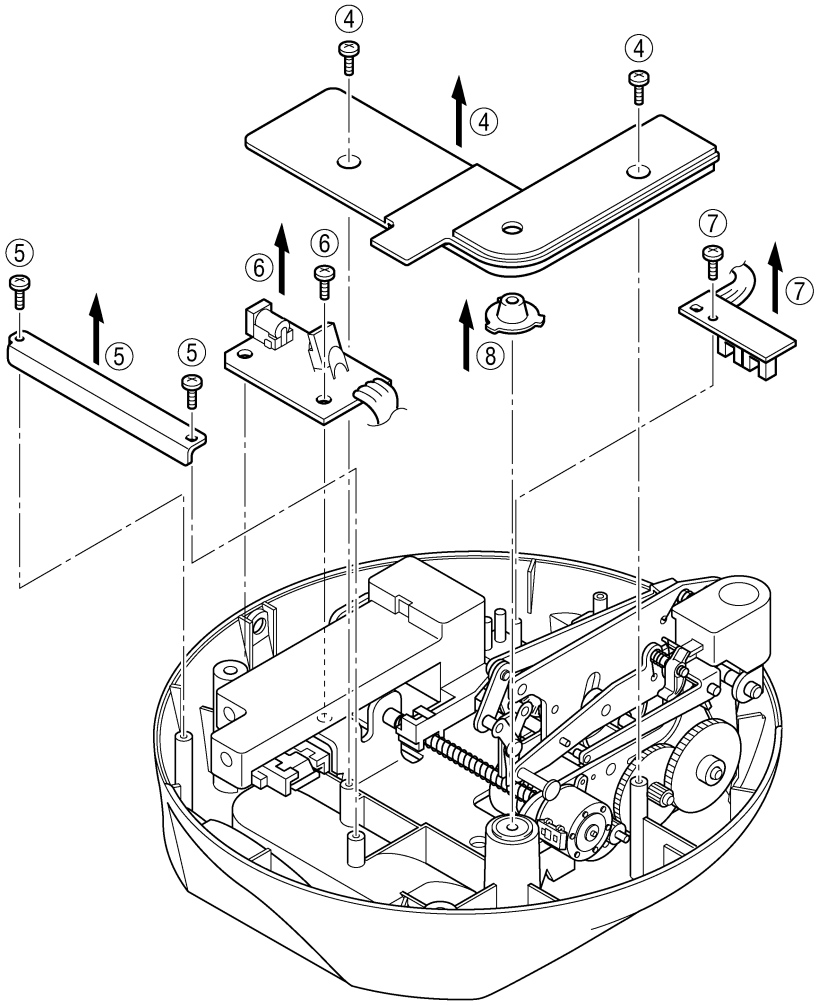
1. If the carriage is not moved to its removal position, the upper cover assy cannot be removed



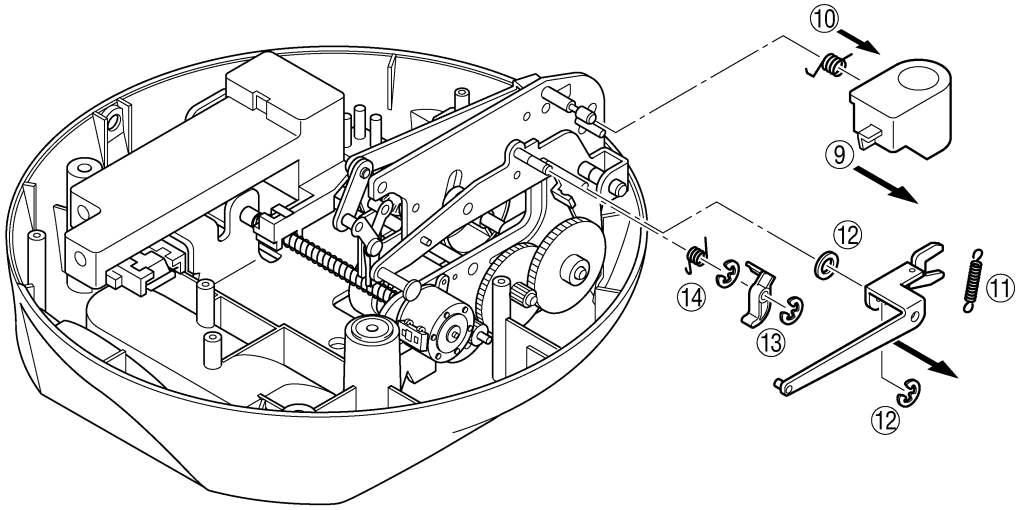
4. Remove the two screws securing the needle plate cover, and then remove the needle plate cover.
5. Remove the two screws securing the carriage guide, and then remove the carriage guide.
6. Remove the screw securing the REG board assy, and then remove the REG board assy.
7. Remove the screw securing the sensor board assy, and then remove the sensor board assy.
8. Remove the needle plate.

Disassembly Points

6. Since the carriage can freely be moved as soon as the carriage guide is removed, moving the carriage so the screw for the REG board assy can be seen allows the REG board assy to be removed easily.



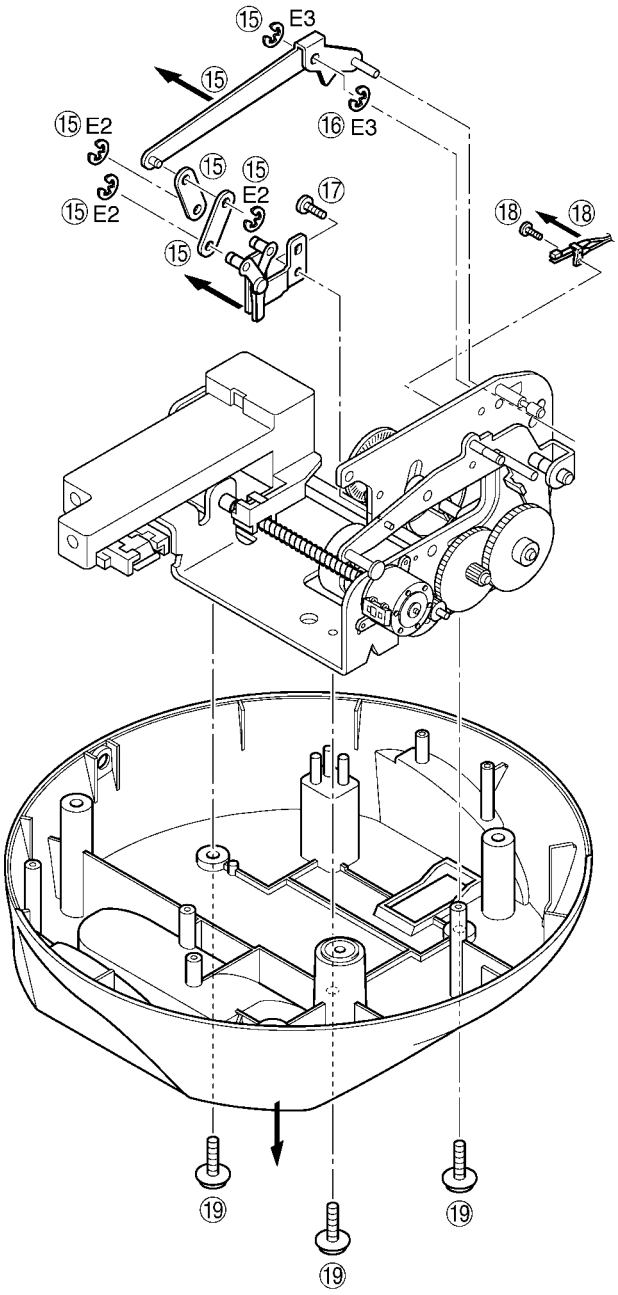
9. Pull the cassette button forward, and when it is partially removed, turn it counterclockwise to remove it from the cassette button spring.
10. Remove the cassette button spring.
11. Remove the cassette release lever spring.
12. Remove the retaining ring, and then remove the cassette release lever assy and the washer.
13. Remove the retaining ring, and then remove the cassette lever.
14. Remove the retaining ring, and then remove the cassette lever spring.



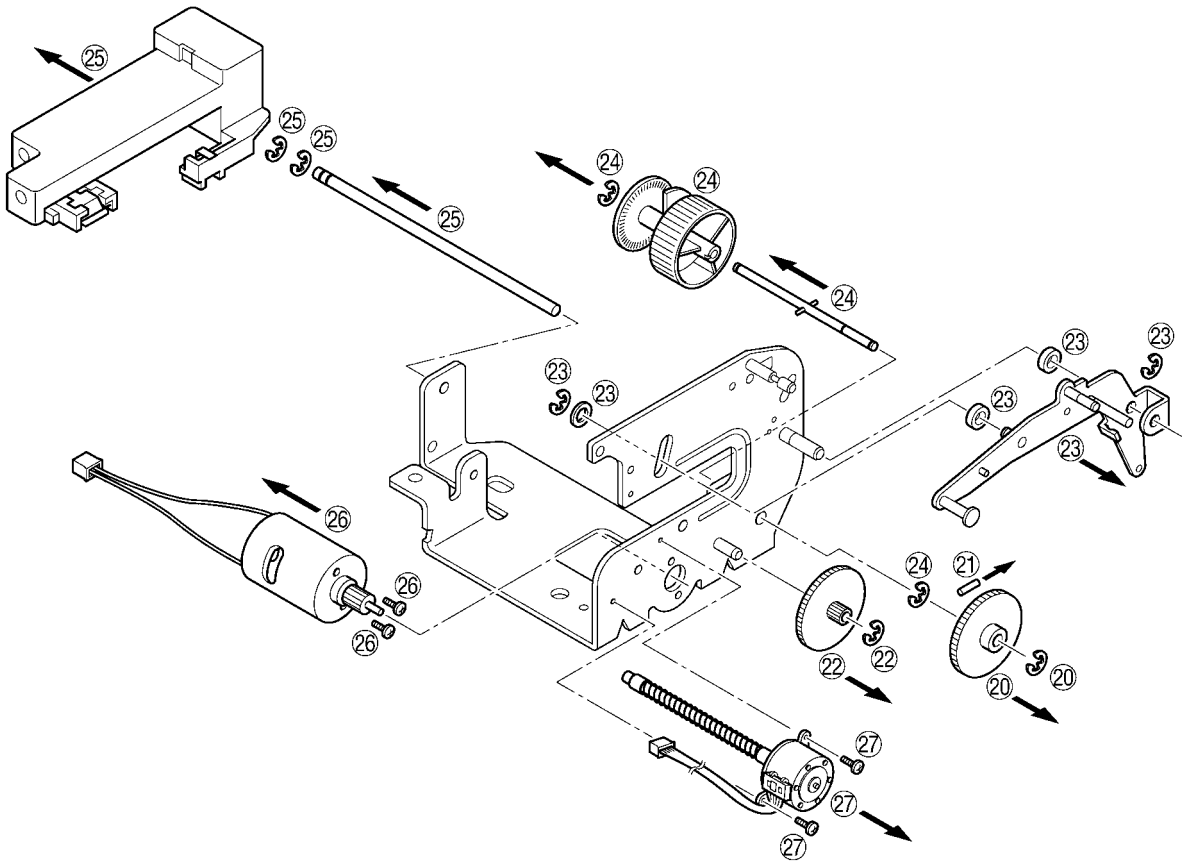
15. Remove the three E2 retaining rings and the E3 retaining ring, and then remove the thread cutter lever assy, and the two thread cutter links.
16. Remove the E3 retaining ring.
17. Remove the screw, and then remove the thread cutter assy.
18. Remove the screw, and then remove the thread cutter switch assy.
19. Remove the three screws from the bottom of the under cover assy, and then remove the under cover assy.

Disassembly Points

16. Since the E3 retaining ring is only used to position the thread cutter lever assy, not removing the retaining ring does not prevent other parts from being removed.



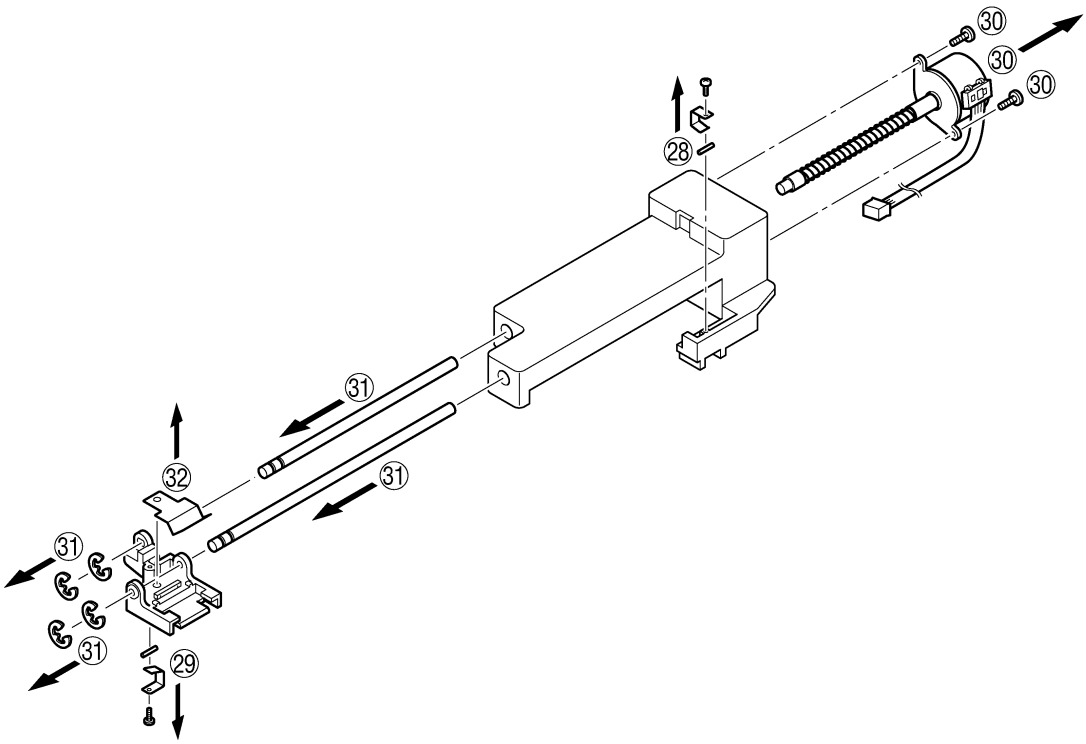
20. Remove the retaining ring, and then remove the driving cam.
21. Pull the pin from the shaft.
22. Remove the retaining ring, and then remove the idle gear.
23. Remove the two retaining rings, and then remove the driving lever assy, the two collars, and the polyester slider.
24. Remove the two retaining rings, and then remove the driving cam shaft assy and the shutter.
25. Remove the two retaining rings, and then remove the Y guide shaft and the carriage.
26. Remove (cut) the band, remove the two screws, and then remove the main motor assy.
27. Remove the two screws, and then remove the Y pulse motor assy.



28. Remove the screw, and then remove the spring and the pin (for the Y pulse motor assy).
29. Remove the screw, and then remove the spring and the pin (for the X pulse motor assy).
30. Remove the two screws, and then remove the X pulse motor assy.
31. Remove the four retaining rings, and then remove the X guide shaft L and the X guide shaft S.
32. Remove the spring from the X carriage.

Note

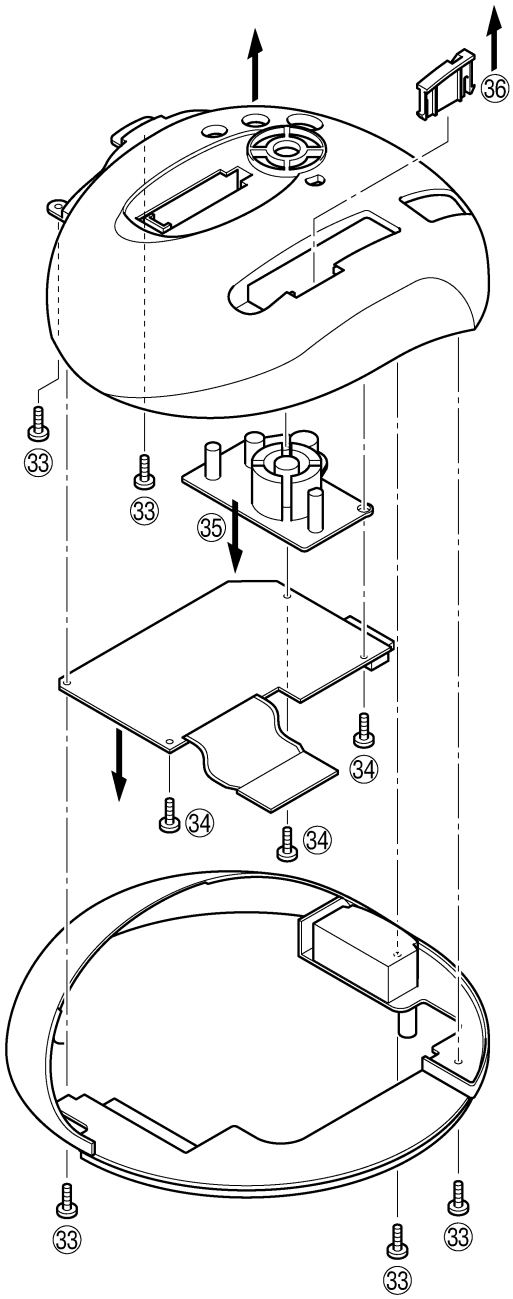
32. The spring fits onto the tab on the X carriage. Be careful not to deform the spring while removing it.



33. Remove the four screws and the main PC board assy screw, and then remove the middle cover.
34. Remove the three screws, and then while pressing on the composite spring section of the upper cover assy, remove the liquid crystal display. Next, remove the main PC board assy.
35. Remove the operation keys.
36. Remove the cassette guide from the upper cover assy.

Disassembly Points

36. Since the cassette guide is snapped into place, release the hooks on the guide to remove it.



2. ASSEMBLING THE OUTER PARTS AND MAIN PARTS

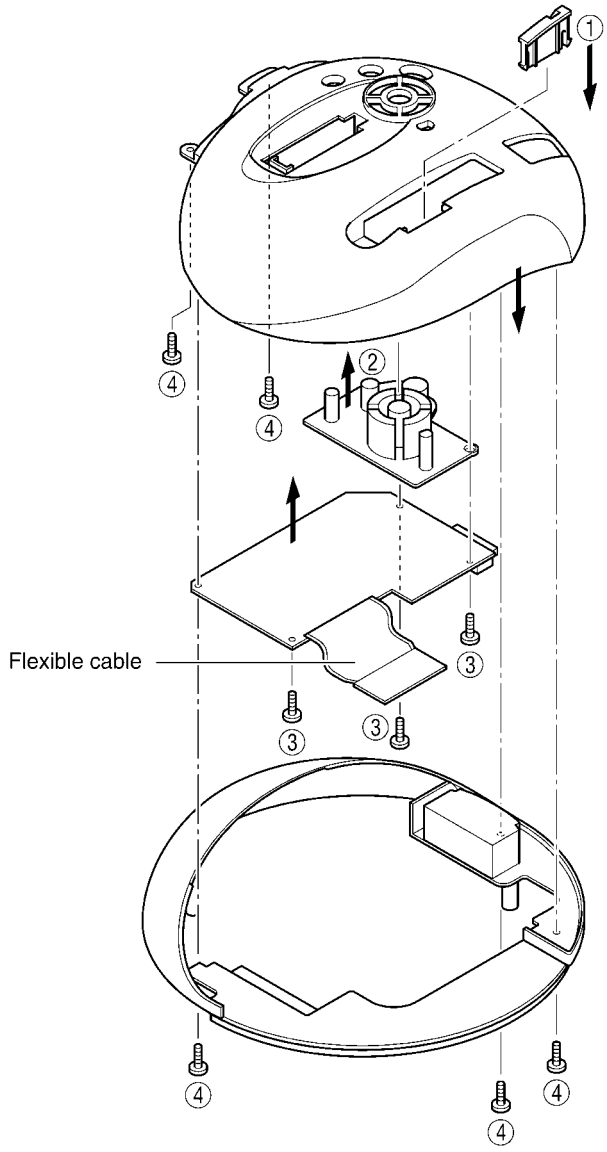
1. Attach the cassette guide to the upper cover assy.
2. Install the operation keys.
3. While pressing on the composite spring section of the upper cover assy, attach the liquid crystal display, and then secure the main PC board assy with the three screws.
4. Secure the middle cover with the four screws and the main PC board assy screw.

Note

2. Make sure that each button correctly fits into its hole in the upper cover assy Make sure that the keys are not inserted into bosses for the screws of the main PC board assy and be sure not to push too strongly.
2. Since the black parts of the operation keys are the contact points, make sure that it is not covered with dust or grease.
3. Since the flexible cable breaks easily, be extremely careful when handling it.

3.4. The main PC board assy screw and the middle cover screws have different lengths, so be sure to install them in their correct locations.

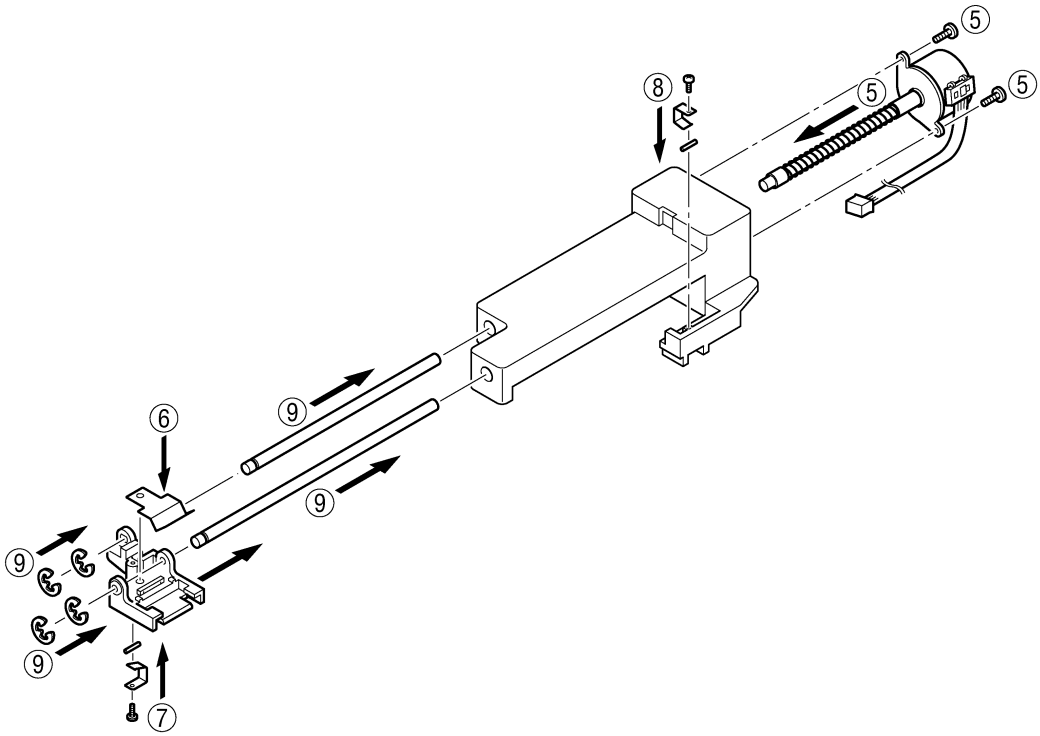
4. After installation, check that each switch clicks.



5. Install the X pulse motor assy and secure it with the two screws.
6. Attach the spring to the X carriage.
7. Install the spring and the pin, and then secure them with the screw (for the X pulse motor assy).
8. Install the spring and the pin, and then secure them with the screw (for the Y pulse motor assy).
9. Pass the X guide shaft L and the X guide shaft S through the holes in the X carriage, and then secure the guide shafts with the four retaining rings.

Note

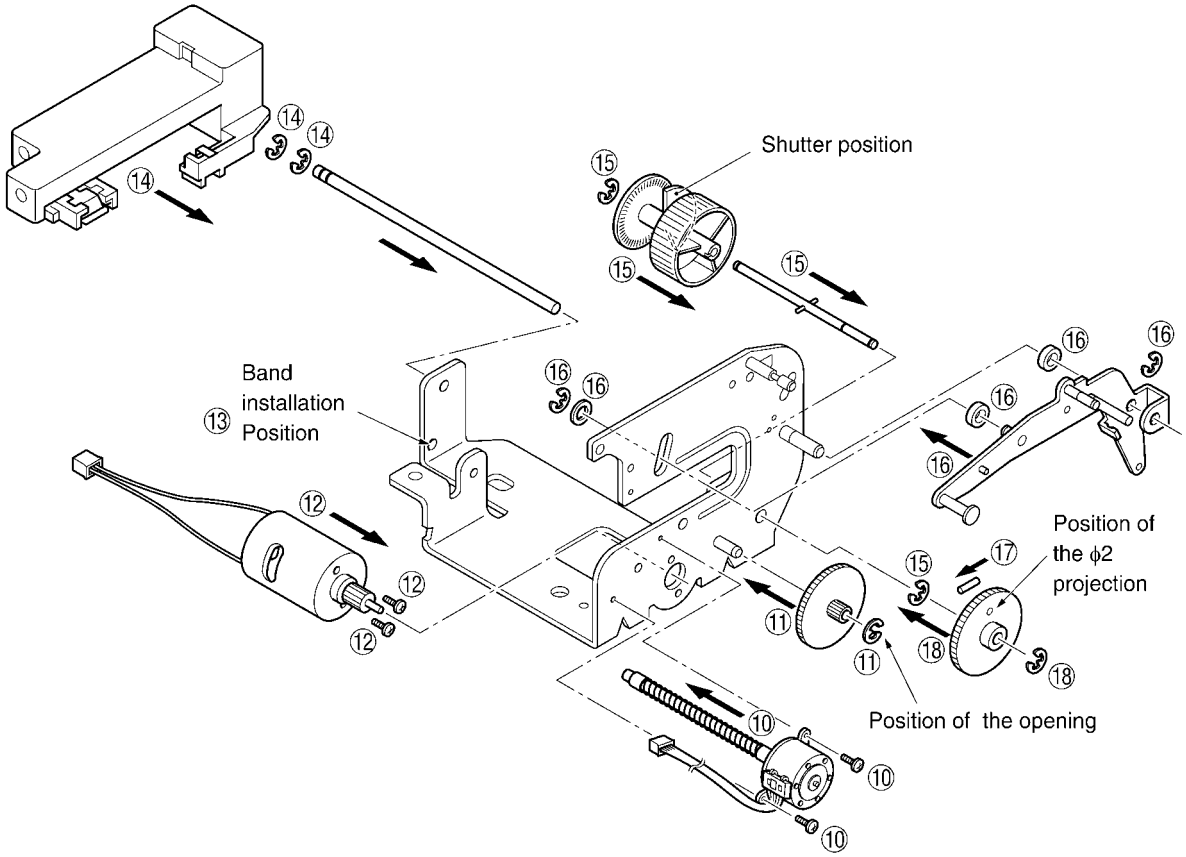
6. The spring fits onto the tab on the X carriage. Be careful not to deform the spring while installing it.



10. Secure the Y pulse motor assy with the two screws.
11. Secure the idle gear with the retaining ring.
12. Secure the main motor assy with the two screws. (Position the main motor assy so that the red lead wire is almost at the top.)
13. Secure the lead wires for the main motor assy and the Y pulse motor assy with the band. (LEAD WIRE ARRANGEMENT (page 2-15); For details, refer to the instructions of wiring.)
14. Pass the Y guide shaft through the hole in the Y carriage, and then secure the guide shaft with the two retaining rings.
15. Secure the shutter to the driving cam shaft assy with the retaining ring, and then secure the driving cam shaft assy to the base plate assy with the retaining ring.
16. Secure the driving lever assy, the two collars, and the polyester slider to the base plate assy with the two retaining rings. (The driving lever assy should be moved carefully.)
17. Insert the pin into the driving cam shaft.
18. Secure the driving cam to the driving cam shaft with the retaining ring.

Assembly Points

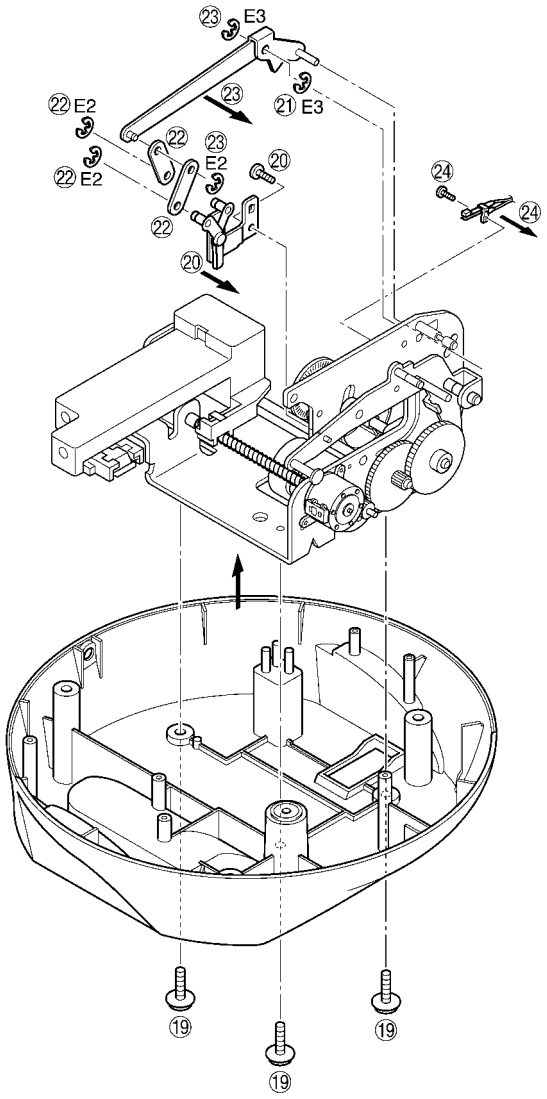
11. If the driving cam that is installed next does not fit because of the position of the retaining ring, move the opening of the retaining ring toward the driving cam.
12. Using the screws, move the position of the main motor assy to adjust the backlash between the motor gear and the idle gear. (backlash of 0.1 to 0.2 mm)
18. When installing the driving cam, position the shutter at the right, and then align the ϕ2 projection on the driving cam at the top as shown in the illustration.



19. From the bottom of the under cover assy, secure the base plate assy with the three screws.
20. Secure the thread cutter assy to the base plate assy with the screw.
21. Attach the E3 retaining ring to the thread cutter lever shaft of the base plate assy.
22. Secure the two thread cutter links to the thread cutter assy with the two E2 retaining rings.
23. Secure the thread cutter lever assy to the thread cutter links with the E2 retaining ring, and then secure it to the thread cutter lever shaft with the E3 retaining ring.
24. Secure the thread cutter switch assy to the base plate assy with the screw.

Assembly Points

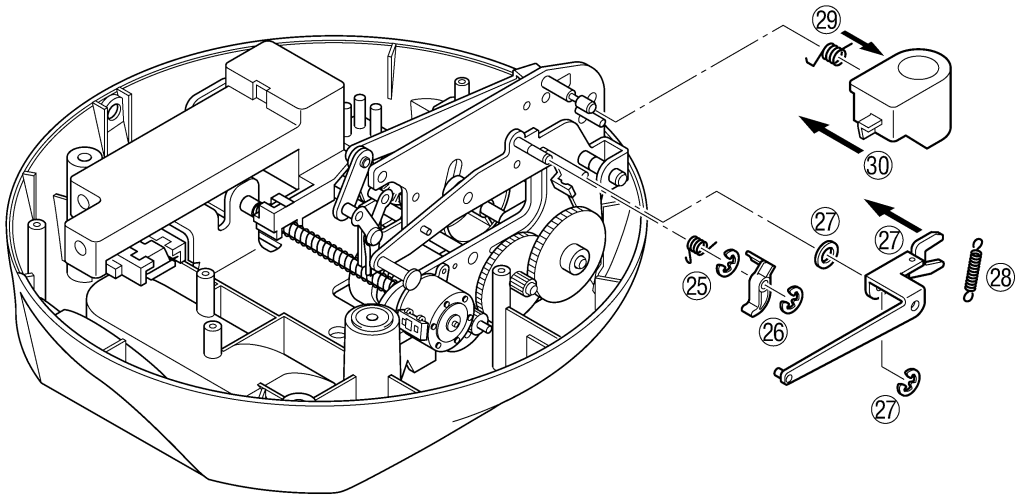
24. It is necessary to adjust the installation angle of the thread cutter switch assy. Adjust it so that the switch is off when the thread cutter lever is lowered, and the switch is on when the lever is slowly brought back up. (The amount that it is pressed after the switch is turned on is 1 to 2 mm.)

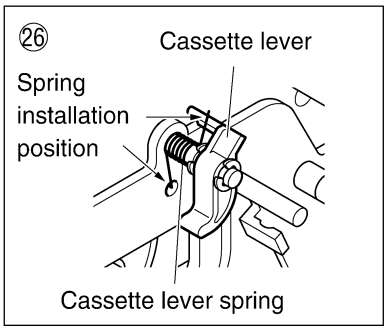


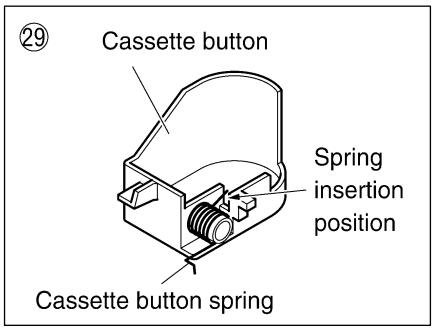
25. Pass the cassette lever spring over the lever shaft, and then attach it with the retaining ring.
26. Pass the cassette lever over the lever shaft, hook the cassette lever spring onto the cassette lever (as shown in the illustration below), and then attach it with the retaining ring.
27. Secure the washer and the cassette release lever assy to the driving lever assy with the retaining ring.
28. Install the cassette release lever spring.
29. Fit the cassette button spring into the notch in the cassette button. (Refer to the illustration below).
30. Turn the wheel of the shutter to move the driving lever assy and cassette release lever assy to their lowest points. Attach the cassette button (with cassette button spring attached). (Refer to the illustration below.)

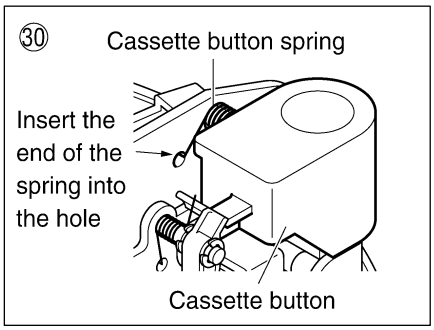
Assembly Points

28. When the cassette release lever is lowered and released, it should return to its previous position under the force of the spring. At that time, check that the thread cutter operates smoothly.
30. Check that the cassette lever assy operates smoothly when the wheel of the shutter is turned and the cassette button is pressed when the driving lever assy and cassette release lever assy are raised.





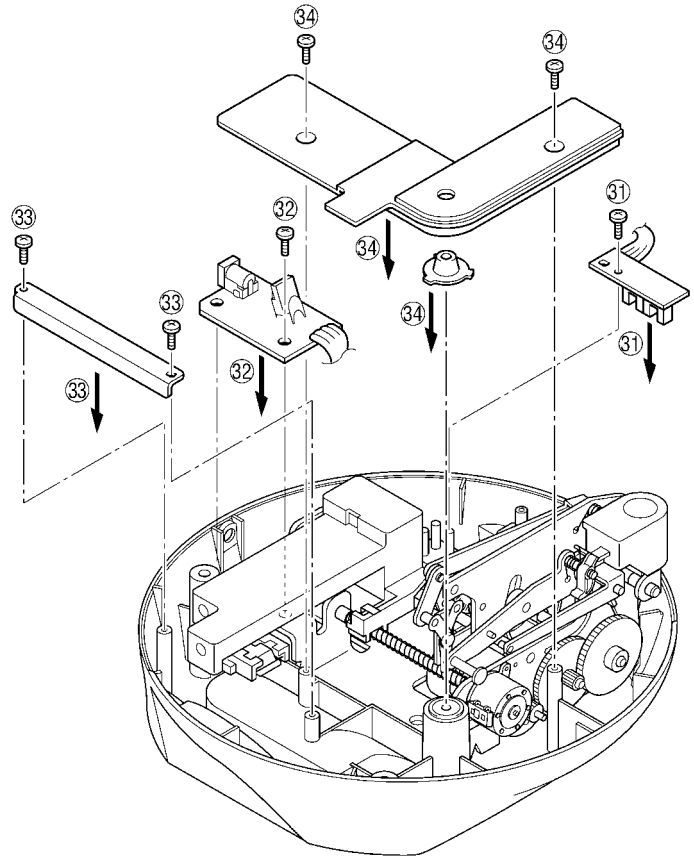


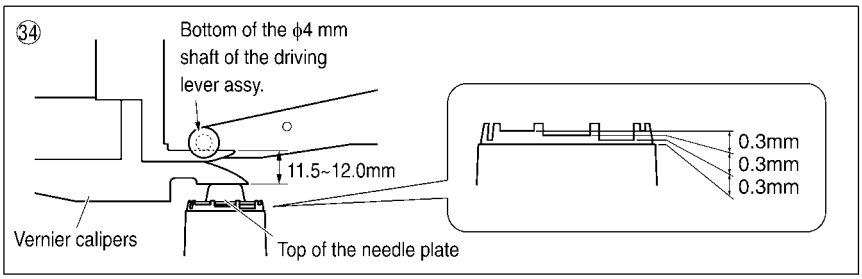


31. Secure the sensor board assy with the screw.
32. Secure the REG board assy with the screw. (LEAD WIRE ARRANGEMENT (page 2-15); For details, refer to the instructions of wiring.)
33. Position the Y carriage at the innermost position, and then secure the carriage guide with the two screws.
34. Secure the needle plate cover (with the needle plate attached) with the two screws.

Assembly Points

34. When installing the needle plate, the height must be adjusted. Using the notches on the bottom of the needle plate, the height can be adjusted to one of three levels, each at 0.3 mm. Turn the wheel, and then with the driving lever assy at its lowest position, adjust the height of the needle plate so that the clearance between the top of the needle plate and the bottom of the ϕ4 mm shaft of the driving lever assy is between 11.5 and 12.0 mm when measured with vernier calipers. (Refer to the illustration below.)

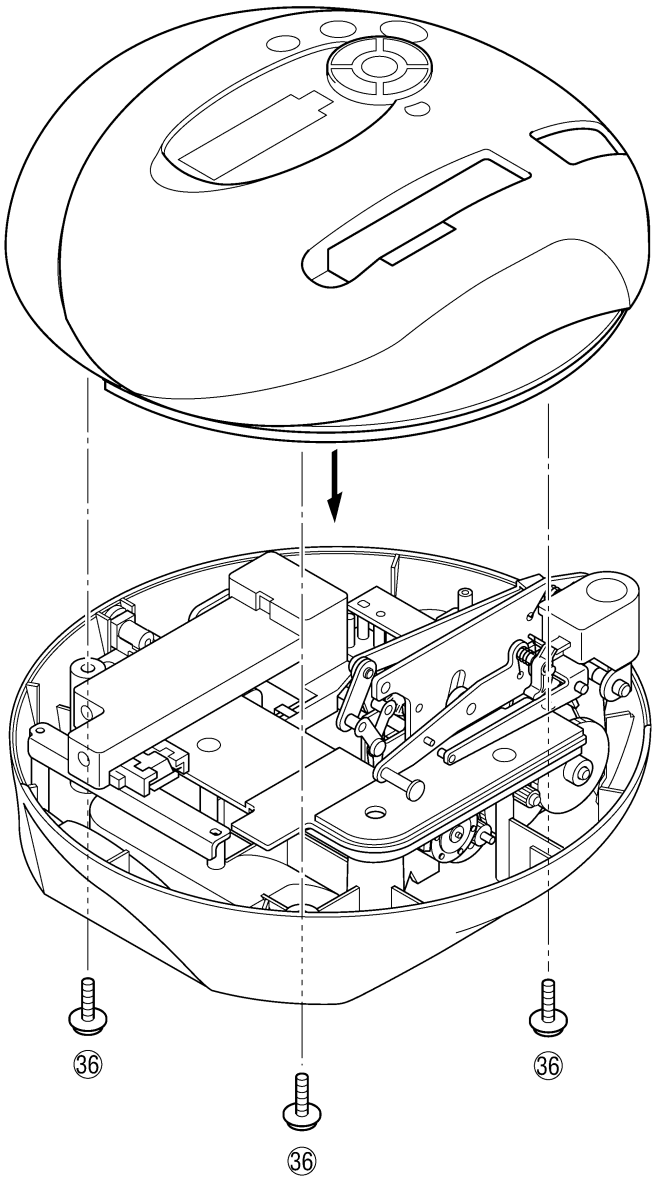


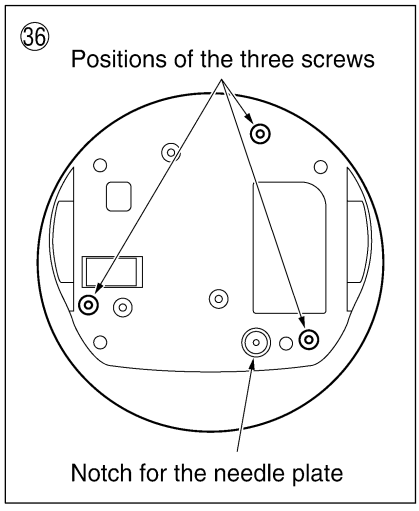


35. Insert the 6 connectors into the upper cover assy.
36. Secure the upper cover assy to the under cover assy with the three screws. Refer to the bottom-view diagram below. (LEAD WIRE ARRANGEMENT (page 2-15); For details, refer to the instructions of wiring.)

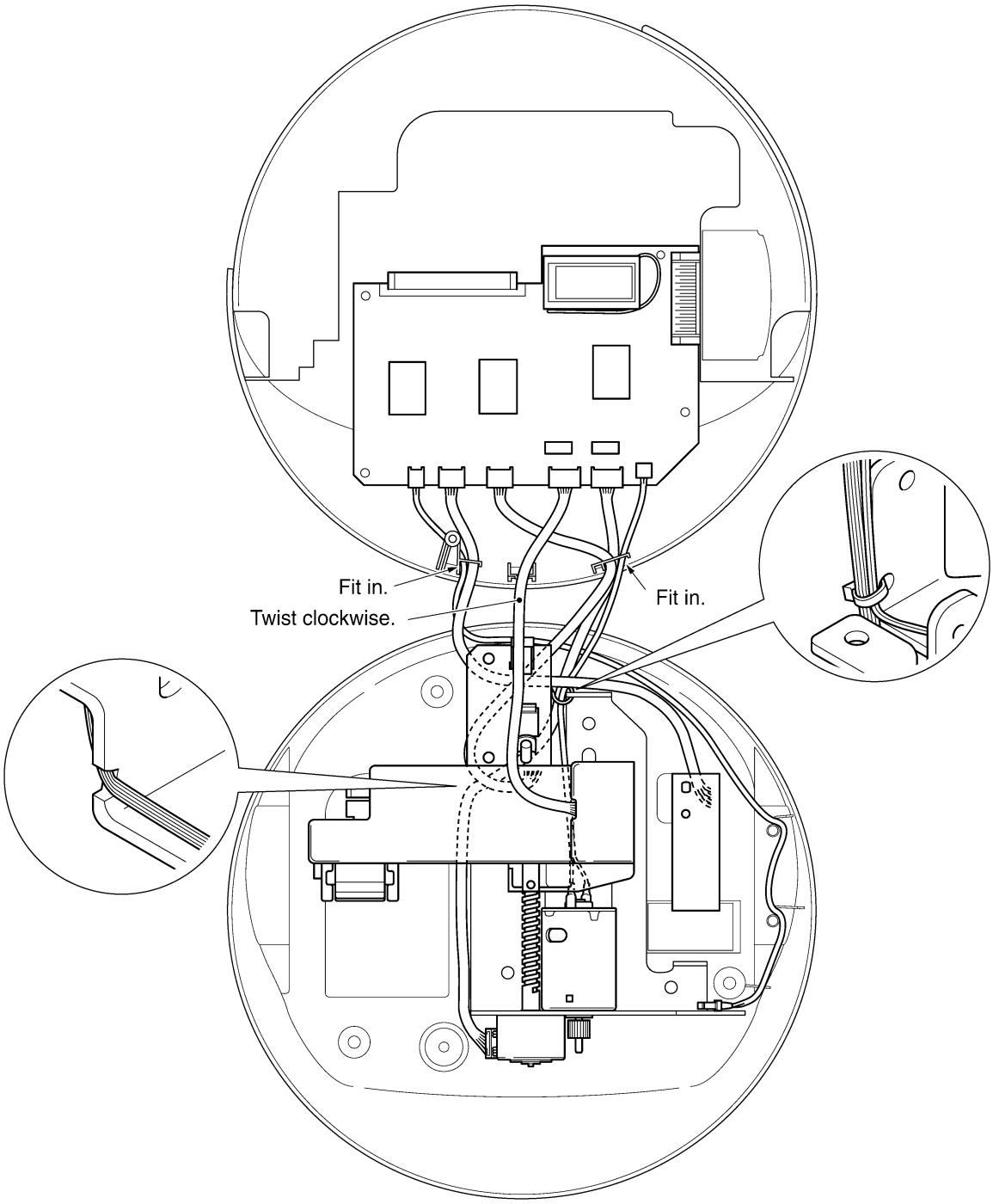
Note

36. Do not insert a screw into the notch for the needle plate.





3. LEAD WIRE ARRNGEMENT (For details, refer to the instructions of wiring.)

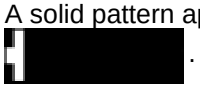


4. POST-REPAIRS INSPECTION PROCEDURES

(1) Selecting a test mode

1) Enter the test mode by holding down ▶ and ⊜ while pressing ◎, then releasing ▶ and ⊜.
2) Press OK (to initialize).
3) T-1 MESH PTM appears.
4) Use ▲ and ▼ to select the test mode.

(2) Checking the LCD (liquid crystal display)

1) Select test mode 4 T-4 LCD CHECK.
2) Press OK.
3) Vertical lines appear and the pile indicator lights up  .
4) Press ▶.
5) Horizontal lines appear and the ROM cassette indicator lights up  .
6) Press ▶.
7) A mesh pattern appears  .
8) Press ▶.
9) A solid pattern appears and both the pile indicator and the ROM cassette indicator light up  .
10) Press ◀ to return to each pattern.
11) Press ⊜ to return to the beginning of test mode 4 T-4 LCD CHECK .(test mode selection).

(3) Checking each button

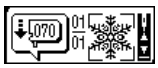
1) Press ◎, and then check that  appears.
2) Press OK, and then check that the embroidery frame moves to a position from where it can be removed, and the left side of the display is highlighted  after the animation is displayed.
3) Press ▶, and then check that the right side of the display is highlighted  .
4) Press ◀, and then check that the left side of the display is highlighted again  .
5) Press OK, and then check that pattern 01 is highlighted  .

6) Press [OK], and then check that the screen for inserting the thread cartridge  appears after the animation is displayed.

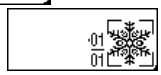
7) Press [▲], and then check that the screen indicating that the needle can be moved  appears.

8) Press [⊜], and then check that  appears again.

9) Press [▼], and then check that the screen allowing you to select an embroidery pattern or a stored pattern  appears.

10) Press [⊜], and then check that the screen for inserting the thread cartridge  appears again.

11) Insert a thread cartridge, and then check that  appears.

12) Press [≫], and then check that embroidering starts and  appears.

13) Press [≫] at anytime to stop embroidering.

14) Press the cassette button to eject the thread cartridge.

15) Press [◎] to move the embroidery frame to a position from where it can be removed.

16) Press [◎] to clear the display and turn off the unit.

* Since the preset patterns differ according to the model, the displayed icons and icon order shown here may differ from those displayed by the machine.

(4) Checking the SP sensor, the NP sensor and the thread cutter switch

1) The SP sensor and the NP sensor are working properly if sewing starts up smoothly when [≫] is pressed in step 12 of section (3) (If sewing stops and an error appears, the speed sensor or NP sensor is malfunctioning.) and if the needle stays within the thread cartridge when sewing is stopped by pressing [≫] in step 13 of section (3)

2) The thread cutter switch is OK if  appears after a thread cartridge is inserted in step 11 of section (3).
(If the display does not change, the thread cutter is malfunctioning.)

(5) Checking the embroidering positions of side A and side B of the embroidery frame

1) Select test mode 7 

.

2) Press [OK]. (The carriage moves to its standard position.)

3) Insert a thread cartridge.

4) Place a pre-cut design fabric in the embroidery frame, and then insert the embroidery frame with side B facing up.

5) Press [≫]. (The needle makes one stitch.)

6) Press [▲] once. (The embroidery frame is moved 1 pitch inside.)

7) Repeat steps 5 and 6 to sew about 15 stitches.

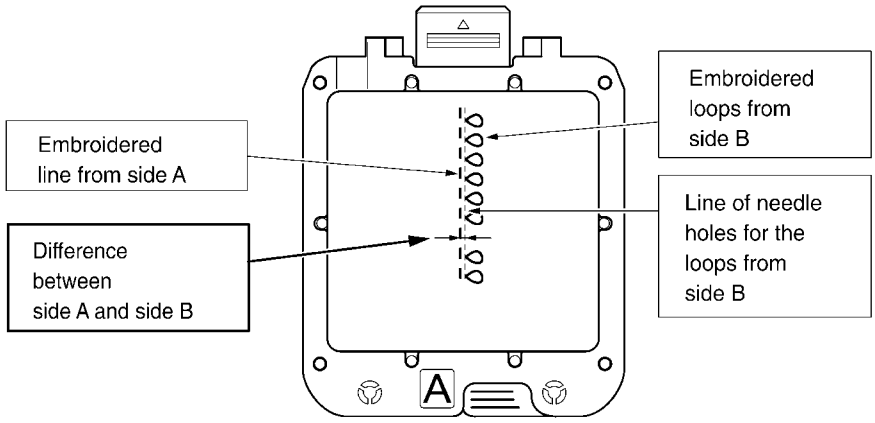
8) Press [▲] a number of times to move the embroidery frame to the innermost position, so that the thread can be cut.

9) Press the cassette button to cut the thread.

10) Press [▼] 20 times to move the embroidery frame fully to the front, and then remove the embroidery frame.

11) Insert the embroidery frame with side A facing up.

12) Install a different thread cartridge.
13) Repeat steps 5 through 10, and then check the embroidering position of sides A and B of the design fabric in the embroidery frame.
14) Press ⊜ to return to test mode 7 [T-7 / A-B POS SET] .
15) Check by moving the embroidery frame mount to the inside, then looking at side A to see the difference in the embroidered lines for sides A and B.



16) The line from side A should be within 1 mm to the left of the line of needle holes for the loops for side B.
If the difference does not meet this specification, it will have to be adjusted as described below.

(6) Adjusting the embroidering positions of side A and side B of the embroidery frame

1) Perform this procedure only if the difference between side A and side B does not meet the specification checked in (5).
2) If the line from side A is more than 1 mm to the left of the line of needle holes for the loops for side B, measure that difference, and then perform adjustment steps 3 through 11. If the line from side A is to the right of the line of needle holes for the loops for side B, measure that difference, and then perform adjustment steps 11 through 20.
3) If the line from side A is more than 1 mm to the left of the line of needle holes for the loops for side B, subtract 0.5 mm from that difference, and then divide the result by 2 to get the correction value.
(For example, if the difference is 1.5, the correction value is (1.5 mm - 0.5 mm)/2=0.5 mm.)
4) Select test mode 7 [T-7 / A-B POS SET] .
5) Press OK .
6) The value previously adjusted appears (for example, 00 [A-B POS SET / 00]).
(The carriage moves to its standard position.)
7) Since the embroidered position for side A is too far to the left and must be moved to the right, press ▶ to adjust the position. For each press of ▶, the position is moved 0.1 mm and the displayed value changes in steps of 01.
(For example, for a correction value of 0.5 mm, press ▶ five times so that [A-B POS SET / 05] appears.)

8) Press OK. A-B POS SET / SET OK? appears.

9) Press OK. A-B POS SET / 05 appears .

10) Press ⊜ to return to test mode 7 T-7 / A-B POS SET .

11) Perform procedure (5) again to check the embroidering positions of side A and side B of the embroidery frame.

12) If the line from side A is to the right of the line of needle holes for the loops for side B, add 0.5 mm to that difference, and then divide the sum by 2 to get the correction value.
(For example, if the difference is 0.7, the correction value is (0.7 mm + 0.5 mm)/2=0.6 mm.)

13) Select test mode 7 T-7 / A-B POS SET .

14) Press OK.

15) The value previously adjusted appears (for example, 00 A-B POS SET / 00).
(The carriage moves to its standard position.)

16) Since the embroidered position for side A is too far to the right and must be moved to the left, press ◂ to adjust the position. For each press of ◂, the position is moved 0.1 mm and the displayed value changes in steps of 01 .
(For example, for a correction value of 0.6 mm, press ◂ six times so that A-B POS SET / -06 appears.)

17) Press OK. A-B POS SET / SET OK appears.

18) Press OK. A-B POS SET / -06 appears.

19) Press ⊜ to return to test mode 7 T-7 / A-B POS SET .

20) Perform procedure (5) again to check the embroidering positions of side A and side B of the embroidery frame.

(7) Check the embroidering and thread-cutting

1) Turn on the machine in the normal condition.
2) Press OK
3) Select the apple pattern (domestic) or the rose pattern (overseas) from the flower patterns.
4) Insert the embroidery frame, and press ≫ to begin embroidering.
5) After embroidering is finished, press the cassette button to remove the thread cartridge. (Make sure that the thread is cut.)
6) Follow the instructions that appear on the display of the machine to finish the embroidery.
(After embroidering each color, check that the thread is cut when the cassette button is pressed.)
7) After embroidering is finished, press the cassette button to remove the thread cartridge.
(Make sure that the thread is cut and that the embroidery frame moves to a position from where it can be removed.)
8) Remove the embroidery frame and check that there is no upper thread looping, skipped stitching or shifted patterns.

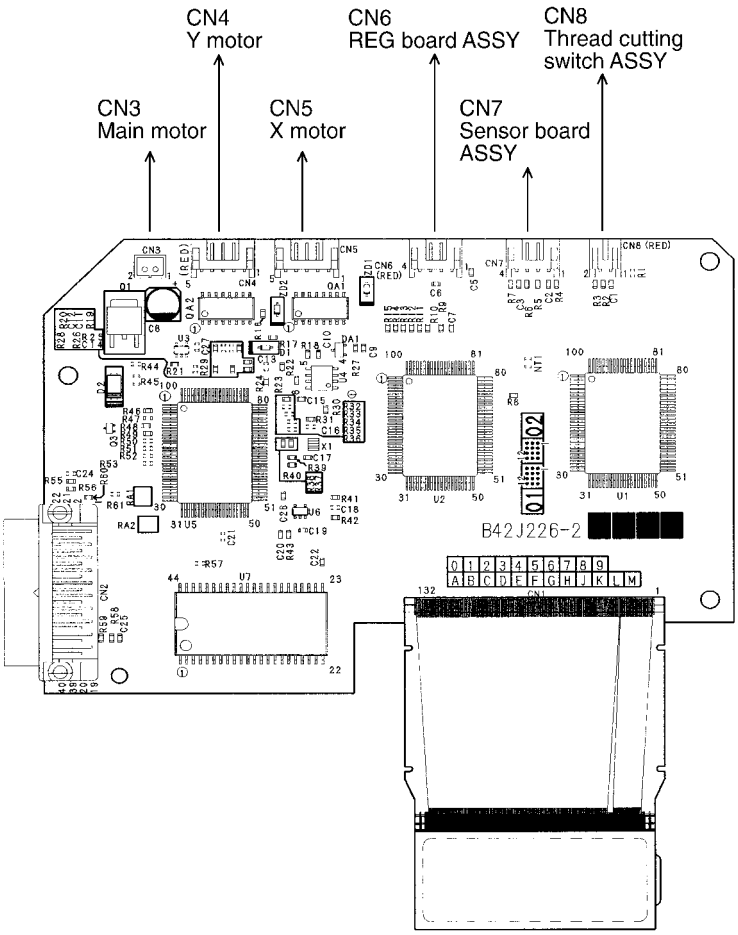
III. HOW TO ADJUST ELECTRONIC ELEMENTS

* Before measuring the resistance, be sure to unplug the AC adaptor from the unit and disconnect the connector being measured from the main PC board assy.
* For points to be checked, refer to the diagrams of the PC boards.

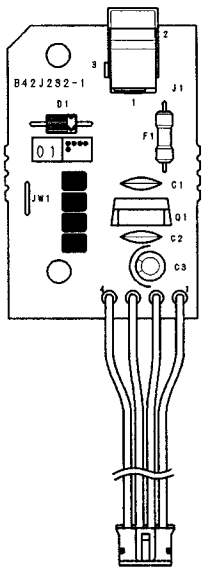
PROBLEM	CHECK	REMEDY
1. The machine does not come on, even after ⏻ is pressed.	1) Is the specially designed AC adaptor being used?	1) Use the specially designed AC adaptor.
	2) With the AC adaptor plugged into an electrical outlet and unplugged from the unit, is the voltage between the inside and the outside of the plug between DC 10.5 V and 14 V?	2) Replace the specially designed AC adaptor.
	3) Is the resistance between both ends of F1 on the REG board assy less than 1Ω?	3) Replace the REG board assy. (However, since F1 is a fuse, correct the defect that caused the fuse to blow, and then replace the PC board.)
	4) After disconnecting the lead wire connector (CN6) for the REG board assy from the main PC board assy, is the voltage between pins 2 and 3 DC 3.3 V?	4) Replace the REG board assy.
	5) Is there no dust or other foreign matter on the contact points for the ⏻ operation key and the contact points for the main PC board?	5) Remove the dust and other foreign matter from the contact points. (Be sure not to damage the contact points while removing the dust and other foreign matter.)
	6) Others	6) Replace the main PC board assy.
2. When the unit is turned on, a system error is displayed.		1) Replace the main PC board assy.
3. The embroidery frame does not move.	1) With the AC adaptor plugged into an electrical outlet and unplugged from the unit, is the voltage between the inside and the outside of the plug between DC 10.5 V and 14 V?	1) Replace the specially designed AC adaptor.
	2) After disconnecting the lead wire connector (CN6) for the REG board assy. from the main PC board assy, is the voltage between pins 1 and 4 between DC 10.5 V and 14 V?	2) Replace the REG board assy.
	3) Others	3) Replace the main PC board assy.
4. A pattern cannot be selected.	1) After checking the function of each operation key with test mode 5, is there no dust or other foreign matter on the contact points for any operation key that is not functioning and on the contact points for the keys at the main PC board?	1) Remove the dust and other foreign matter from the contact points. (Be sure not to damage the contact points while removing the dust and other foreign matter.)
	2) Others	2) Replace the main PC board assy.
5. Embroidering does not start.	1) After checking the function of ⏩ with test mode 5, is there no dust or other foreign matter on the contact point for that key and on the key's contact point of the main PC board?	1) Remove the dust and other foreign matter from the contact points. (Be sure not to damage the contact points while removing the dust and other foreign matter.)
	2) Is the resistance between the terminals of the lead wire connector (CN3) of the main motor between 3Ω and 12Ω?	2) Replace the main motor assy.
	3) With the AC adaptor plugged into an electrical outlet and unplugged from the unit, is the voltage between the inside and the outside of the plug between DC 10.5 V and 14 V?	3) Replace the specially designed AC adaptor.
	4) After disconnecting the lead wire connector (CN6) for the REG board assy from the main PC board assy, is the voltage between pins 1 and 4 between DC 10.5 V and 14 V?	4) Replace the REG board assy.
	5) Is the resistance between the terminals of the lead wire connector for the thread cutter assy ∞ when the thread cutter lever is pressed (when a thread cartridge is installed)?	5) Replace the thread cutter assy or correct its installation.

5. Embroidering does not start.	6) With the unit turned on, manually turn the wheel slowly, and then check that each potential between pins 2 and 4 and between pins 3 and 4 of CN7 on the main PC board alternately changes between 0 V ← → 3.3 V. 7) Others	6) Replace the sensor board assy. 7) Replace the main PC board assy.
6. The pattern is shifted or the embroidery frame does not move correctly.	1) Is the resistance between pin 5 of the lead wire connector (CN4 or CN5) of the X pulse motor or the Y pulse motor and any other pin between 27Ω and 33Ω? 2) With the AC adaptor plugged into an electrical outlet and unplugged from the unit, is the voltage between the inside and the outside of the plug between DC 10.5 V and 14 V? 3) After disconnecting the lead wire connector (CN6) for the REG board assy from the main PC board assy, is the voltage between pins 1 and 4 between DC 10.5 V and 14 V? 4) Others	1) Replace either the X pulse motor or the Y pulse motor. 2) Replace the specially designed AC adaptor. 3) Replace the REG board assy. 4) Replace the main PC board assy.
7. Nothing appears on the LCD (liquid crystal display). Otherwise, the density is too uneven.		1) Replace the main PC board assy.
8. After the key is pressed or embroidering is finished and the thread cartridge is removed, the thread is cut, but the embroidery frame does not move to a position from where it can be removed.	1) Is the resistance between the terminals of the lead wire connector (CN8) for the thread cutter 0Ω when the thread cutter lever is returned to its original position (when a thread cartridge is ejected)? 2) Others	1) Replace the thread cutter assy or correct its installation. 2) Replace the main PC board assy.
9. Even if a ROM cassette is installed, a pattern from the ROM cassette cannot be selected. (The patterns are not displayed.)	1) Can a different ROM cassette be installed, and can a pattern from it be selected correctly? 2) Others	1) Replace the main PC board assy. 2) Replace the ROM cassette.

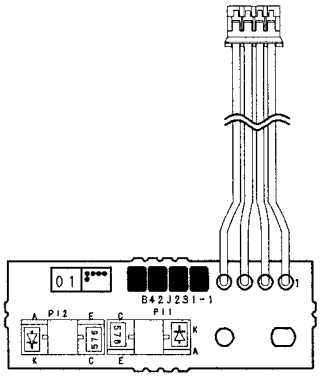
Main PC board ASSY



REG board ASSY



Sensor board ASSY

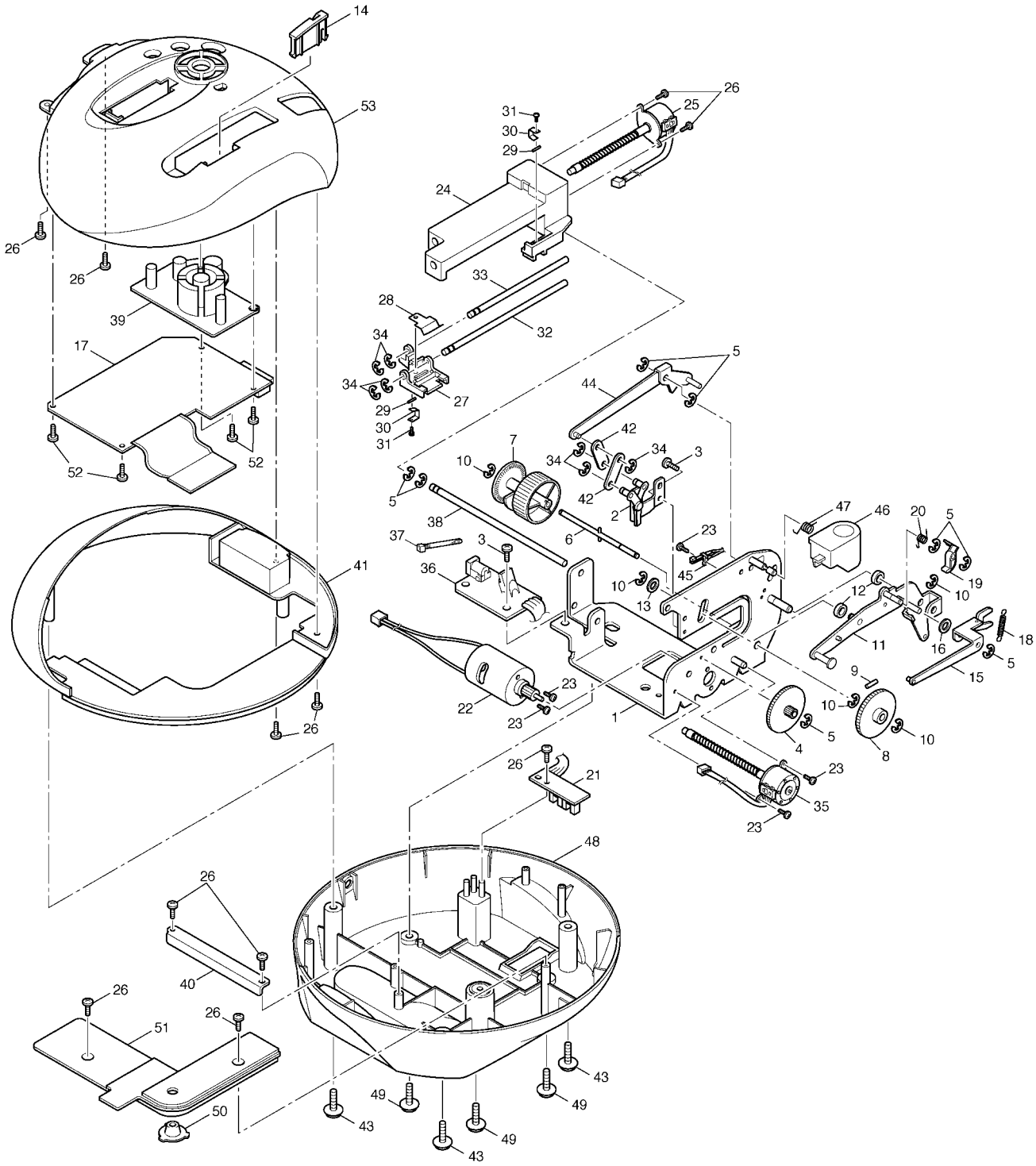


IV. PARTS CATALOGUE

1. PARTS CATALOGUE

No.	CODE	PARTS NAME	REMARKS
1		Base plate ASSY	DEL
2	XC1718021	Thread cutter ASSY	R
3	060300516	Screw, Bind M3 x 5	
4	XC1726020	Idle gear	
5	048030346	Retaining ring, E3	
6	XC1727021	Driving cam shaft ASSY	
7	XC1729021	Shutter	R
8	XC1730020	Driving cam	
9	XC1731020	Pin2	
10	048040346	Retaining ring, E4	
11	XC1732021	Driving lever ASSY	
12	XC1740020	Collar	
13	137713020	Polyester slider	
14	XC1778021	Cassette guide	R
15	XC1741021	Cassette release lever ASSY	
16	026040235	Washer, plain S 4	
17	XC2716021	Main PC board ASSY (E-100:U.S.A., Canada)	R
	XC2717021	Main PC board ASSY (E-100:Europe)	R
	XC2718021	Main PC board ASSY (E-100P:U.S.A., Canada)	R
	XC2719021	Main PC board ASSY (E-100P:Europe)	R
	XC2720021	Main PC board ASSY (E-100M:U.S.A., Canada)	R
	XC3026021	Main PC board ASSY (E-100M:Europe)	R
18	XC1744021	Spring	
19	XC1745021	Cassette lever	
20	XC1746021	Spring	
21	XC1829021	Sensor board ASSY	R
22	XC1747021	Main motor ASSY	R
23	062260516	Screw, Pan M2.6 x 5	
24	XC1750020	Y CARRIAGE	CHG R
25	XC1751121	X pulse motor ASSY	CHG R
26	085300815	Taptite, Bind P M3 x 8	
27	XC1754021	X carriage	R
28	XC1755021	Spring	
29	XC1756021	Pin	
30	XC1757121	Spring	CHG
31	085200815	Taptite, Bind P M2 x 8	
32	XC1758021	X guide shaft L	
33	XC1759021	X guide shaft S	

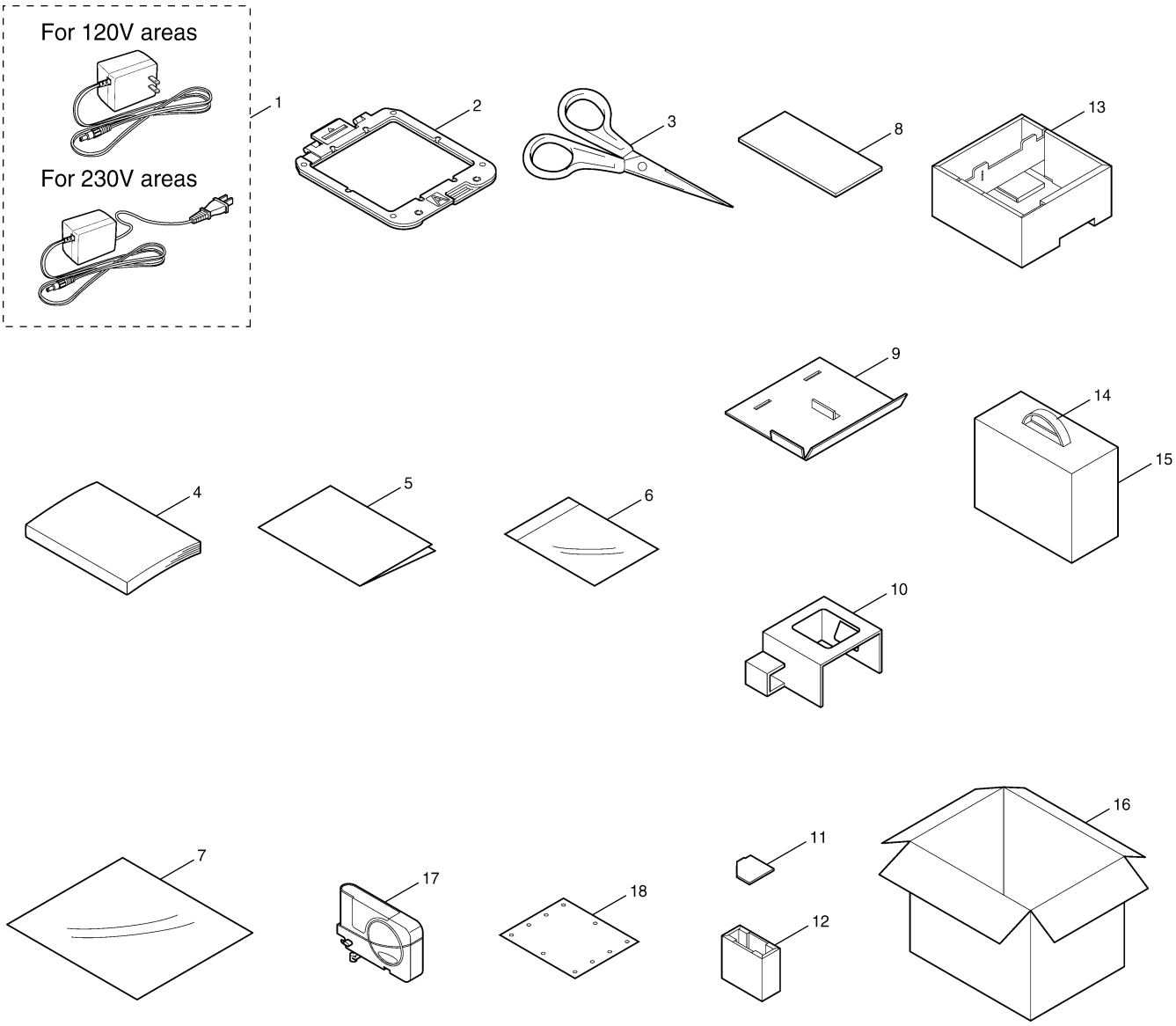
No.	CODE	PARTS NAME	REMARKS
34	048020346	Retaining ring, E2	
35	XC1760121	Y pulse motor ASSY	CHG R
	XC2258121	Y pulse motor ASSY (Europe)	ADD
36	XC1831021	REG board ASSY	R
37	X53169020	Band	
38	XC1761021	Y guide shaft	
39	XC1825022	Key	R
40	XC1762021	Carriage guide	
41	XC1777021	Middle cover	R
42	XC1767021	Thread cutter link	
43	087411416	Taptite, Cup B M4 x 14	
44	XC1763021	Thread cutter lever ASSY	
45	XC1864021	Thread cutter switch ASSY	R
46	XC1768021	Cassette button	R
47	XC1769021	Spring	
48	XC1770021	Under cover ASSY	R
49	0A4400806	Screw, Pan (S/P Washer) M4 x 8	
50	XC1772021	Needle plate	R
51	XC1773021	Needle plate cover	R
52	083310615	Taptite, B3 x 6	
53	XC1774026	Upper cover ASSY (E-100:U.S.A.)	R
	XC1774021	Upper cover ASSY (E-	R
	XC1774027	Upper cover ASSY (E-100P: U.S.A.)	R
	XC1774022	Upper cover ASSY (E-100P: Europe)S	R
	XC1774028	Upper cover ASSY (E-100M: U.S.A.)	R
	XC1774023	Upper cover ASSY (E-100M: Europe)	R
54	XC3149021	YPM spring	ADD
55	XC1757121	SPRING	ADD
56	X53330020	WASHER	ADD



2. OTHER PARTS

No.	CODE	NAME	REMARKS
1	LN3039001	ADAPTER AD-60 LF	CHG
	XC2065021	AC Adapter MDL-H (Europe)	
	XC2066021	AC Adapter MDL-H (U.K.)	
	LA0793001	AC Adapter MDL-H (Australia)	
2	XC1799021	Embroidery frame ASSY	R
3	XC1807121	SCISSORS	CHG
4	194311011	Instruction manual (Eng. Spa. Ita.)	R
	194311012	Instruction manual (Ger. Fre. Dut.)	R
	194311014	Instruction manual (Eng. Fre. Spa.)	R
5	XC2129022	Pattern sheet (E-100: U.S.A.)	R
	XC2129021	Pattern sheet (E-100: Europe)	R
	XC2130022	Pattern sheet (E-100P: U.S.A.)	R
	XC2130021	Pattern sheet (E-100P: Europe)	R
	XC2714022	Pattern sheet (E-100M: U.S.A.)	R
	XC2714021	Pattern sheet (E-100M: Europe)	R
6	130800021	BAG, 220 x 310	CHG
7	X60679021	BAG, 450 x 400H	CHG
8	X61824020	Pad D	R
9	X61778020	Inner carton C	R
10	X61777020	Inner carton B	R
11	X61783020	Carriage pad	R
12	X61802020	Adapter carton A (MDL-H)	R
	X61803020	Adapter carton B	R
13	X61776020	Inner carton A	R
14	X61779020	Carton handle	R
15	X61775029	Carton (E-100: U.S.A.)	R
	X61775025	Carton (E-100: Europe)	R
	X61775030	Carton (E-100P: U.S.A.)	R
	X61775026	Carton (E-100P: Europe)	R
	X61775023	Carton (E-100M: U.S.A.)	R
	X61775027	Carton (E-100M: Europe)	R
16	X61786023	Master carton (U.S.A.)	R
	X61786021	Master carton (Europe)	R

No.	CODE	NAME	REMARKS
		Optional Parts	
17	TA4001	Thread cartridge ASSY (White)	
	XC2085001	Thread cartridge ASSY (White)	
	TA4010	Thread cartridge ASSY (Cream brown)	
	XC2085010	Thread cartridge ASSY (Cream brown)	
	TA4017	Thread cartridge ASSY (Light blue)	
	XC2085017	Thread cartridge ASSY (Light blue)	
	TA4058	Thread cartridge ASSY (Dark brown)	
	XC2085058	Thread cartridge ASSY (Dark brown)	
	TA4070	Thread cartridge ASSY(Corn flower blue)	
	XC2085070	Thread cartridge ASSY(Corn flower blue)	
	TA4085	Thread cartridge ASSY (Pink)	
	XC2085085	Thread cartridge ASSY (Pink)	
	TA4124	Thread cartridge ASSY(Flesh pink)	
	XC2085124	Thread cartridge ASSY(Flesh pink)	
	TA4205	Thread cartridge ASSY (Yellow)	
	XC2085205	Thread cartridge ASSY (Yellow)	
	TA4209	Thread cartridge ASSY(Tangerine)	
	XC2085209	Thread cartridge ASSY(Tangerine)	
	TA4214	Thread cartridge ASSY (Deep gold)	
	XC2085214	Thread cartridge ASSY (Deep gold)	
	TA4323	Thread cartridge ASSY (Light	
	XC2085323	Thread cartridge ASSY (Light	
	TA4513	Thread cartridge ASSY (Lime green)	
	XC2085513	Thread cartridge ASSY (Lime green)	
	TA4515	Thread cartridge ASSY(Moss green)	
	XC2085515	Thread cartridge ASSY(Moss green)	
	TA4800	Thread cartridge ASSY (Red)	
	XC2085800	Thread cartridge ASSY (Red)	
	TA4900	Thread cartridge ASSY (Black)	
	XC2085900	Thread cartridge ASSY (Black)	
18	TA2001	Pre-cut design fabric ASSY (White)	
	XC2088001	Pre-cut design fabric ASSY (White)	
	TA2002	Pre-cut design fabric ASSY (Beige)	
	XC2088002	Pre-cut design fabric ASSY (Beige)	
	TA2003	Pre-cut design fabric ASSY (Gray)	
	XC2088003	Pre-cut design fabric ASSY (Grey)	
19	XC3889021	INSTRUCTION CD	ADD
20	XC4113021	IDEA BOOK(USA)	ADD
21	XC4114021	QUICK REFERENCE GUIDE (USA)	ADD



E-100
E-100P
E-100M
XXXXXXX