

SERVICE MANUAL
&
PARTS LIST

**MODEL: 1522LG, 1522BL, 1522DG,
1522GN, 1522RD,
1522PG Anniversary Edition**

CONTENTS

TROUBLESHOOTING	1 to 3
SERVICE ACCESS (1) FACE COVER.....	4
SERVICE ACCESS (2) FRONT COVER.....	5
SERVICE ACCESS (3) REAR COVER	6
TOP TENSION	7
BOBBIN TENSION	8
PRESSER BAR HEIGHT AND ALIGNMENT	9
NEEDLE SWING	10
NEEDLE DROP	11
CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE (ADJUSTMENT METHOD NO. 1)	12
CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE (ADJUSTMENT METHOD NO. 2)	13
FEED DOG HEIGHT	14
NEEDLE BAR HEIGHT	15
NEEDLE TIMING TO SHUTTLE	16
BUTTONHOLE FEED BALANCE.....	17
FEED BALANCE ON STRETCH STITCH.....	18
BUTTONHOLE FUNCTION	19
DISENGAGEMENT OF CAM FOLLOWER.....	20
MOTOR BELT TENSION.....	21
WIRING	22
PARTS LIST	23 to 41

TROUBLESHOOTING

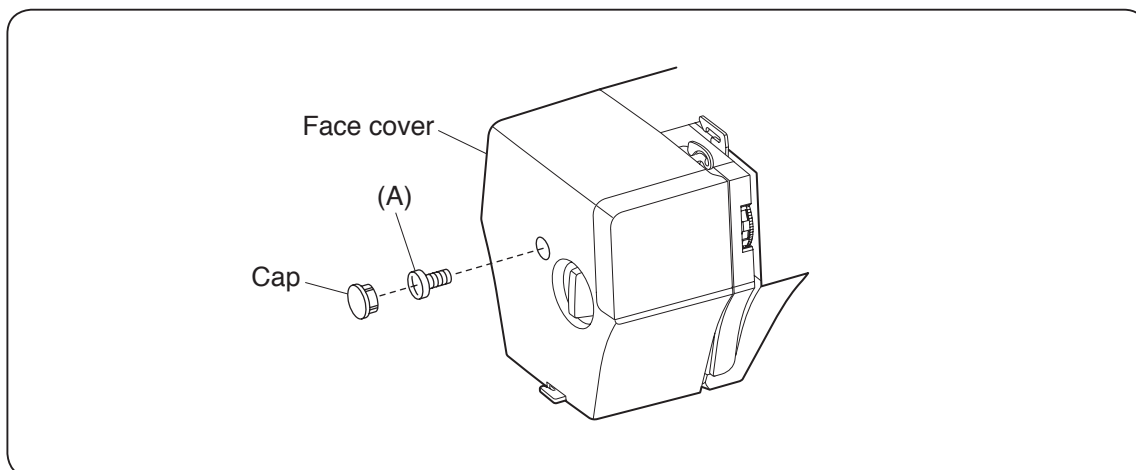
PROBLEM	CAUSE	REMEDY	REFERENCE
1. Skipping stitches	<ul style="list-style-type: none"> 1. Needle is not inserted properly. 2. Needle is bent or worn. 3. Incorrectly threaded. 4. Needle or thread are inappropriate for the fabric being sewn. 5. Sewing on stretch fabric. 6. Inappropriate needle bar height. 7. Inappropriate needle to hook timing. 8. Inappropriate needle to hook clearance. 	<ul style="list-style-type: none"> Insert the needle properly. Change the needle. Rethread. Use the recommended sewing needle and thread. Use A #11 blue tip needle. See mechanical adjustment "Needle bar height." See mechanical adjustment "Needle timing to shuttle." See mechanical adjustment "Clearance between needle and hook." 	<ul style="list-style-type: none"> P. 15 P. 16 P. 12, 13
2. Fabric not moving	<ul style="list-style-type: none"> 1. Incorrect feed dog height. 2. Thread on bottom side of fabric is jammed up. 	<ul style="list-style-type: none"> See mechanical adjustment "Feed dog height." Make sure to bring both needle and bobbin threads under the foot when starting sewing. 	<ul style="list-style-type: none"> P. 14

PROBLEM	CAUSE	REMEDY	REFERENCE
3. Breaking upper thread	1. Initial sewing speed is too fast. 2. Thread path is incorrect. 3. Needle is bent or dull. 4. Upper thread tension is too strong. 5. Needle size is inappropriate for fabric. 6. Needle eye is worn. 7. Needle hole in needle plate is worn or burred.	Start with medium speed. Use the proper thread path. Replace with a new needle. Adjust upper thread tension correctly. Use appropriate needle and thread for fabric in use. Change the needle. Repair the hole or replace the needle plate.	P. 7
4. Breaking bobbin thread	1. Incorrectly thread bobbin case. 2. Too much thread is around the bobbin. 3. Lint is stuck inside the shuttle race. 4. Thread quality is too low. 5. Thread is jamming around the bobbin. 6. Bobbin thread tension is too strong.	Thread bobbin case correctly. Adjust the position of stopper. Clean the shuttle race. Change to a high quality sewing thread. Clear out the jamming thread. Adjust bobbin thread tension correctly.	P. 8
5. Needle breaks	1. Needle is hitting the needle plate. 2. Needle is bent or worn. 3. Needle is hitting the shuttle race. 4. The fabric moves while the needle is piercing it, or the needle zigzags while in fabric. 5. Fabric is being pulled too strongly while sewing.	See mechanical adjustment "Needle drop." Change the needle. See mechanical adjustment "Clearance between needle and shuttle race." See mechanical adjustment "Needle swing." Guide the fabric gently while sewing.	P. 11 P. 12, 13 P. 10

PROBLEM	CAUSE	REMEDY	REFERENCE
6. Noisy operation	1. Backlash between shuttle hook gear and lower shaft gear is too great. 2. Lower shaft gear is loose. 3. Inappropriate belt tension. 4. Upper shaft gear is loose. 5. Not enough oil.	See mechanical adjustment "Clearance between needle and shuttle race (NO. 2)." Eliminate the looseness. See mechanical adjustment "Motor belt tension." Eliminate the looseness. Oil all moving parts.	P. 13 P. 21
7. Deformation of pattern	1. Inappropriate zigzag synchronization. 2. Inappropriate disengagement of cam follower. 3. Upper thread tension is too strong. 4. Inappropriate feed balance.	See mechanical adjustment "Needle swing." See mechanical adjustment "Disengagement of cam follower." Adjust upper thread tension correctly. See mechanical adjustment "Feed balance on stretch stitch."	P. 10 P. 20 P. 7 P. 18

SERVICE ACCESS (1)

FACE COVER



TO REMOVE

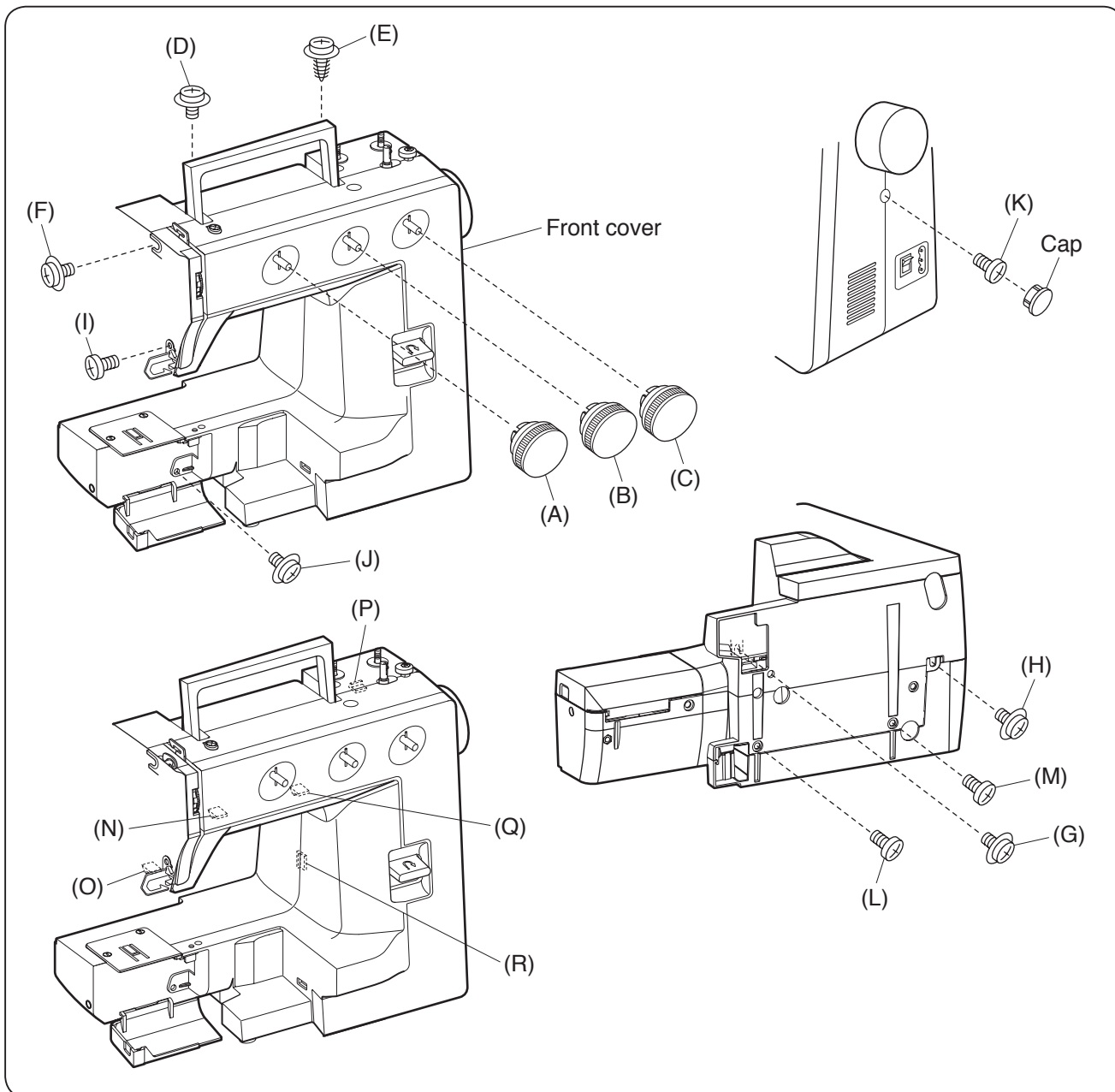
1. Remove the face cover by removing the cap and setscrew (A).

TO ATTACH

2. Attach the face cover in reverse procedure of the removing.

SERVICE ACCESS (2)

FRONT COVER



TO REMOVE

1. Remove the face cover (see page 4).
2. Remove the dials (A), (B) and (C).
3. Remove the cap.
4. Loosen the setscrews (D), (E), (F), (G), and (H) and then, and front cover by removing setscrews (I), (J), (K), (L) and (M).

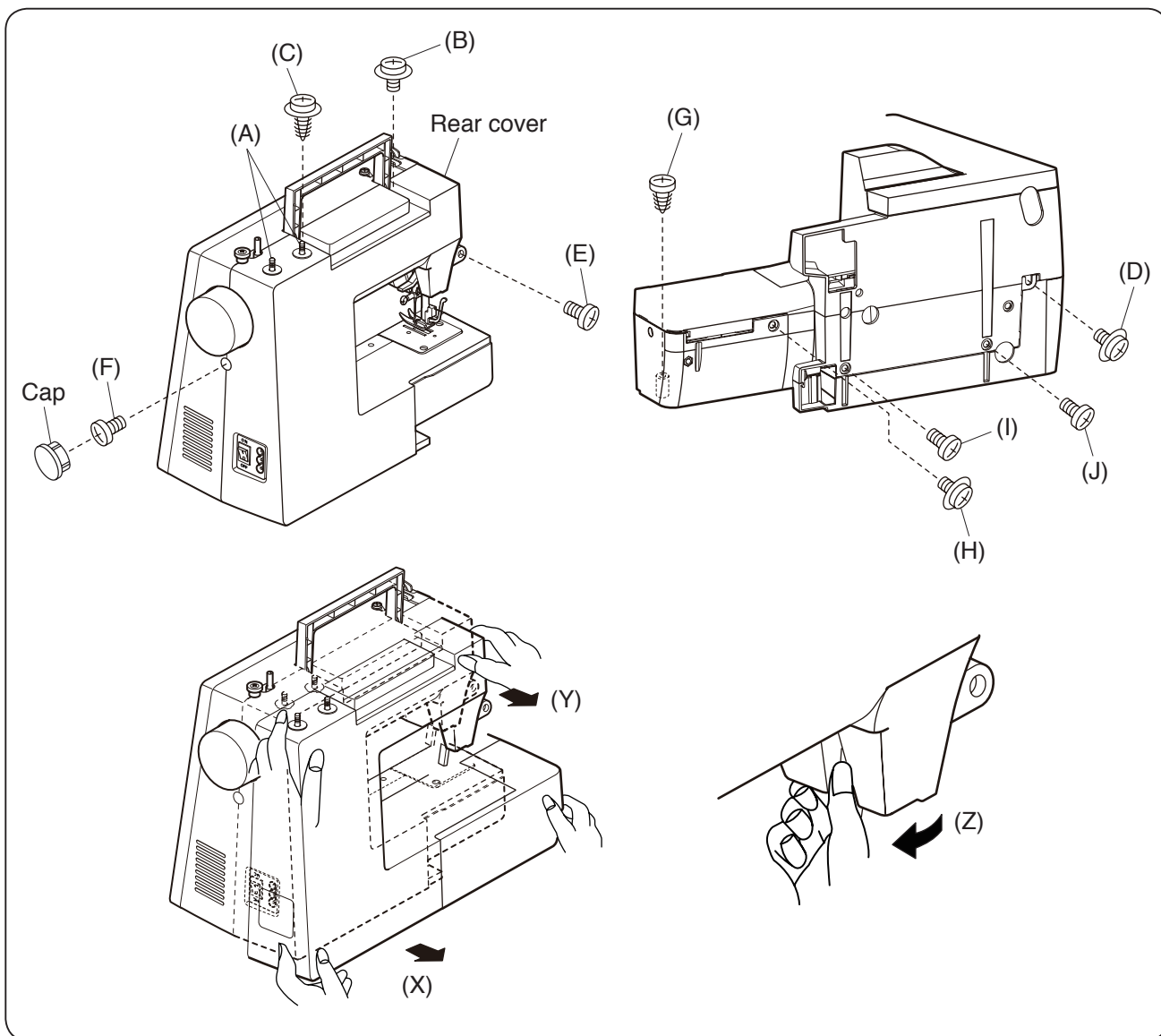
NOTE: Unhook the tabs (N), (O), (P), (Q) and (R) from the rear cover when removing the front cover.

TO ATTACH

5. Attach the front cover in reverse procedure of the removing.

SERVICE ACCESS (3)

REAR COVER



TO REMOVE

1. Remove the face cover and front cover (see pages 4 to 5).

NOTE: PULL UP THE SPOOL PINS (A).

2. Remove the cap.
3. Loosen the setscrews (B), (C) and (D) and then, remove the rear cover by removing setscrews (E), (F), (G), (H), (I) and (J).

NOTE: Remove the rear cover in the order of (X) (lower part) → (Y) (upper part) → (Z) (presser foot lifter part).

TO ATTACH

4. Attach the rear cover in reverse procedure of the removing.

MECHANICAL ADJUSTMENT

TOP TENSION

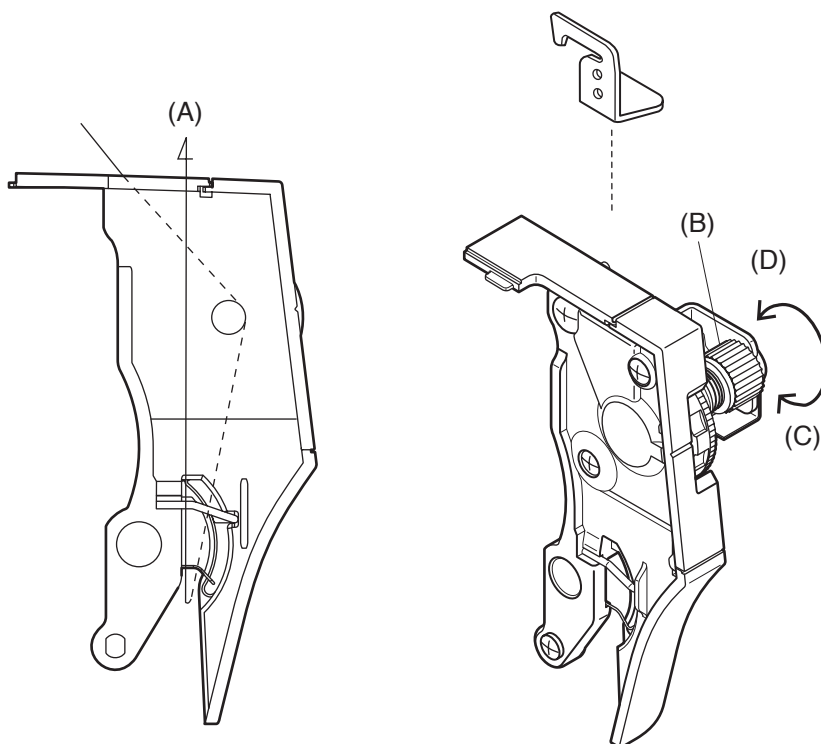
TO CHECK:

The standard upper thread tension should be 65 to 95 grams-force when pulling the thread (cotton thread #50) in the direction of (A) with setting the tension dial at "3". (Be sure the presser foot should be lowered.)

If the tension is out of the standard range, adjust it as follows:

ADJUSTMENT PROCEDURE:

1. Remove the front cover (see page 5).
2. Turn the adjusting screw (B) in the direction of (C) when the upper thread tension is too tight.
Turn the adjusting screw (B) in the direction of (D) when the upper thread tension is too loose.
3. Attach the front cover.



MECHANICAL ADJUSTMENT

BOBBIN TENSION

NOTICE:

Adjusting the lower thread tension can be difficult to get correct.

You need to be skilled at working with small screws to adjust the thread tension.

We recommend replacing the bobbin case instead of adjusting the bobbin thread tension if you are not skilled with adjustments such as this.

TO CHECK:

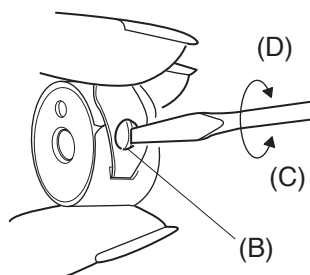
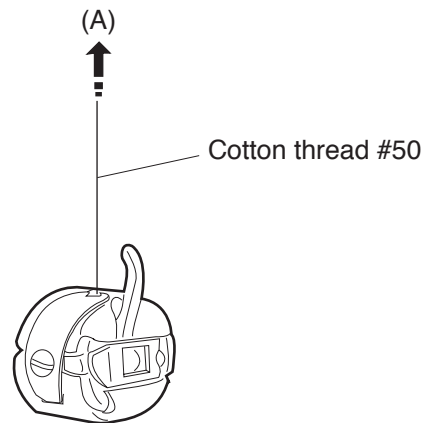
Set the bobbin in the bobbin case and pass the thread (cotton #50) through the tension spring.

The bobbin thread tension should be 32 to 38 grams-force when pulling the thread in the direction of (A).

If the tension is out of the range, adjust it as follows:

ADJUSTMENT PROCEDURE:

1. Turn the adjusting screw (B) in the direction of (C) when the bobbin thread tension is too tight.
2. Turn the adjusting screw (B) in the direction of (D) when the bobbin thread tension is too loose.



MECHANICAL ADJUSTMENT

PRESSER BAR HEIGHT AND ALIGNMENT

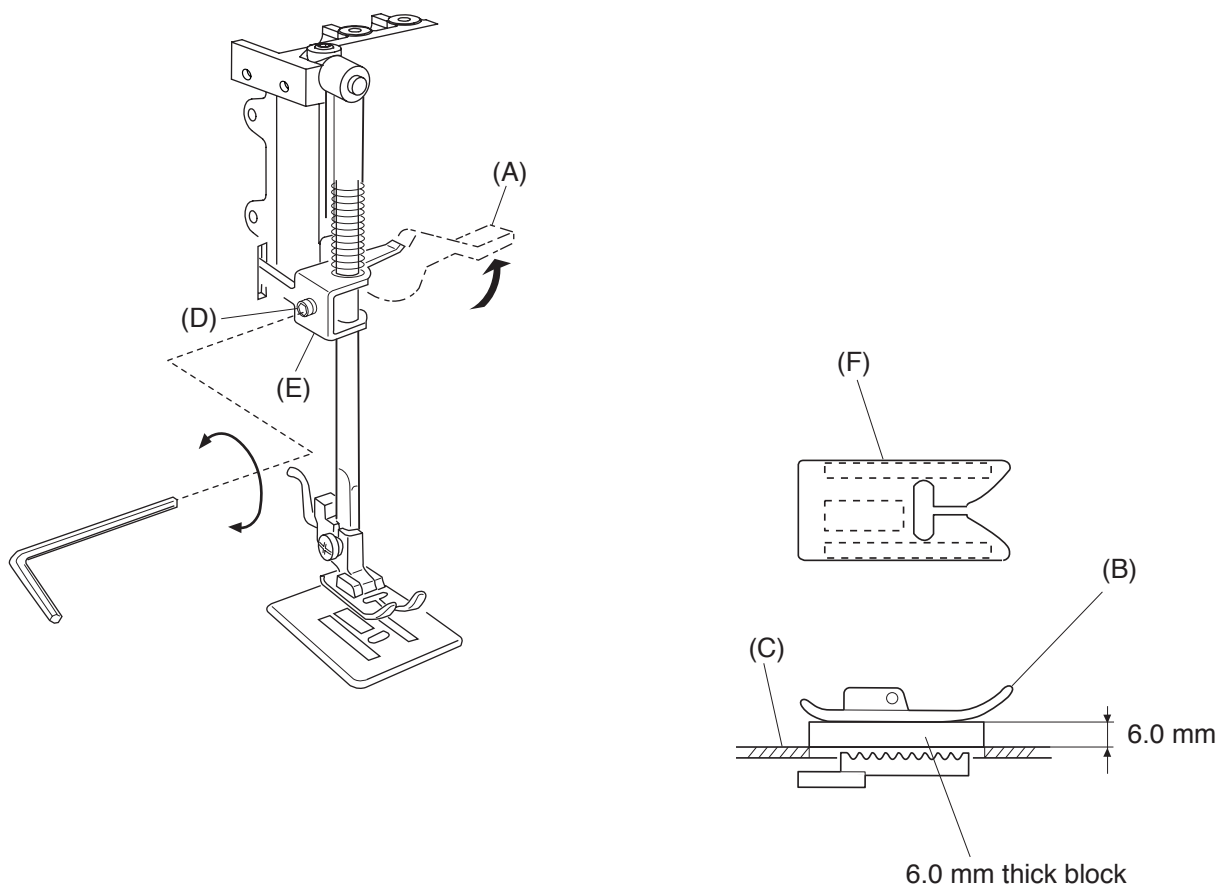
TO CHECK:

1. Set the presser regulator dial at "3".
2. Lower the feed dog.
3. Raise the presser foot lifter (A).
4. The distance between the presser foot (B) and the needle plate (C) should be 6.0 mm.

ADJUSTMENT PROCEDURE:

1. Remove the face cover (see page 4).
2. Raise the presser foot lifter (A) and insert the 6 mm thick block between the foot and needle plate.
Loosen the hexagonal socket screw (D) on the presser bar bracket (E).
3. Tighten the hexagonal socket screw (D) securely.
4. Attach the face cover.

NOTE: When you tighten the hexagonal socket screw (D), make sure that both sides of the presser foot are parallel to the feed dog slots (F) on the needle plate.



MECHANICAL ADJUSTMENT

NEEDLE SWING

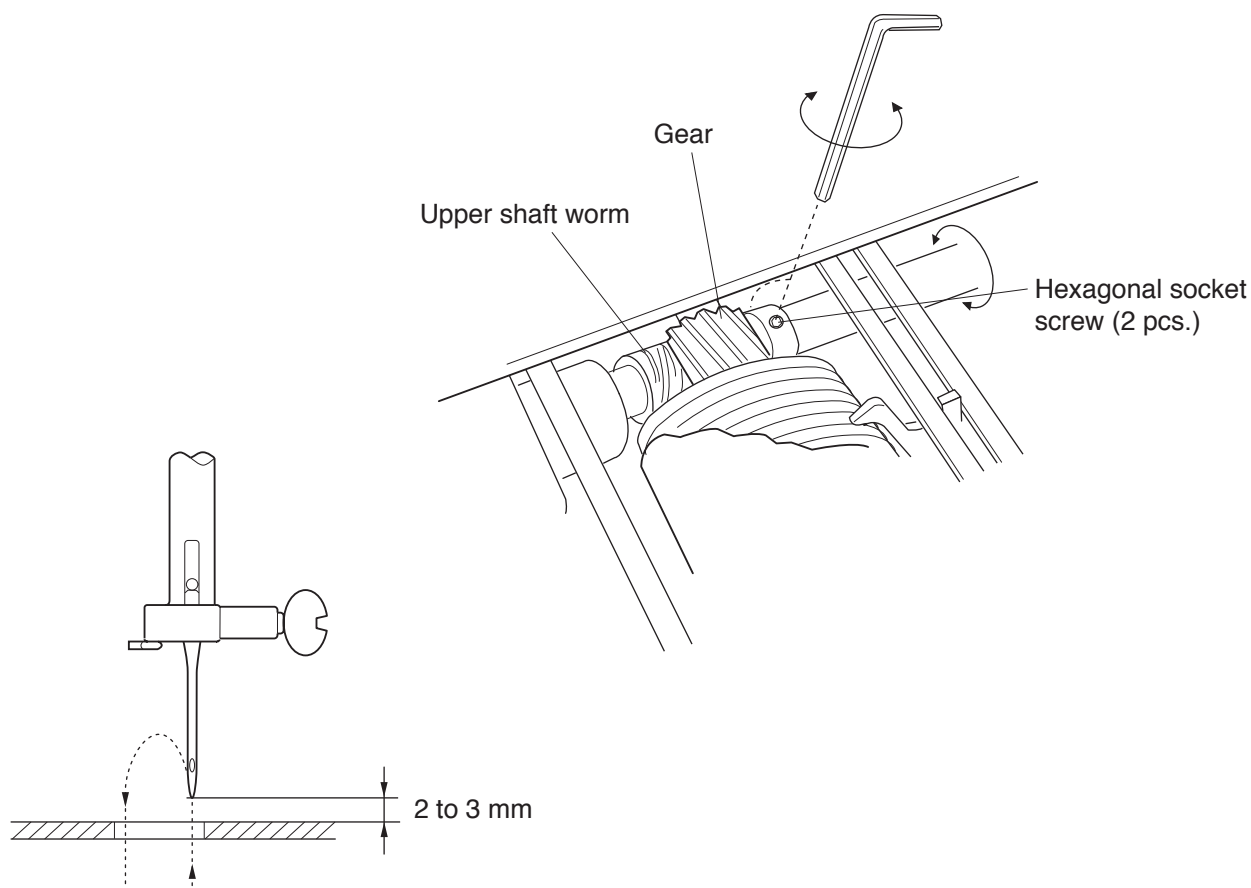
TO CHECK:

Adjust the needle swing according to the following procedure, If the needle bar starts moving sideways while the needle is in the fabric when sewing the zigzag pattern (with maximum zigzag width).

ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "C", and the stitch length dial at "5".
2. Remove the front cover (see page 5).
3. Loosen the hexagonal socket screws (2 pcs.).
4. Adjust the needle swing by turning the handwheel, while holding the worm so as not to rotate it, until the needle swing starts at 2 to 3 mm above the needle plate after the needle has come out of the right side of the needle plate hole.
5. Tighten the hexagonal socket screws (2 pcs.).
6. Attach the front cover.

NOTE: After adjusting the needle swing, check that the upper shaft worm and gear rotate smoothly without any backlash between them.



MECHANICAL ADJUSTMENT

NEEDLE DROP

TO CHECK:

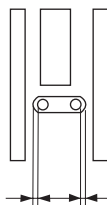
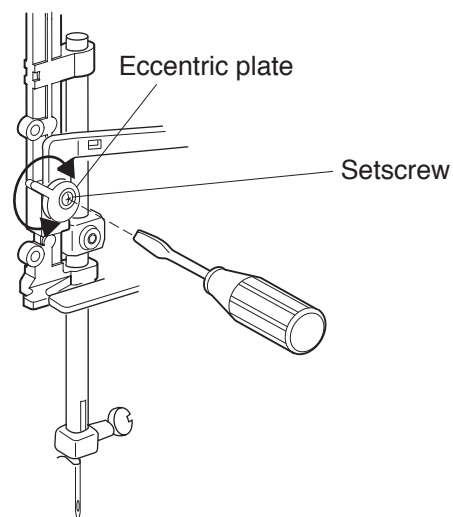
When the needle swings in maximum zigzag width, the distance between both ends of the needle hole on the needle plate and the needle drop positions should be equal.

If not, adjust as follows:

ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "C", and the stitch length dial at "5".
2. Remove the face cover (see page 4).
3. Loosen the setscrew.
4. Turn the eccentric plate to adjust the needle drop.
5. Tighten the setscrew.
6. Attach the face cover.

NOTE: Check the needle timing to shuttle after this adjustment (see page 16).



Both clearances should be equal

MECHANICAL ADJUSTMENT

CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE (ADJUSTMENT METHOD NO. 1)

TO CHECK:

The clearance between the needle and shuttle race should be -0.05 to $+0.10$ mm.

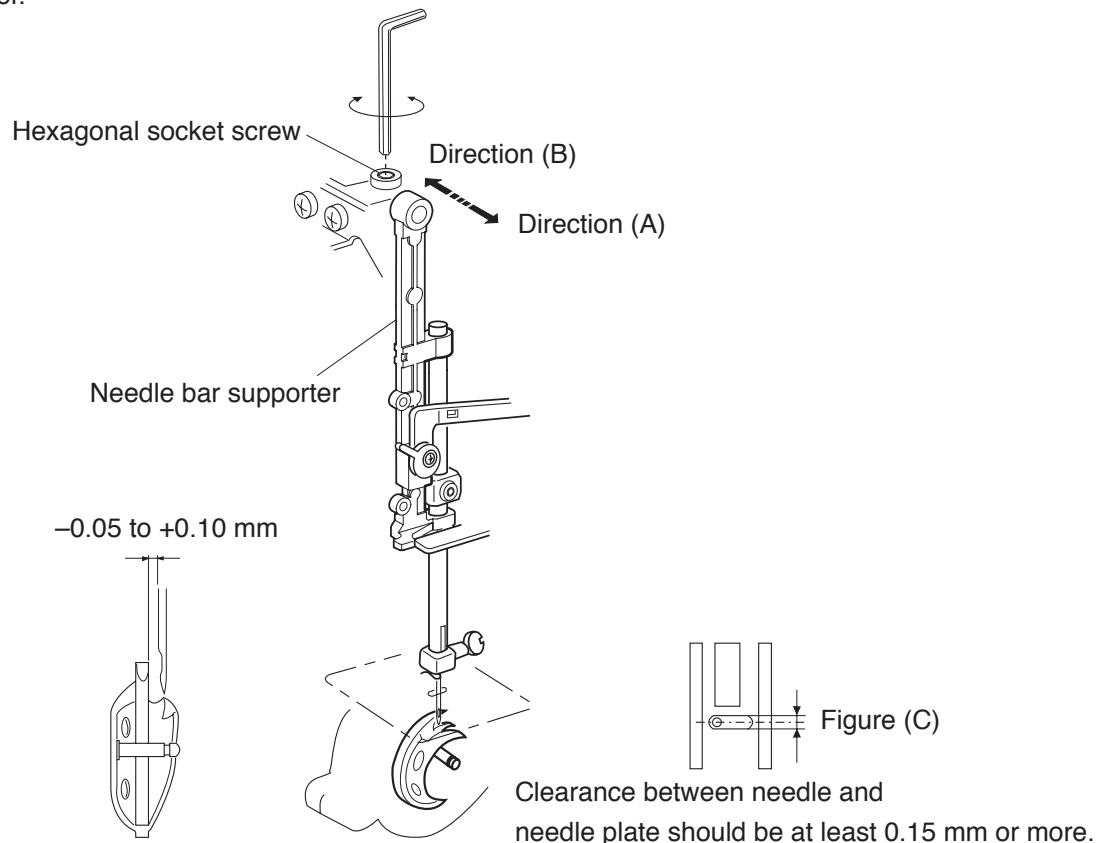
If not, adjust as follows:

ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "B/A", and the stitch length dial at "0".
2. Remove the face cover (see page 4).
3. Loosen the hexagonal socket screw, and move the needle bar supporter in the direction of the arrows to get a clearance between -0.05 to $+0.10$ mm.
 - * If clearance is too wide, move the needle bar supporter to direction (A).
 - * If clearance is too narrow, move the needle bar supporter to direction (B).
4. Tighten the hexagonal socket screw.

NOTE: After this adjustment, check that the clearance between the needle and needle plate is more than 0.15 mm as shown in figure (C). If not, adjust the clearance between needle and shuttle race by using adjustment method NO.2 (see next page). Readjust the clearance between needle and needle plate to 0.15 mm or more.

5. Attach the face cover.



MECHANICAL ADJUSTMENT

CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE (ADJUSTMENT METHOD NO. 2)

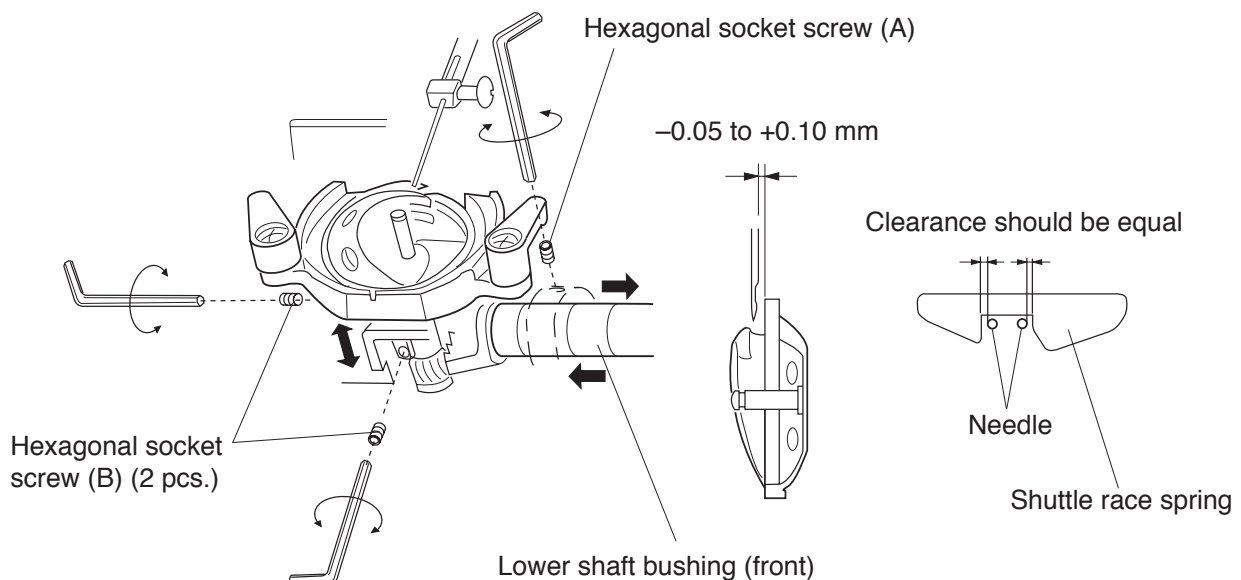
TO CHECK:

Use this adjustment method NO. 2 if the clearance cannot be adjusted by the method NO.1.
The clearance between the needle and shuttle race should be -0.05 to $+0.10$ mm.

ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "B/A", and the stitch length dial at "0".
2. Remove the rear cover (see page 6).
3. Loosen the hexagonal socket screw (A) on the lower shaft bushing and slide the gear about 0.5 mm to the right to create some slack between the gears.
4. Lower the needle and loosen the hexagonal socket screws (B) (2 pcs.).
Move the shuttle race unit axially either forward or backward to adjust the clearance between the needle and the shuttle race in the range of -0.05 to $+0.10$ mm.
5. Set the pattern select dial at "B/A". Set the stitch width dial at "5". Turn the handwheel to check if the clearance between the needle and inner edges of the shuttle race spring at the left and right needle drops are equal.
If not, adjust by turning the shuttle race unit.
6. Tighten the hexagonal socket screws (B) (2 pcs.).
7. Loosen the setscrew on the lower shaft bushing and slide the gear back to the original position while adjusting the backlash.
8. Tighten hexagonal socket screws (A) firmly.
9. Attach the rear cover.

NOTE: The rotary play of the tip of the shuttle driver should be less than 0.3 mm and the lower shaft should turn smoothly.
Check the needle timing to shuttle after this adjustment (see page 16).



MECHANICAL ADJUSTMENT

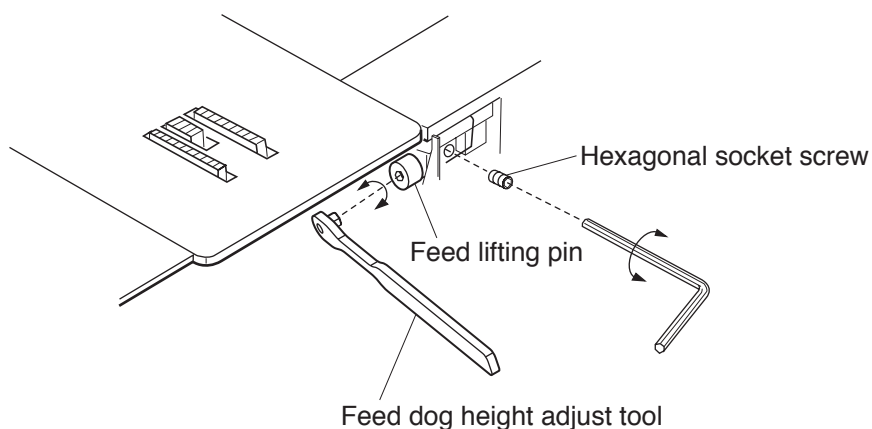
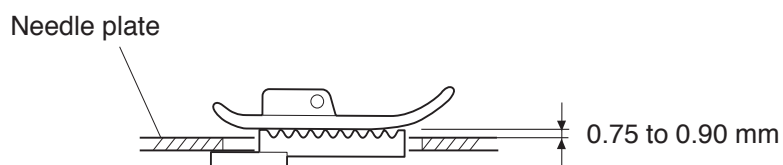
FEED DOG HEIGHT

TO CHECK:

1. Set the presser foot pressure dial at "3".
2. Lower the presser foot.
3. Turn the handwheel toward you to bring the feed dog to its highest position.
The height of the feed dog from the needle plate should be 0.75 to 0.90 mm.
If it is not in the range, adjust as follows.

ADJUSTMENT PROCEDURE:

1. Prepare the feed dog height adjust tool, part No. 311064005.
2. Open the bed cover.
3. Set the presser foot pressure dial at "3".
4. Lower the presser foot and turn the handwheel toward you until the feed dog comes to its highest point.
5. Loosen the hexagonal socket screw.
6. Turn the feed lifting pin to adjust the height of feed dog (0.75 to 0.90 mm).
7. Tighten the hexagonal socket screw.
8. Turn the handwheel toward you to recheck the height of feed dog.
9. Close the bed cover.



MECHANICAL ADJUSTMENT

NEEDLE BAR HEIGHT

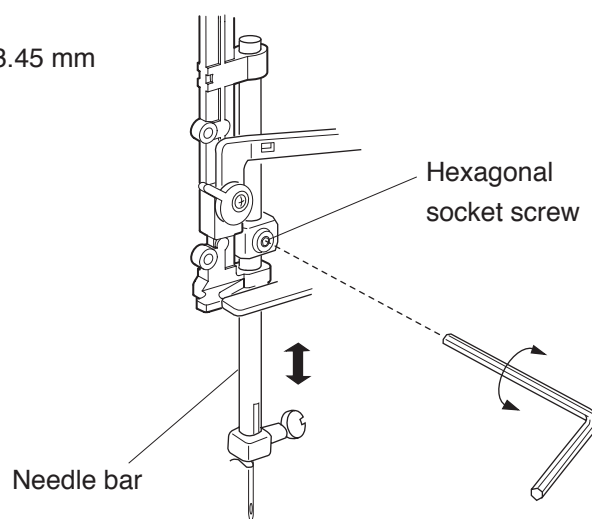
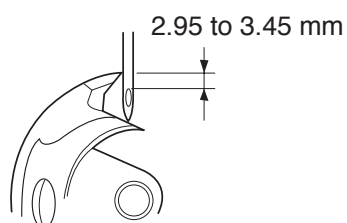
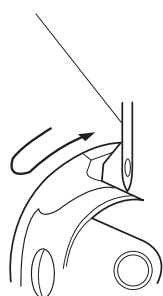
TO CHECK:

When the tip of shuttle hook meets the left side of the needle in ascending travel of the needle from its left and lowest position.

ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "B/A", and the stitch length dial at "0".
 2. Remove the face cover (see page 4).
 3. Open the bed cover.
 4. Remove the bobbin case.
 5. Turn the handwheel toward you until the tip of the shuttle hook meets the left side of the needle.
 6. Loosen the hexagonal socket screw.
 7. The distance between the top of the needle eye and the tip of the shuttle hook should be in the range of 2.95 to 3.45 mm.
- Adjust the height of the needle bar by moving the needle bar upward or downward without turning it.
8. Tighten the hexagonal socket screw.
 9. Attach the bobbin case.
 10. Close the bed cover.
 11. Attach the face cover.

Tip of shuttle hook meets
left side of needle



MECHANICAL ADJUSTMENT

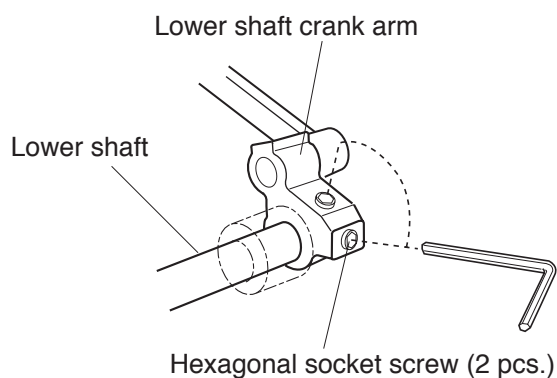
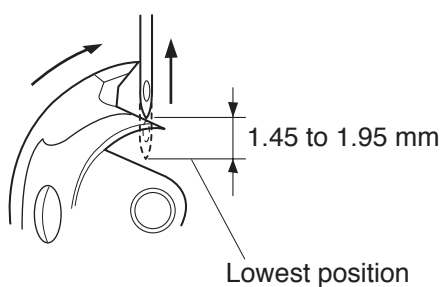
NEEDLE TIMING TO SHUTTLE

TO CHECK:

The height of the needle point from its lowest point of travel should be in the range of 1.45 to 1.95 mm when the tip of the shuttle hook just meets the left side of the needle at the left needle position.

ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "B/A", and the stitch length dial at "0".
2. Remove the front cover (see page 5).
3. Open the bed cover.
4. Remove the bobbin case.
5. Turn the handwheel toward you until the tip of the shuttle hook meets the left side of the needle.
6. Loosen the hexagonal socket screws (2 pcs.).
7. While holding the shuttle hook so it doesn't turn, turn the handwheel toward you until the needle comes to its lowest position.
Then, further turn the handwheel to raise the needle about 1.7 mm from its lowest position.
8. Tighten the hexagonal socket screws (2 pcs.).
9. Turn the handwheel toward you to check if the height is in the range of 1.45 to 1.95 mm.
If it is not in this range, repeat the above procedure.
10. Attach the bobbin case.
11. Attach the front cover.



MECHANICAL ADJUSTMENT

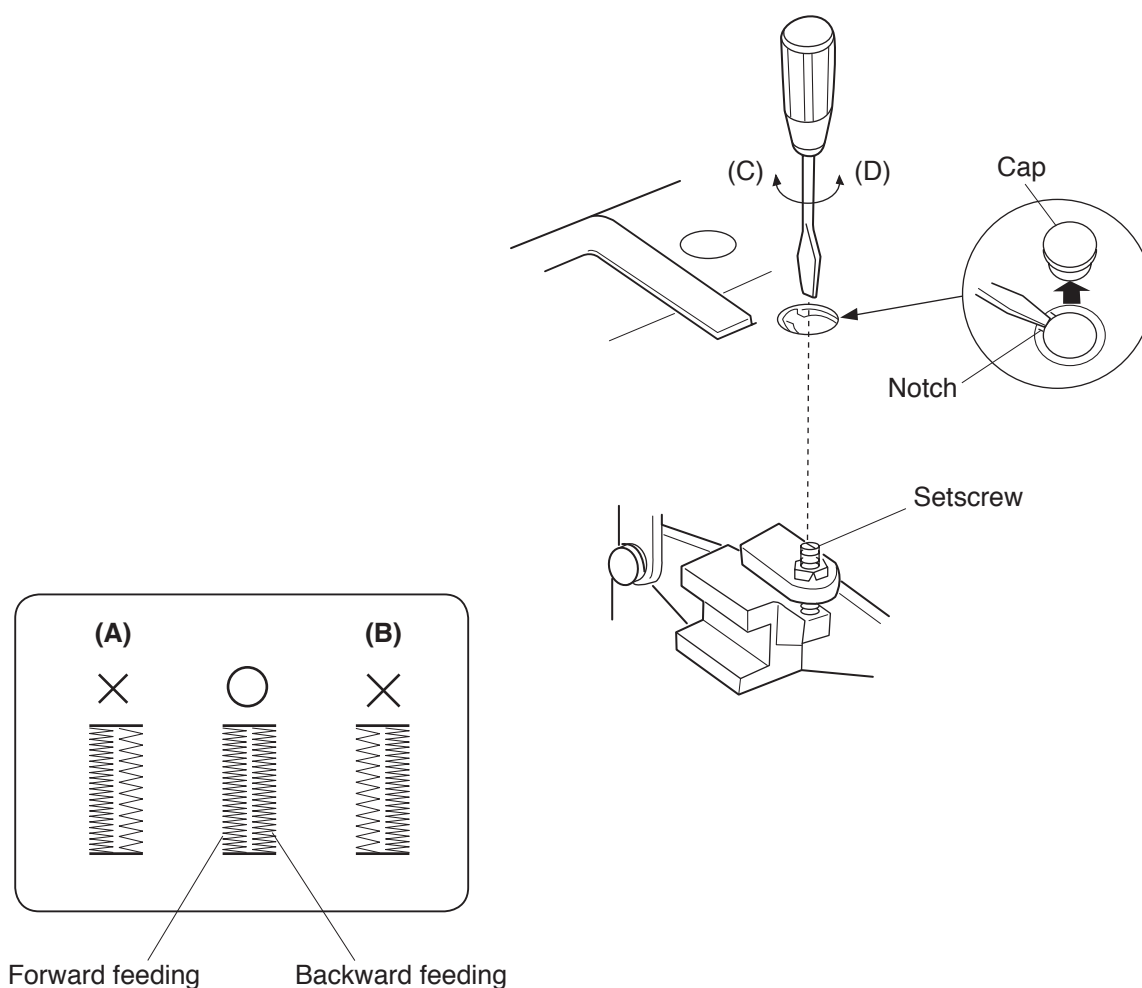
BUTTONHOLE FEED BALANCE

TO CHECK:

When sewing buttonhole, the stitches on each side of buttonhole should be the same stitch density. The range of 9 to 12 stitches in the right side row "backward feeding" against 10 stitches in the left side row "forward feeding" is considered acceptable.

ADJUSTMENT PROCEDURE:

1. Check the stitches by sewing buttonholes, and remove the cap.
2. Turn the setscrew in the direction of (C) in case of (A) (right stitches are rough), or in the direction of (D) in case of (B) (left stitches are rough).
3. Attach the cap.



MECHANICAL ADJUSTMENT

FEED BALANCE ON STRETCH STITCH

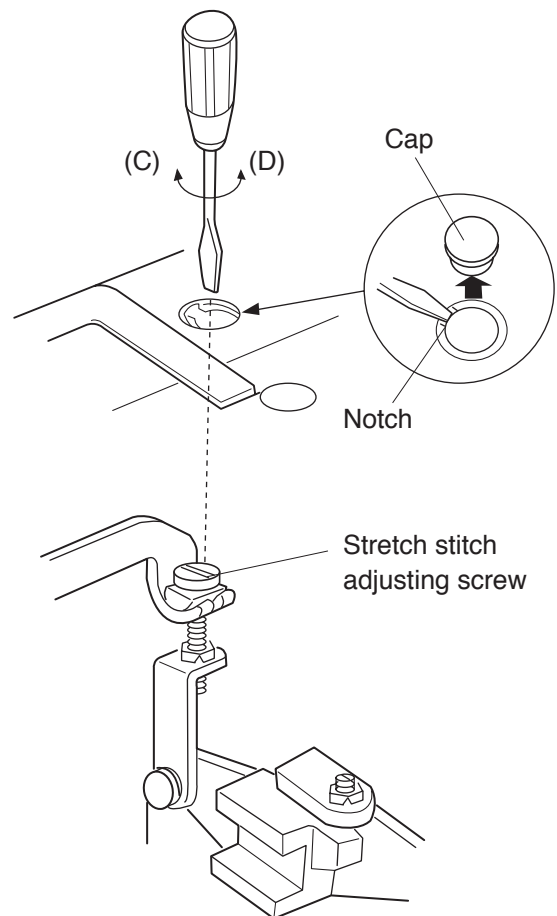
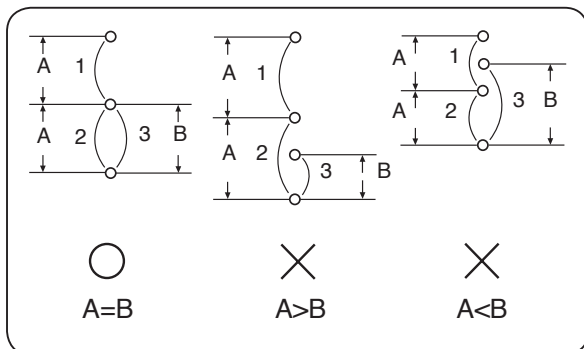
TO CHECK:

Check if the stretch stitch patterns are distorted with setting the stitch length dial at "S.S. ".

If there is a difference between forward feeding and backward feeding during stretch stitch patterns, make an adjustment as follows:

ADJUSTMENT PROCEDURE:

1. Remove the cap.
2. Set the pattern selector dial at "B/A", and the stitch length dial at "S.S.".
3. Turn the stretch stitch adjusting screw in the direction of (C) when $A > B$, or in the direction of (D) when $A < B$.
4. Attach the cap.



MECHANICAL ADJUSTMENT

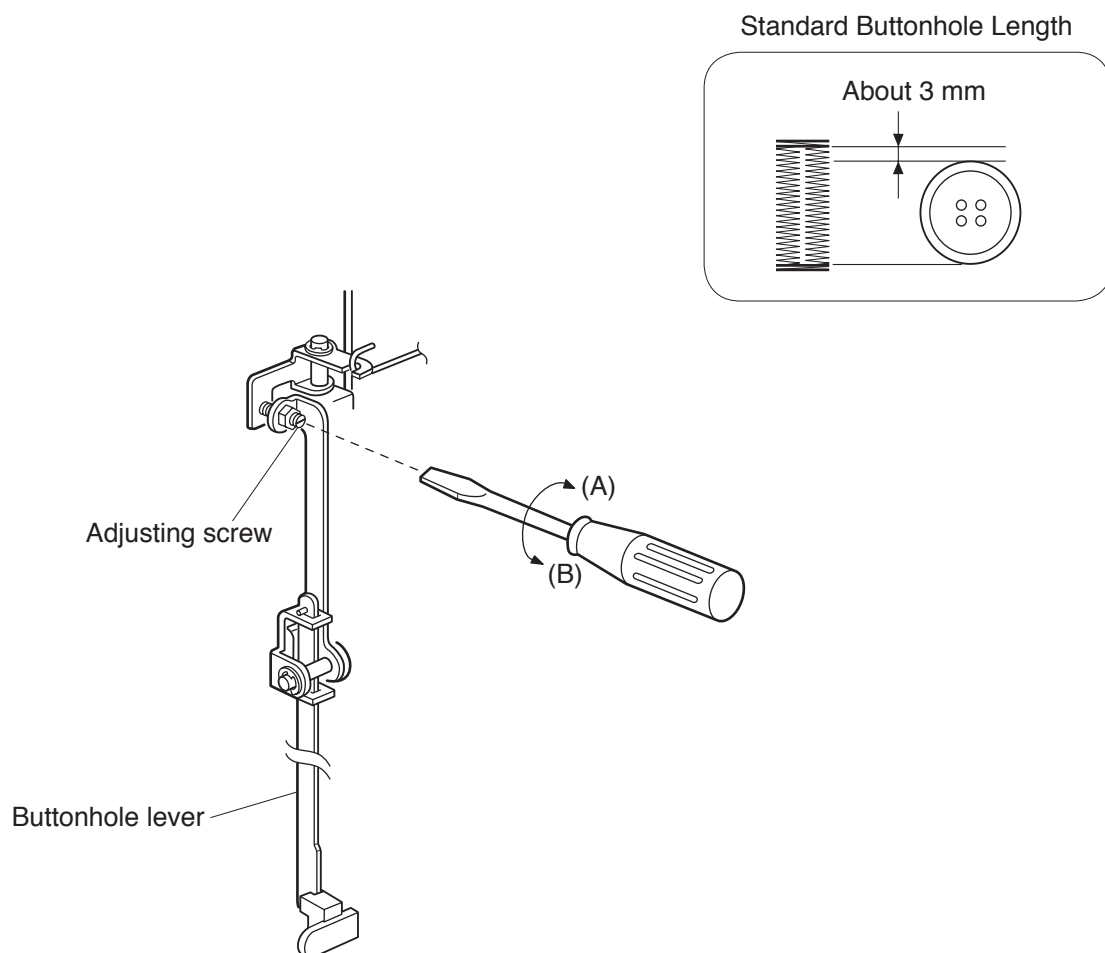
BUTTONHOLE FUNCTION

ADJUSTMENT PROCEDURE:

Standard buttonhole length should be about 3 mm longer than the length set by the automatic buttonhole foot. If this length cannot be obtained, check and adjust as follows:

ADJUSTMENT PROCEDURE:

1. Remove the face cover (see page 4).
2. Turn the adjusting screw in the direction of (A) if the buttonhole stitch length is longer than the standard, or in the direction of (B) if the buttonhole stitch length is shorter than the standard.
3. Attach the face cover.



MECHANICAL ADJUSTMENT

DISENGAGEMENT OF CAM FOLLOWER

TO CHECK:

If the clearance between the cam follower and the top convex of the zigzag cam is not enough, the pattern selector dial is blocked or will not select the correct pattern.

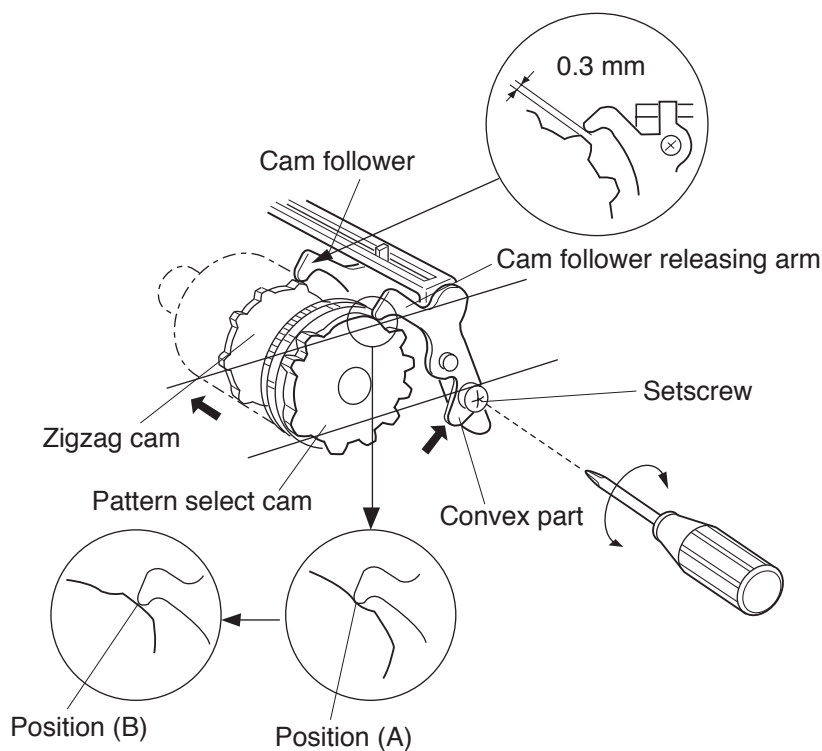
ADJUSTMENT PROCEDURE:

1. Set the pattern selector dial at "B/A", and the stitch length dial at "S.S."
2. Remove the front cover (see page 5).
3. Put the cam follower to the zigzag cam and put the cam follower releasing arm to the pattern selector cam.
4. Loosen the setscrew.
5. Push the convex part of the cam follower releasing arm in the direction of arrow until the cam follower releasing arm touches position (A) of the pattern select cam, and then, tighten the setscrew.

NOTE: After this adjustment, check that the clearance between the zigzag cam and the cam follower is about 0.3 mm when setting the cam follower releasing arm onto position (B) of pattern selector cam.

6. Attach the front cover.

NOTE: Check the needle movement for straight stitch.



MECHANICAL ADJUSTMENT

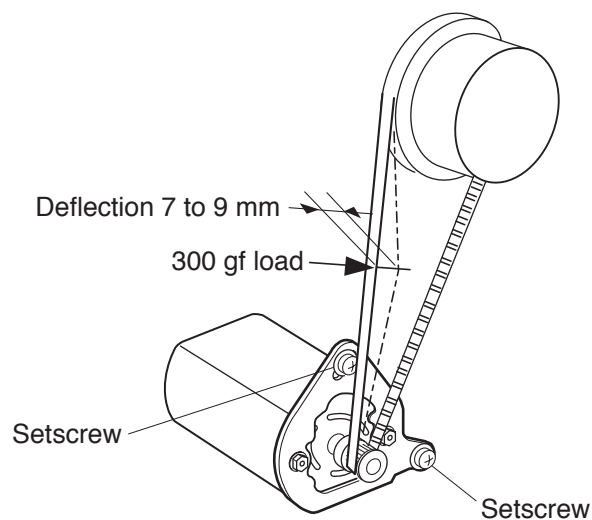
MOTOR BELT TENSION

TO CHECK:

1. Improper belt tension may cause noise, overload of motor, slow running or motor belt jumping.
2. The belt deflection should be 7 to 9 mm when pressing the middle of the motor belt with approximately 300 grams-force of pressure.

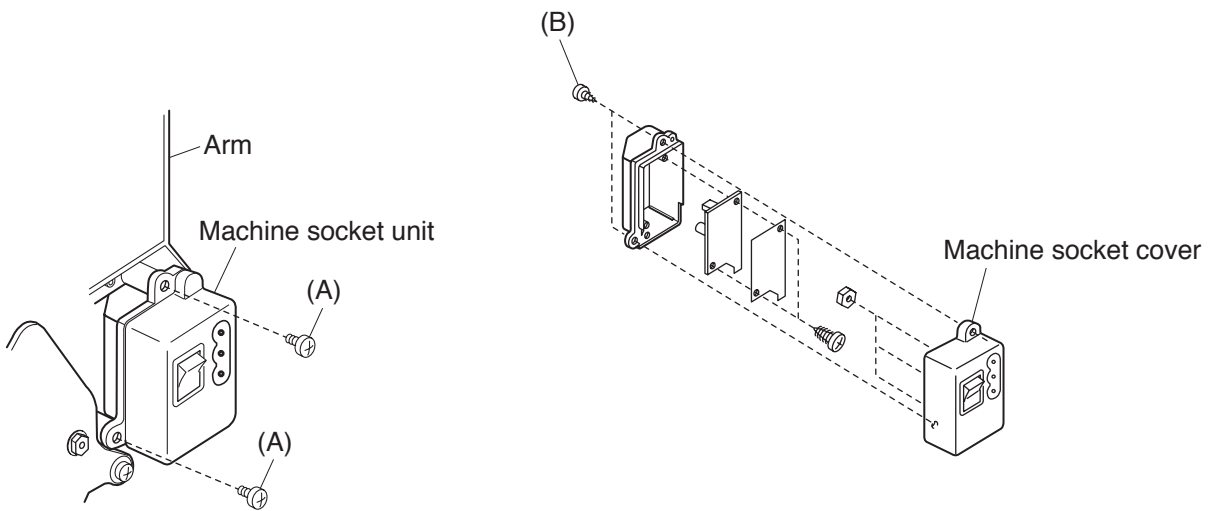
ADJUSTMENT PROCEDURE:

1. Remove the front cover (see page 5).
2. Loosen the setscrews (2 pcs.).
3. Move the motor up or down to adjust the deflection about 7 to 9 mm.
4. Tighten the setscrews (2 pcs.).
5. Attach the belt cover.

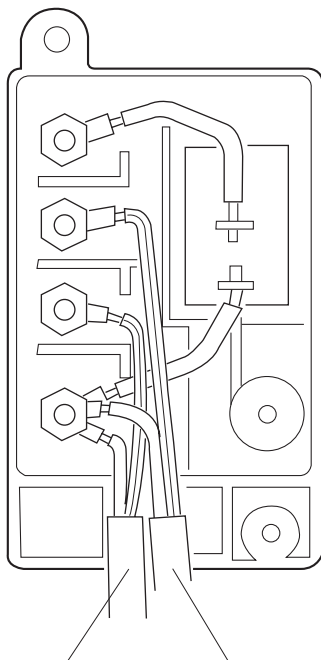


WIRING

1. Remove the rear cover (see page 6).
2. Remove the setscrews (A), (B) and machine socket cover.
3. Follow the above procedure in reverse.

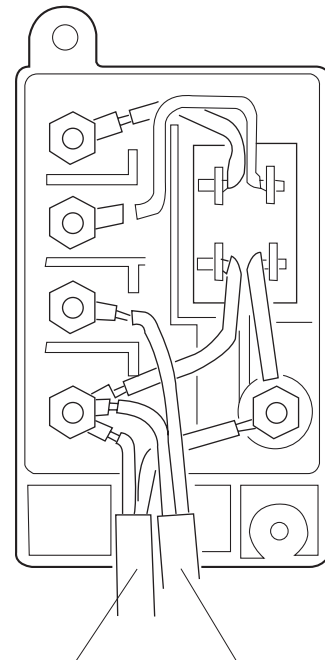


120V



Motor cord Cord from printed circuit board C (LED)

240V

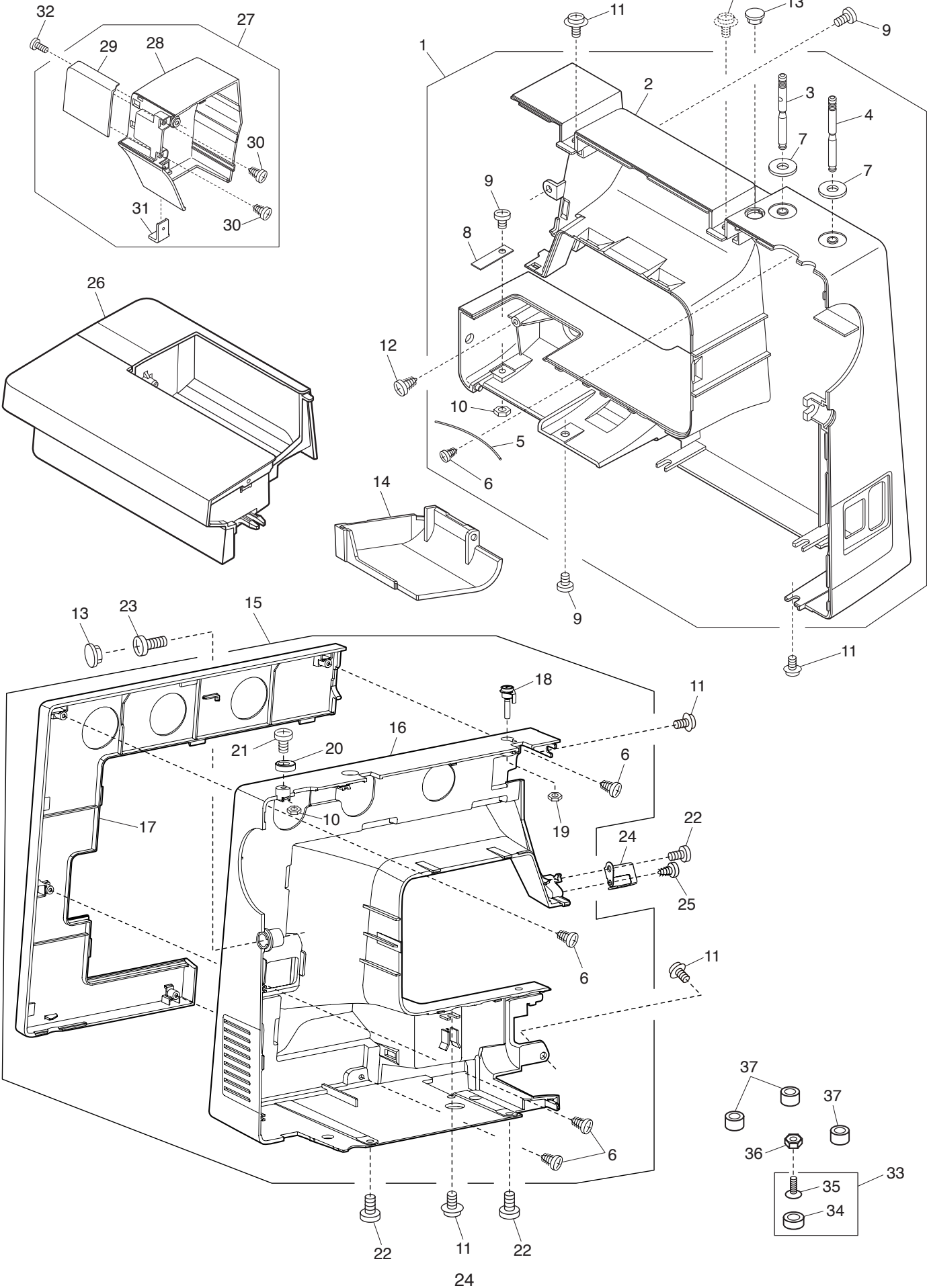


Cord from printed circuit board C (LED) Motor cord

PARTS LIST

PARTS LIST

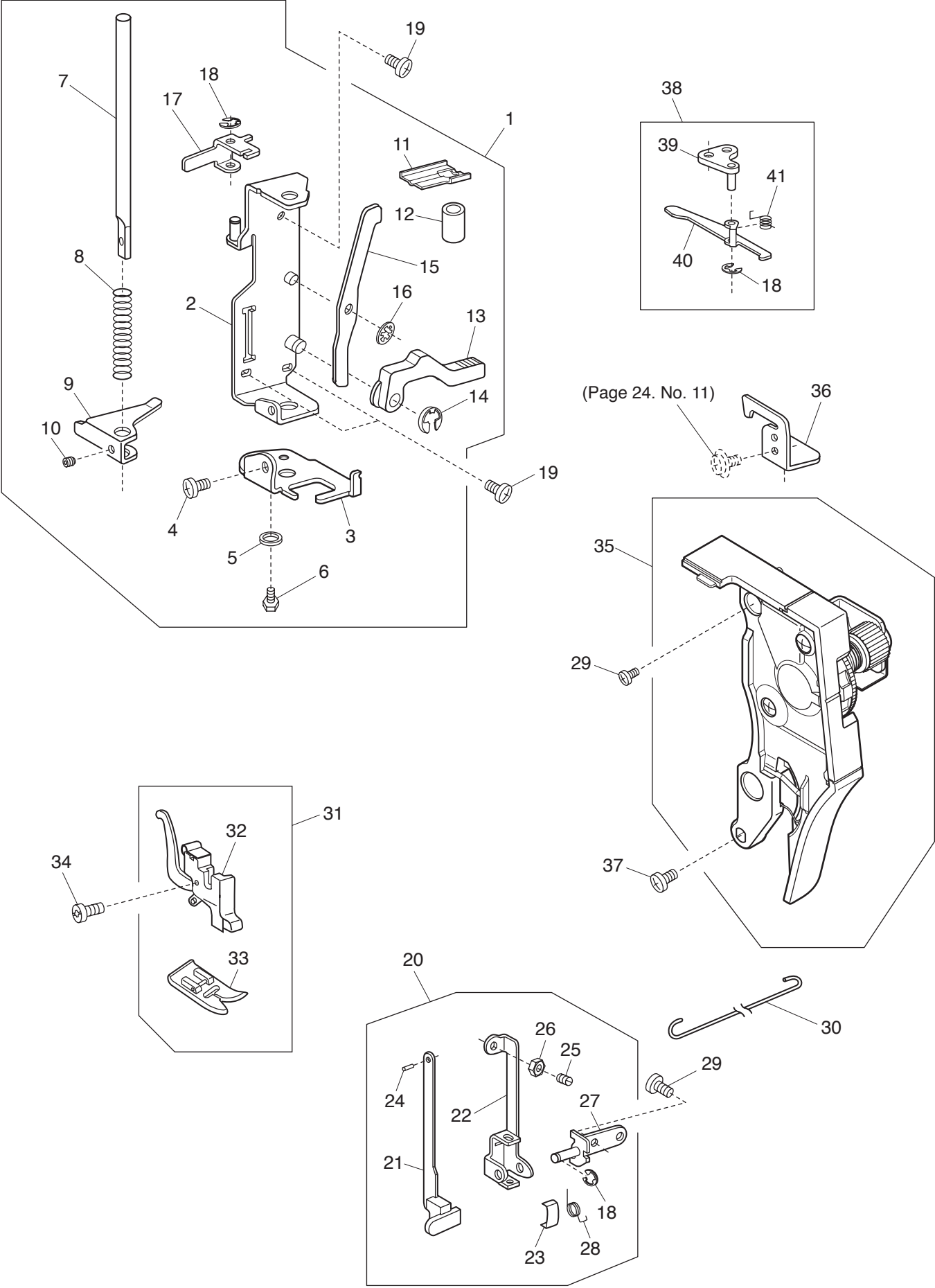
(Page 32. No.13)



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	315601002	Rear cover (unit)
2	315001006	Rear cover
3	652302004	Spool pin (hole)
4	652205006	Spool pin (no hole)
5	736007009	Spool pin spring
6	000161206	Setscrew 3x10 (B)
7	315022003	Spool pin spring base
8	730006000	Spring
9	000101404	Setscrew 4x6
10	000061205	Nut 4-3-7
11	000115205	Setscrew TP 4x6
12	000121905	Setscrew 4x12 (B)
13	745033002	Cap
14	745002002	Bed cover
15	315608009	Front cover (unit) (1522LG)
	315608102	Front cover (unit) (1522BL)
	315608205	Front cover (unit) (1522DG)
	315608308	Front cover (unit) (1522GN)
	315608401	Front cover (unit) (1522RD)
	315608504	Front cover (unit) (1522PG Anniversary Edition)
16	315020A01	Front cover
17	315021A01	Front cover panel (1522LG)
	315021B01	Front cover panel (1522BL)
	315021C01	Front cover panel (1522DG)
	315021D01	Front cover panel (1522GN)
	315021E01	Front cover panel (1522RD)
	315021F01	Front cover panel (1522PG Anniversary Edition)
18	730501011	Thread guide plate (unit)
19	000160102	Adjustable lock nut 4
20	735016307	Bobbin winder stopper
21	000103107	Setscrew 4x14
22	000081005	Setscrew 4x8
23	000101703	Setscrew 4x12
24	745031000	Thread guide
25	000107307	Setscrew 3x8 (B)
26	315502002	Extension table (unit) (1522LG)
	315502105	Extension table (unit) (1522BL)
	315502208	Extension table (unit) (1522DG)
	315502301	Extension table (unit) (1522GN)
	315502404	Extension table (unit) (1522RD)
	315502507	Extension table (unit) (1522PG Anniversary Edition)
27	315603004	Face cover (unit) (1522LG)
	315603107	Face cover (unit) (1522BL)
	315603200	Face cover (unit) (1522DG)
	315603303	Face cover (unit) (1522GN)
	315603406	Face cover (unit) (1522RD)
	315603509	Face cover (unit) (1522PG Anniversary Edition)
28	315007A01	Face cover
29	315008A01	Face cover panel (1522LG)
	315008B01	Face cover panel (1522BL)
	315008C01	Face cover panel (1522DG)
	315008D01	Face cover panel (1522GN)
	315008E01	Face cover panel (1522RD)
	315008F01	Face cover panel (1522PG Anniversary Edition)
30	000120203	Setscrew 3x8 (B)
31	840602006	Thread cutter (unit)
32	000103509	Setscrew 4x10
33	735616200	Rubber base (unit)
34	735002001	Rubber base
35	000097901	Flat screw 5x18
36	000061319	Nut 5-1-8
37	739064003	Bed rubber base

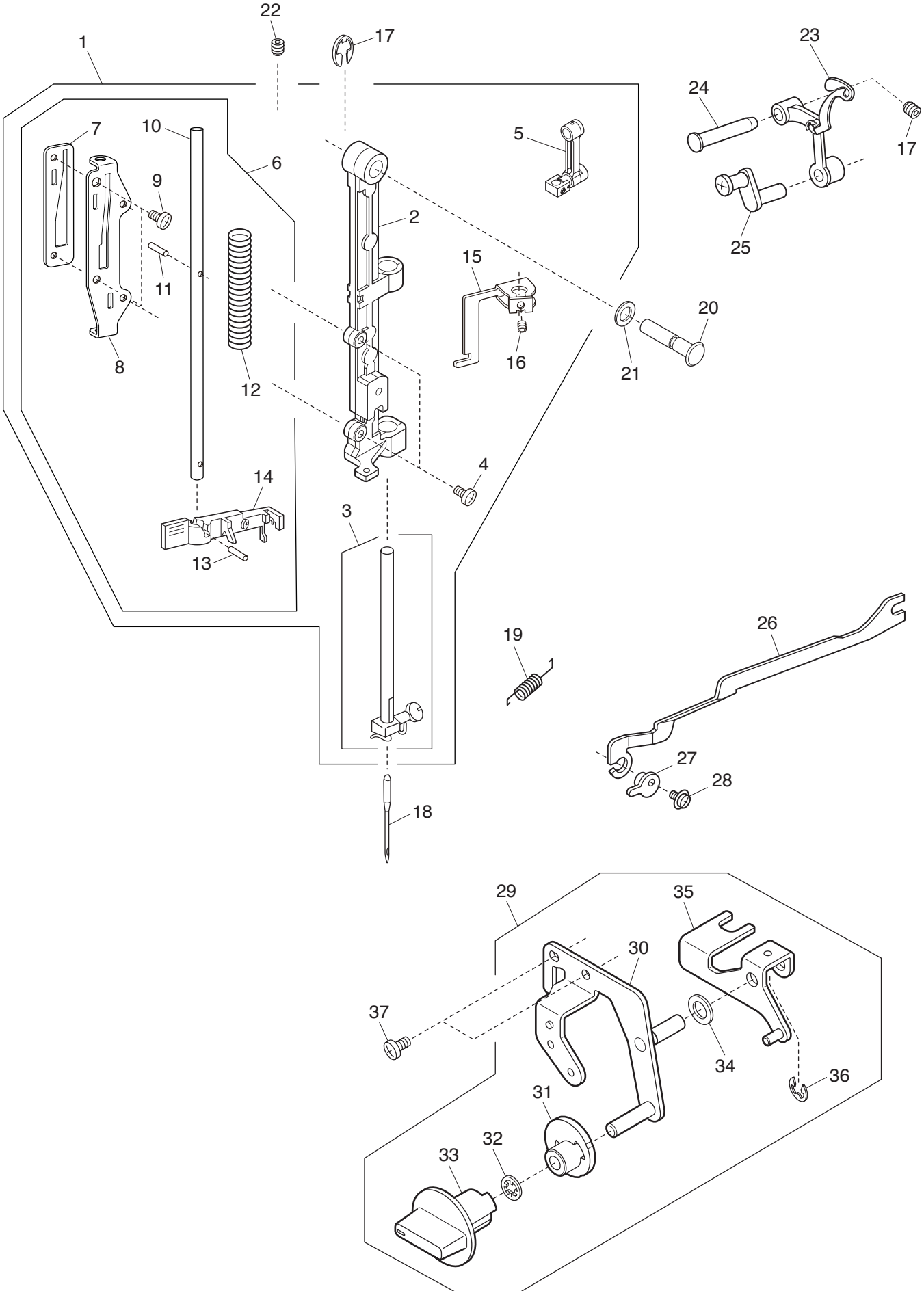
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	741622105	Presser bar base plate (unit)
2	308060001	Presser bar base plate
3	743212001	Needle drop adjusting plate
4	000101404	Setscrew 4x6
5	000070506	Washer 4
6	000138307	Bolt 4x8
7	303017101	Presser bar
8	301020008	Presser bar spring
9	735028003	Presser bar bracket
10	000111500	Hexagonal socket screw 4x8
11	301018003	Presser bar regulating plate
12	301019004	Presser bar bushing
13	735029004	Presser foot lifter
14	000001609	Snap ring E-5
15	735030008	Tension release lever
16	000013903	Snap ring CS-5
17	740051001	BH regulating lever
18	000002105	Snap ring E-3
19	000081005	Setscrew 4x8
20	740617001	BH lever (unit)
21	753629109	BH lever
22	740047004	BH lever supporter
23	753027008	Friction spring
24	000023009	Spring pin 1.6x4
25	000113306	Setscrew 4x10
26	000160102	Adjustable lock nut 4
27	740048005	BH lever base plate
28	740049006	BH lever spring
29	000103808	Setscrew 3x5
30	740052002	BH shifting rod
31	301612003	Presser foot (unit)
32	611510000	Presser foot holder
33	301505002	Zigzag foot
34	660106001	Setscrew
35	315605006	Tension assembly (unit) (1522LG)
	315605109	Tension assembly (unit) (1522BL)
	315605202	Tension assembly (unit) (1522DG)
	315605305	Tension assembly (unit) (1522GN)
	315605408	Tension assembly (unit) (1522RD)
	315605501	Tension assembly (unit) (1522PG Anniversary Edition)
36	739016000	Top cover thread guide
37	000101703	Setscrew 4x12
38	739605002	Tension release arm (unit)
39	739017001	Tension release arm base
40	739018002	Tension release arm
41	739019003	Tension release spring

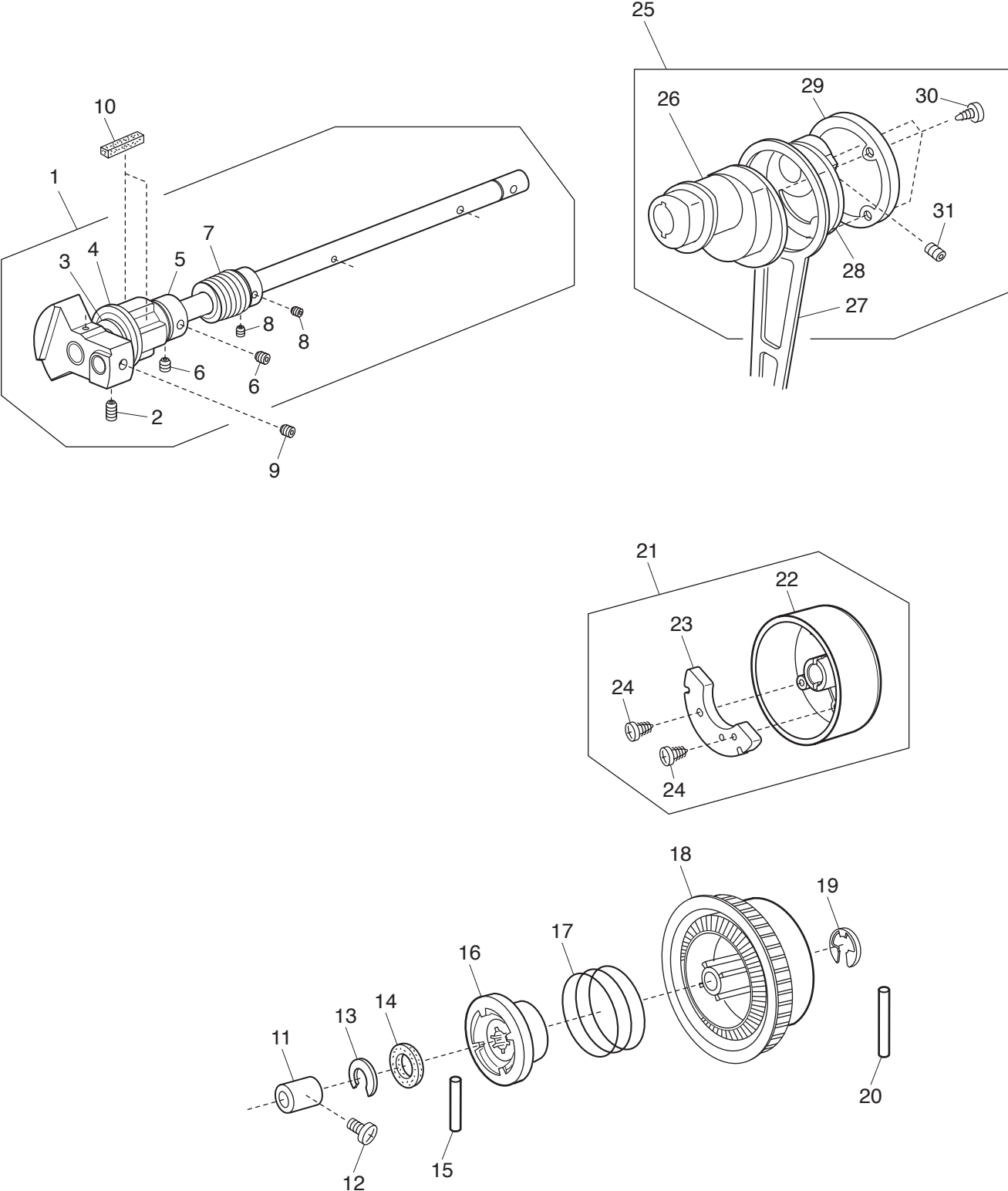
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	743678205	Needle bar supporter (unit)
2	743246004	Needle bar supporter
3	311622007	Needle bar (unit)
4	000103808	Setscrew 3x5
5	311502000	Needle bar connecting stud (unit)
6	311611106	Needle threader guide plate (unit)
7	311027006	Needle threader guide plate
8	311032107	Needle threader shaft plate
9	000101105	Setscrew 3x4
10	301034005	Needle threader shaft
11	000122906	Guide pin E-2x14-CH
12	734094007	Needle threader spring
13	000003508	Spring pin 2x8
14	639643009	Needle threader plate (unit)
15	311028007	Needle threader set plate
16	000111902	Hexagonal socket screw 3x4
17	000111304	Hexagonal socket screw 5x5
18	102408089	Needle
19	743216005	Needle bar supporter spring
20	730022002	Needle bar supporter pin
21	673022002	Washer
22	000002507	Snap ring E-4
23	625506109	Thread take-up lever (unit)
24	647040108	Thread take-up lever pin
25	735504008	Needle bar crank pin (unit)
26	735119002	Zigzag rod
27	310041003	Eccentric plate
28	000115009	Setscrew TP 3x8
29	315604005	Face plate set plate (unit)
30	315009004	Face plate set plate
31	301021009	Presser foot pressure adjusting plate
32	000013800	Snap ring CS-6
33	315010008	Presser foot pressure dial
34	000072601	Washer 6
35	315011009	Presser foot pressure adjusting arm
36	000001609	Snap ring E-5
37	000081005	Setscrew 4x8

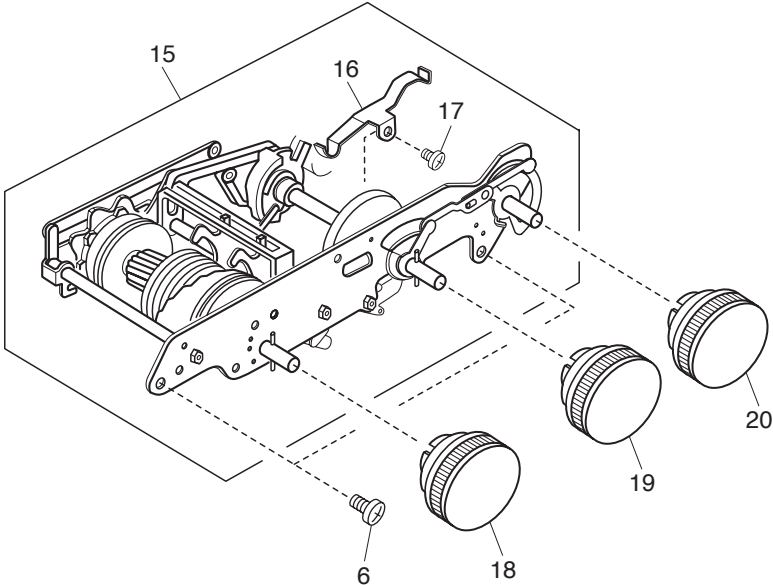
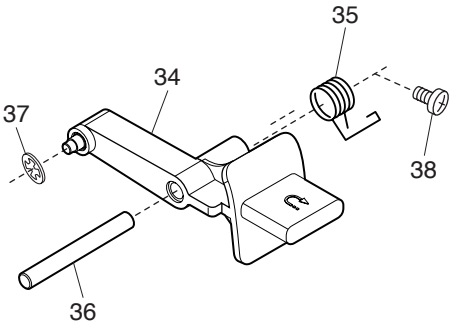
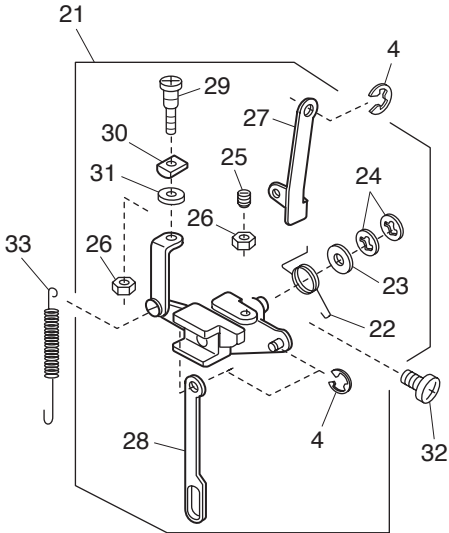
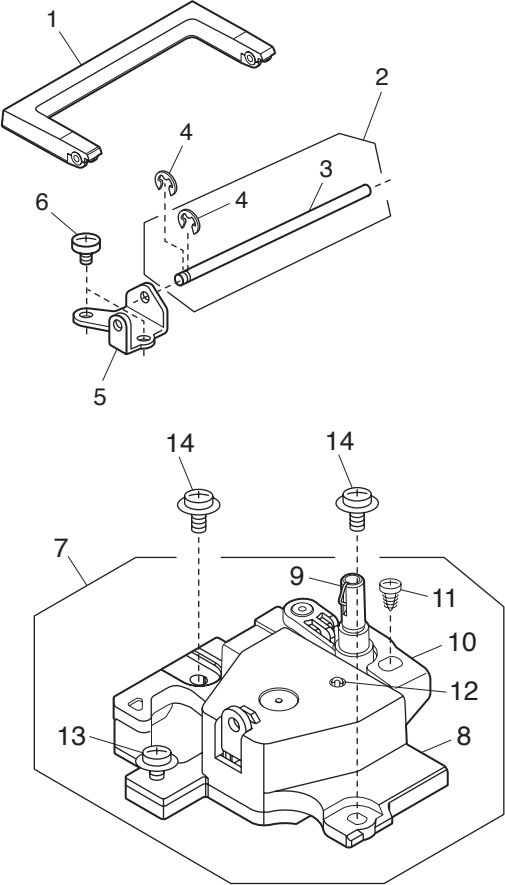
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	315606007	Upper shaft (unit)
2	102073003	Setscrew
3	000036717	Washer
4	732025001	Upper shaft front bushing
5	639095000	Ring
6	000111304	Hexagonal socket screw 5x5
7	660113001	Worm
8	000111201	Hexagonal socket screw 4x4
9	761052007	Setscrew
10	731312005	Felt
11	732003003	Upper shaft rear bushing
12	000172602	Setscrew 5x8
13	310069007	Felt holder
14	743029009	Felt
15	000024206	Spring pin 3x30
16	502064003	Clutch ring
17	502065004	Clutch spring
18	303025009	Belt wheel
19	000030205	Snap ring E-8
20	000024402	Spring pin 3x40
21	315607008	Handwheel (unit)
22	315016004	Handwheel
23	743030003	Balance weight
24	000121400	Setscrew 3x14 (B)
25	304609006	Crank rod (unit)
26	304042005	Feed cam
27	743011008	Crank rod
28	304044007	Crank cam
29	304043006	Crank cam plate
30	000161309	Setscrew 3x12 (B)
31	000110107	Hexagonal socket screw 5x5 (WP)

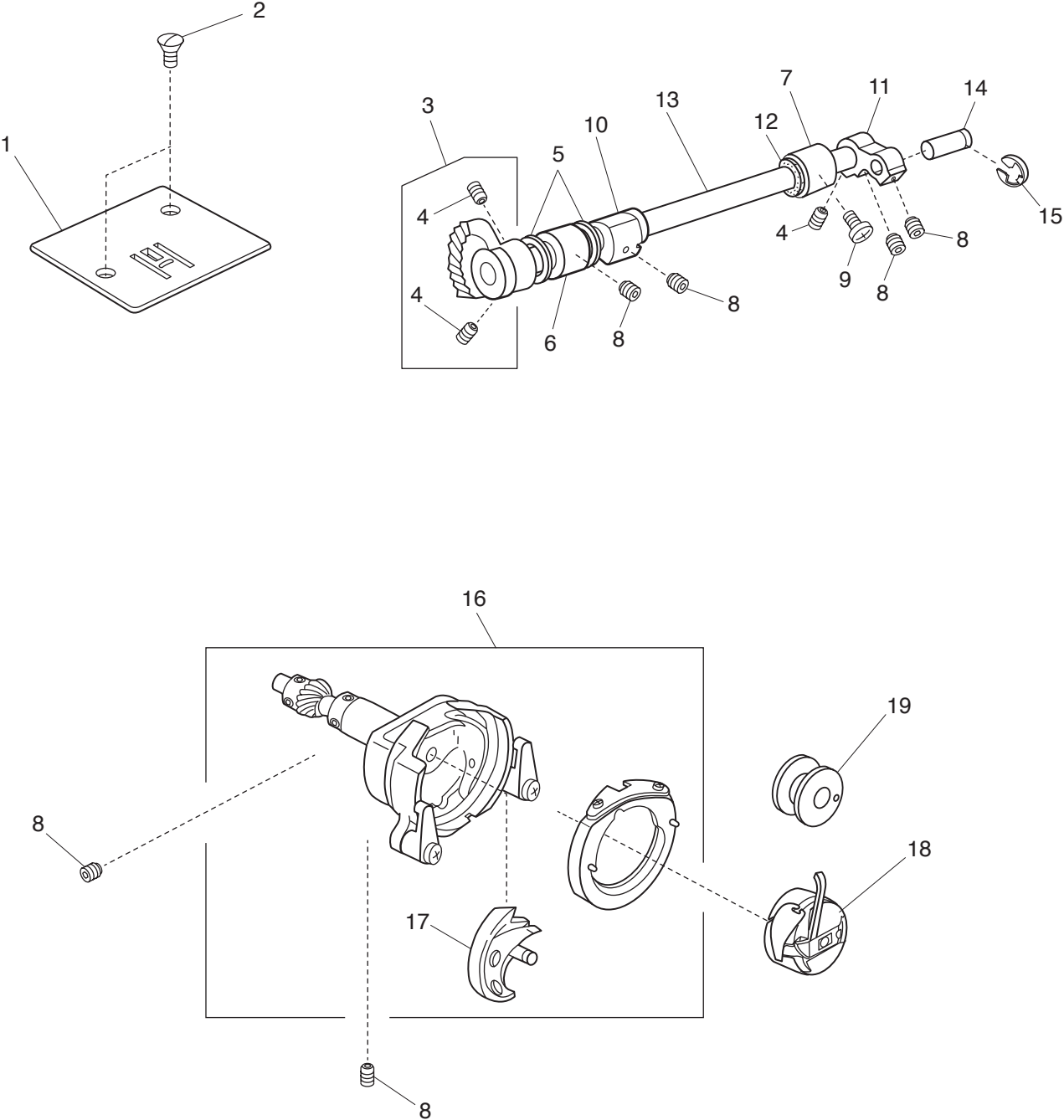
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	315014002	Handle
2	740624001	Carrying handle set pin (unit)
3	740011009	Handle shaft
4	000002105	Snap ring E-3
5	740010008	Handle supporter
6	000081005	Setscrew 4x8
7	315602003	Bobbin winder supporter (unit)
8	311011007	Bobbin winder base plate
9	311503001	Bobbin winder arm (unit)
10	315003008	Clutch lever
11	000120203	Setscrew 3x8 (B)
12	740042009	Bobbin winder arm spring
13	000109103	Setscrew 4x12
14	000115607	Setscrew TP 4x8
15	745604000	Zigzag mechanism (unit)
16	737011009	Index spring
17	000103808	Setscrew 3x5
18	315018A01	Pattern dial (1522LG)
	315018B01	Pattern dial (1522BL)
	315018C01	Pattern dial(1522DG)
	315018D01	Pattern dial (1522GN)
	315018E01	Pattern dial (1522RD)
	315018F01	Pattern dial (1522PG Anniversary Edition)
19	315019A01	Stitch length dial (1522LG)
	315019B01	Stitch length dial (1522BL)
	315019C01	Stitch length dial(1522DG)
	315019D01	Stitch length dial (1522GN)
	315019E01	Stitch length dial (1522RD)
	315019F01	Stitch length dial (1522PG Anniversary Edition)
20	315018A02	ZZ width dial (1522LG)
	315018B02	ZZ width dial (1522BL)
	315018C02	ZZ width dial(1522DG)
	315018D02	ZZ width dial (1522GN)
	315018E02	ZZ width dial (1522RD)
	315018F02	ZZ width dial (1522PG Anniversary Edition)
21	311604003	Feed regulator (unit)
22	735077007	Feed regulating body spring
23	735073003	Plain washer
24	000013800	Snap ring CS-6
25	648010009	Setscrew
26	000160102	Adjustable lock nut 4
27	739020007	Feed regulating rod
28	730045001	Reverse link
29	735074004	SS adjusting screw
30	735076006	SS rod block
31	000071013	Washer 4
32	000172602	Setscrew 5x8
33	670100006	Feed regulator spring
34	315017005	R button
35	739063002	R button spring
36	736015000	R button shaft
37	000014007	Snap ring CS-4
38	000101301	Setscrew 5x10

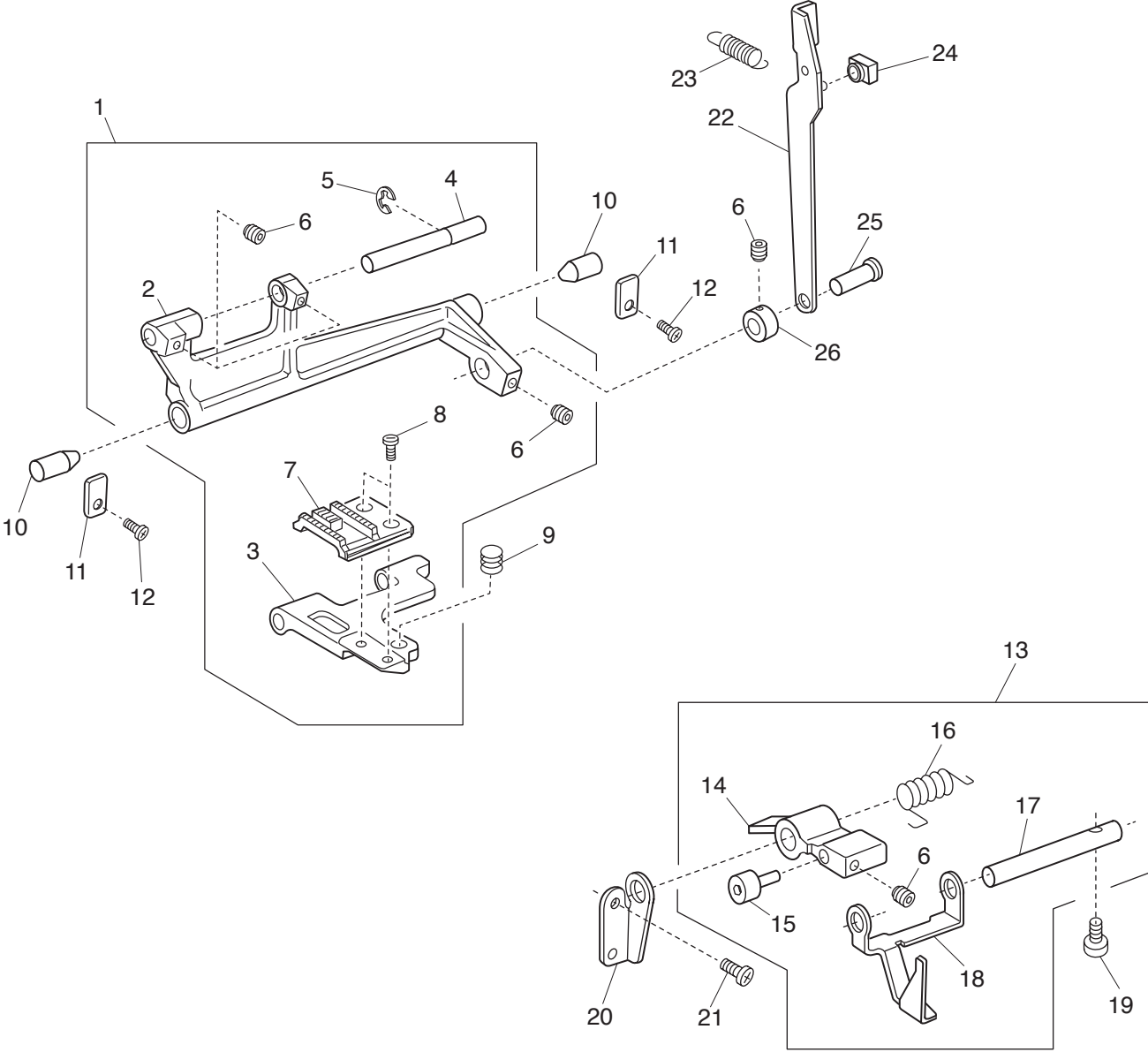
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	744004001	Needle plate
2	681009101	Setscrew
3	735950003	Lower shaft gear (unit)
4	000110107	Hexagonal socket screw 5x5 (WP)
5	000036201	Washer
6	735233003	Bushing (front)
7	735234004	Bushing (rear)
8	000111304	Hexagonal socket screw 5x5
9	000172602	Setscrew 5x8
10	735061101	Feed lifting cam
11	639036003	Lower shaft crank arm
12	822070003	Felt
13	735236006	Lower shaft
14	639037004	Pin
15	000001609	Snap ring E-5
16	735610101	Shuttle race body (unit)
17	532096007	Shuttle hook
18	647515006	Bobbin case (unit)
19	102261000	Bobbin

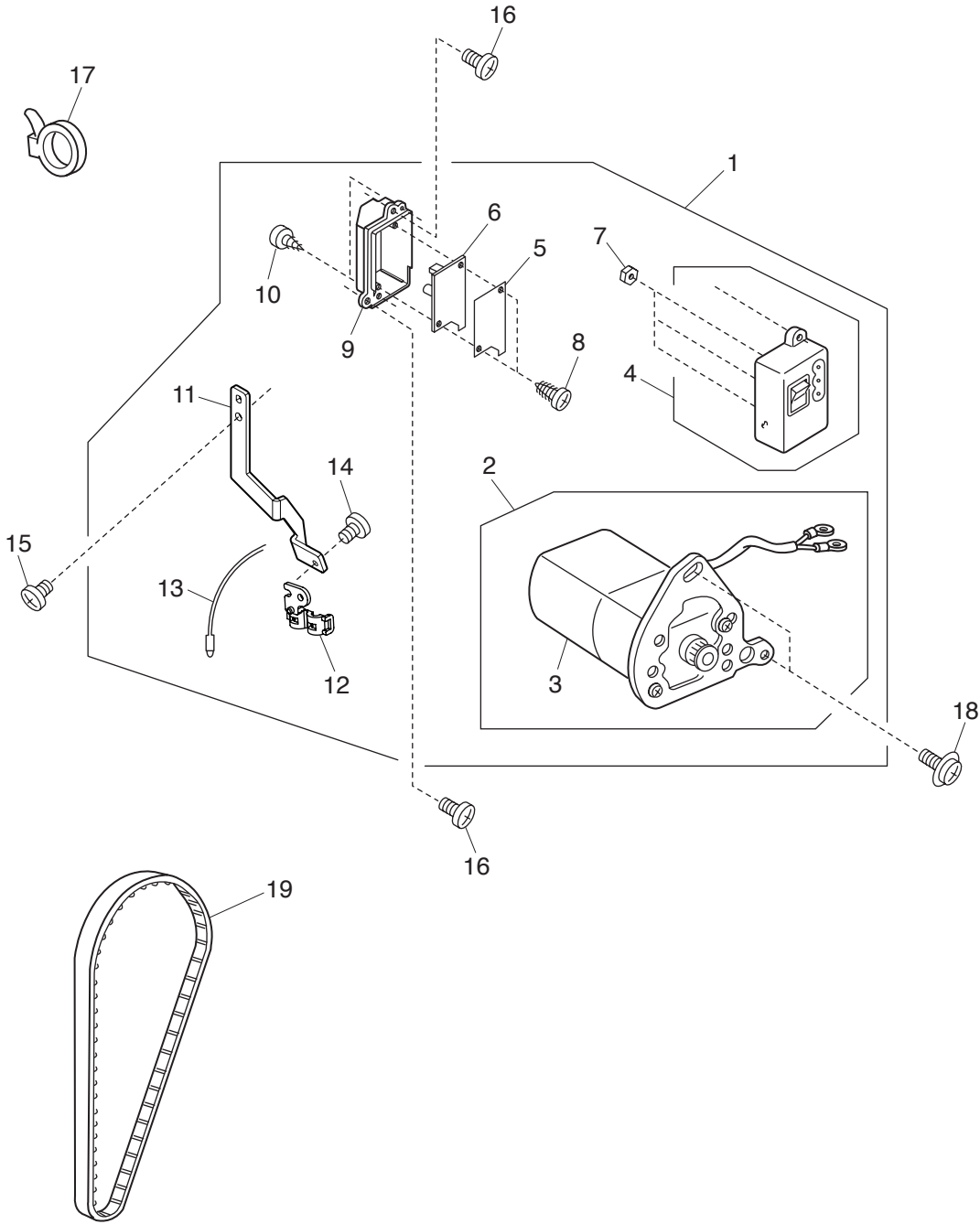
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	735612000	Feed rock shaft (unit)
2	735078008	Feed rock shaft
3	735079009	Feed bar
4	735080003	Feed bar shaft
5	000002507	Snap ring E-4
6	000111201	Hexagonal socket screw 4x4
7	735081004	Feed dog
8	735082005	Setscrew
9	735083006	Feed bar spring
10	735084007	Feed rock shaft center
11	735085008	Feed rock shaft center plate
12	000101404	Setscrew 4x6
13	301609018	Feed lifting arm (unit)
14	301027005	Feed lifting arm
15	739105007	Feed lifting pin
16	730061003	Feed lifting spring
17	735090006	Feed lifting shaft
18	740013001	Drop feed selecting plate
19	000101703	Setscrew 4x12
20	739022009	Feed lifting shaft holder
21	000081119	Setscrew 4x6
22	743012009	Feed rod
23	743013000	Feed rod spring
24	102141003	Feed regulator slide block
25	735071104	Feed rock shaft connecting pin
26	735276008	Ring

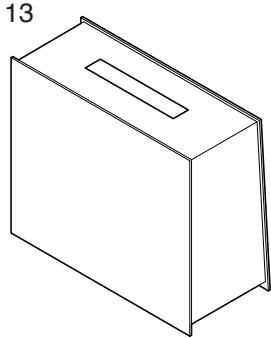
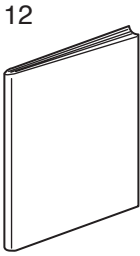
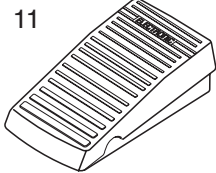
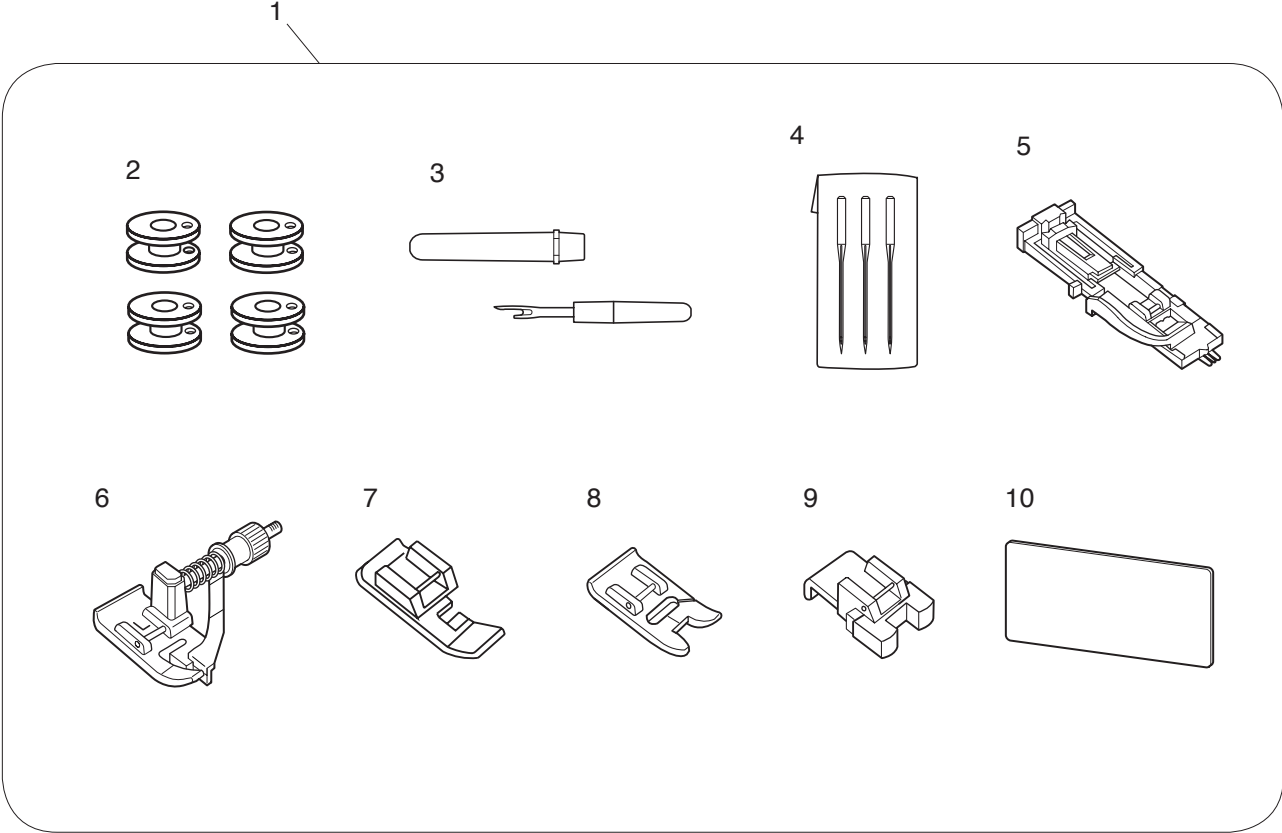
PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	311635106	Machine socket (whole unit)
2	743671024	Motor assembly (unit) including bracket
3	025601026	Motor with pulley
4	739503308	Machine socket (unit)
5	508134003	Insulation paper
6	508512102	Printed circuit board C (unit)
7	000060802	Nut 3-1-5.5
8	000120203	Setscrew 3x8 (B)
9	508133002	Machine socket cover
10	000107802	Setscrew 3x10 (B)
11	741078007	LED set plate
12	508143005	LED holder
13	508515105	LED (unit)
14	000103808	Setscrew 3x5
15	000081005	Setscrew 4x8
16	000103509	Setscrew 4x10
17	000053008	Cord binder
18	000115504	Setscrew TP 5x10
19	650166008	Motor timing belt

PARTS LIST



PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
1	315870004	Accessory set
2	102261000	Bobbin
3	647808009	Seam ripper (buttonhole opener)
4	639804000	Needle set
5	740801004	Automatic buttonhole foot
6	743817002	Blind hem foot
7	611406002	Zipper foot
8	743816001	Satin stitch foot
9	743819004	Button sewing foot
10	103108A01	Card
11	045501005	Foot control
12	315800047	Instruction manual
13	315401000	Semi hard cover