

Z-8550A Z-8560A

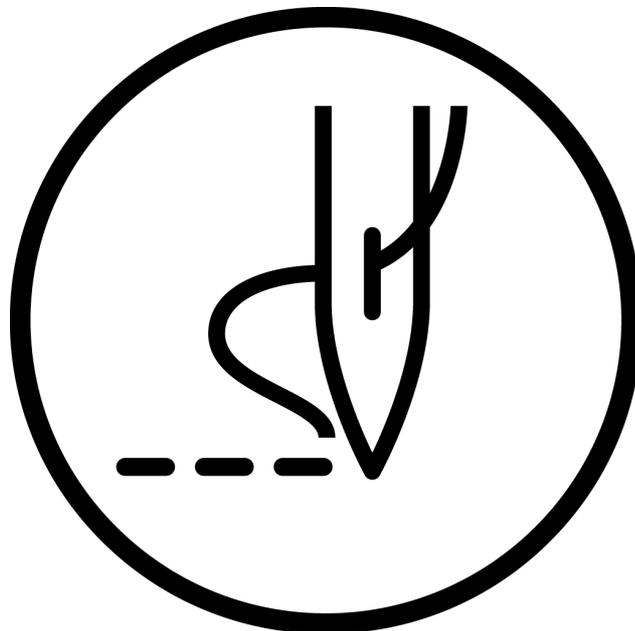
Basic Operation Manual

ELECTRONIC DIRECT DRIVE ZIGZAG LOCK STITCHER ELECTRONIC DIRECT DRIVE ZIGZAG LOCK STITCHER WITH THREAD TRIMMER

Please read this manual before using the machine.

Please keep this manual within easy reach for quick reference.

This basic operation manual describes basic operations including sewing machine operations. For cleaning, standard adjustments and more details, please refer to the instruction manual contained in the Document CD.



brother[®]

Thank you very much for buying a BROTHER sewing machine. Before using your new machine, please read the safety instructions below and the explanations given in the instruction manual.

With industrial sewing machines, it is normal to carry out work while positioned directly in front of moving parts such as the needle and thread take-up, and consequently there is always a danger of injury that can be caused by these parts. Follow the instructions from training personnel and instructors regarding safe and correct operation before operating the machine so that you will know how to use it correctly.

SAFETY INSTRUCTIONS

[1] Safety indications and their meanings

This instruction manual and the indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people.

Indications

 DANGER	The instructions which follow this term indicate situations where failure to follow the instructions will almost certainly result in death or severe injury.
 CAUTION	The instructions which follow this term indicate situations where failure to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings.

Symbols



..... This symbol () indicates something that you should be careful of. The picture inside the triangle indicates the nature of the caution that must be taken.
(For example, the symbol at left means “beware of injury”.)



..... This symbol () indicates something that you must not do.



..... This symbol () indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done.
(For example, the symbol at left means “you must make the ground connection”.)

[2] Notes on safety

DANGER



Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the face plate of the control box. Touching areas where high voltages are present can result in severe injury.

CAUTION

Environmental requirements



Use the sewing machine in an area which is free from sources of strong electrical noise such as high-frequency welders. Sources of strong electrical noise may cause problems with correct operation.



Any fluctuations in the power supply voltage should be within $\pm 10\%$ of the rated voltage for the machine. Voltage fluctuations which are greater than this may cause problems with correct operation.



The power supply capacity should be greater than the requirements for the sewing machine's electrical consumption. Insufficient power supply capacity may cause problems with correct operation.



The ambient temperature should be within the range of 5°C to 35°C during use. Temperatures which are lower or higher than this may cause problems with correct operation.



The relative humidity should be within the range of 45% to 85% during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.



In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.

Installation



Machine installation should only be carried out by a qualified technician.



Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.



The sewing machine weighs more than 49 kg. The installation should be carried out by two or more people.



Do not connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.



Turn off the power switch before inserting or removing the plug, otherwise damage to the control box could result.



Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.



When securing the cords, do not bend the cords excessively or fasten them too hard with staples, otherwise there is the danger that fire or electric shocks could occur.



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.



Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result.

Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea.

Keep the oil out of the reach of children.

CAUTION

Sewing

-  This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.
-  The sewing machine should not be used for any applications other than sewing.
-  Be sure to wear protective goggles when using the machine.
If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.
-  Turn off the power switch at the following times. The machine may operate if the treadle is depressed by mistake, which could result in injury.
 - When threading the needle
 - When replacing the bobbin and needle
 - When not using the machine and when leaving the machine unattended
-  If the actuator is pressed by mistake when using the correction sewing function, the needle will move in a zigzag motion while the machine is operating, and injury may result.
-  If using a work table which has casters, the casters should be secured in such a way so that they cannot move.
-  Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.
-  Never touch the knife on the face plate when opening the thread takeup guard cover at times such as when taking up slack in the thread, otherwise injury may result.
-  Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.
-  Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
-  If an error occurs in machine, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest Brother dealer or a qualified technician.
-  If the machine develops a problem, contact your nearest Brother dealer or a qualified technician.

Cleaning

-  Turn off the power switch before carrying out cleaning. The machine may operate if the treadle is depressed by mistake, which could result in injury.
-  Do not directly touch sharp objects such as the tip of the rotary hook when cleaning the rotary hook, otherwise injury may result.
-  When removing the needle plate, auxiliary needle plate and knife unit, use a screwdriver that matches the size of the screw heads.
If a screwdriver with a size that does not match is used, it may damage the screw heads and cause personal injury or damage to the sewing articles.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result.
Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea.
Keep the oil out of the reach of children.
-  Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
-  Use only the proper replacement parts as specified by Brother.

⚠ CAUTION

Maintenance and inspection

- Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.
- Ask your Brother dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.
- Turn off the power switch and disconnect the power cord from the wall outlet at the following times, otherwise the machine may operate if the treadle is depressed by mistake, which could result in injury.
 - When carrying out inspection, adjustment and maintenance
 - When replacing consumable parts such as the rotary hook
- Turn off the power switch before inserting or removing the plug, otherwise damage to the control box could result.
- If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.
- Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.
- Never touch the knife on the face plate when opening the thread takeup guard cover, otherwise injury may result.
- If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the machine.
- When removing the needle plate, auxiliary needle plate and knife unit, use a screwdriver that matches the size of the screw heads. If a screwdriver with a size that does not match is used, it may damage the screw heads and cause personal injury or damage to the sewing articles.
- Use only the proper replacement parts as specified by Brother.
- Any problems in machine operation which result from unauthorized modifications to the machine will not be covered by the warranty.

[3] Warning labels

The following warning labels appear on the sewing machine. Please follow the instructions on the labels at all times when using the machine. If the labels have been removed or are difficult to read, please contact your nearest Brother dealer.

1

	⚠ 危険	⚠ 危険	
	高電圧部分にふれて、大けがをすることがある。電源を切り、5分たってからカバーをはずすこと。	触摸高压电部分，会导致受伤。在切断电源5分钟后，再开启盖罩。	
⚠ DANGER	⚠ GEFAHR	⚠ DANGER	⚠ PELIGRO
Hazardous voltage will cause injury. Turn off main switch and wait 5 minutes before opening this cover.	Hochspannung verletzungsgefahr! Bitte schalten sie den hauptschalter aus und warten sie 5 minuten, bevor sie diese abdeckung öffnen.	Un voltage non adapte provoque des blessures. Eteindre l'interrupteur et attendre 5 minutes avant d'ouvrir le capot.	Un voltaje inadecuado puede provocar las heridas. Apagar el interruptor principal y esperar 5 minutos antes de abrir esta cubierta.

2

	⚠ CAUTION
	Moving parts may cause injury. Operate with safety devices. Turn off main switch before threading, changing bobbin and needle, cleaning etc.

Safety devices:
 (A) Finger guard
 (B) Thread take-up guard cover

3

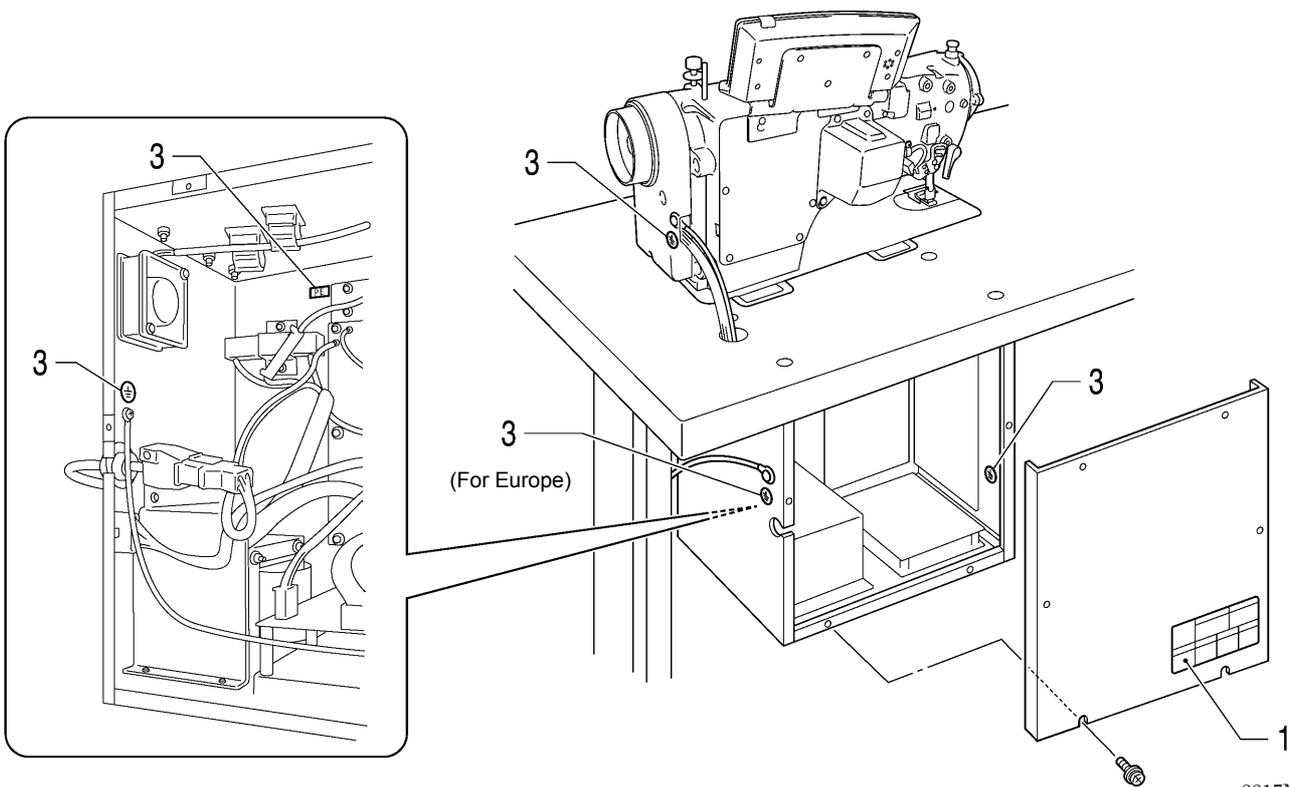
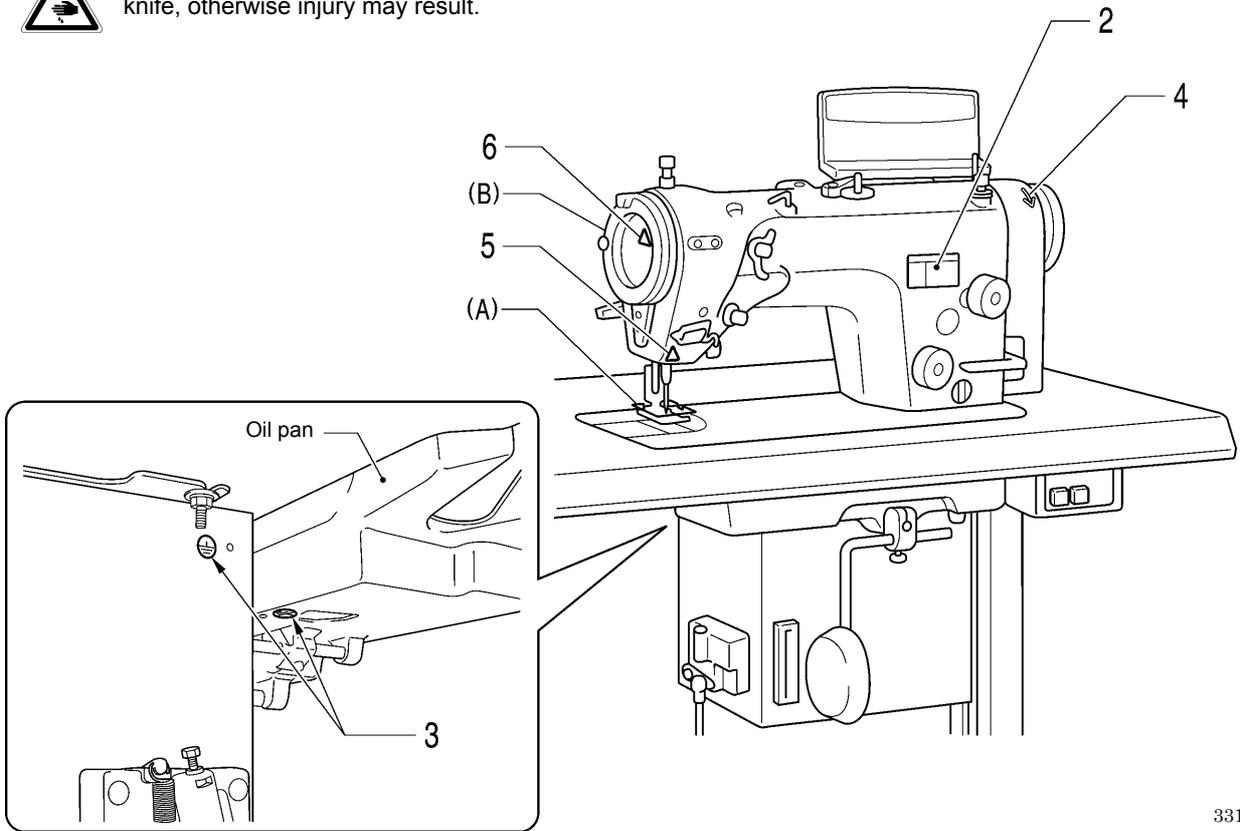


Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

4  Direction of operation

5  If the actuator is pressed by mistake when using the correction sewing function, the needle will move in a zigzag motion while the machine is operating, and injury may result.

6  Do not touch the thread take-up or the knife, otherwise injury may result.



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1. CONVENIENT FUNCTION FOR SMOOTH SEWING

Lower thread counter

➔ **INSTRUCTION MANUAL CD**
6-3. Using the lower thread counter

The graphic display lights and a buzzer sounds before the bobbin thread runs out, so that the operator can concentrate on the job with confidence.

Simple setting using the operation panel

➔ Page 19

Sewing patterns

14 patterns using 8 basic zigzag stitches are built in. Setting is easy because all you do is select a pattern number.

Zigzag width

The setting can be made numerically (mm).

Zigzag base line position

(Center line of sewing pattern)

The patterns can be easily shifted to the left and right.

EX.) Pattern no. [4 - - -]

3 mm



(Center)

1.5 mm to the left

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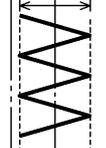
Sewing data save/load function

➔ **INSTRUCTION MANUAL CD**
7-5. Using user programs

Combinations of settings such as sewing patterns and stitch widths (sewing data) that you use often can be saved. Furthermore the sewing data can be loaded at the press of a key and sewn straight away.

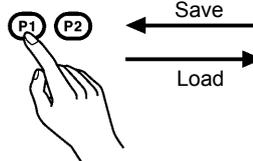
EX.) Pattern no. [2 - - -]

2.5 mm



2 mm to the right

(Center)



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Greater efficiency with needle up/needle down stopping

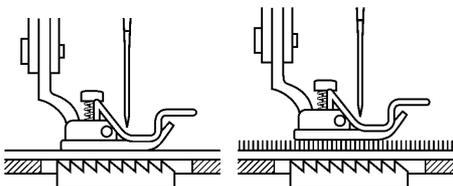
➔ **INSTRUCTION MANUAL CD**
7. Using the operation panel (Advanced operations)

The direction of the sewing article can be changed needle down stop is set, and articles can be removed and inserted smoothly when needle up stop is set.

Floating presser foot for easy handling

➔ **INSTRUCTION MANUAL CD**
12-12. Adjusting the presser foot floating amount

A micro-adjustable type floating presser foot is equipped as standard. This device is ideal for controlling presser foot floating in materials that stretch easily and materials with long pile. It prevents seam slippage and also prevents damage to the material. In addition, three-dimensional articles with irregular curves can also be handled with ease.



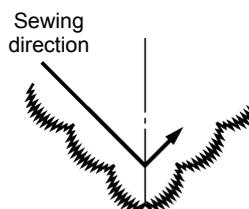
3819M

Scallop stitch mirror reflection function

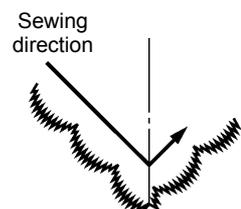
➔ **INSTRUCTION MANUAL CD**
6-2-2. Setting the sewing pattern

This is useful to avoid the pattern getting out of shape and when you would like to sew symmetrical patterns.

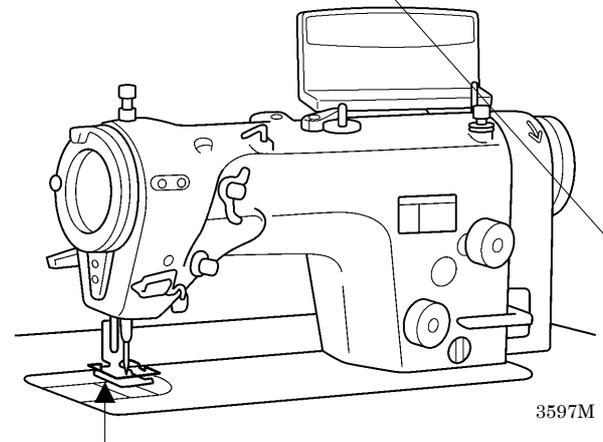
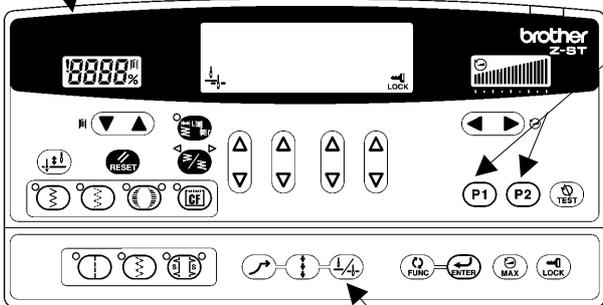
<When mirror reflected>



<When not mirror reflected>

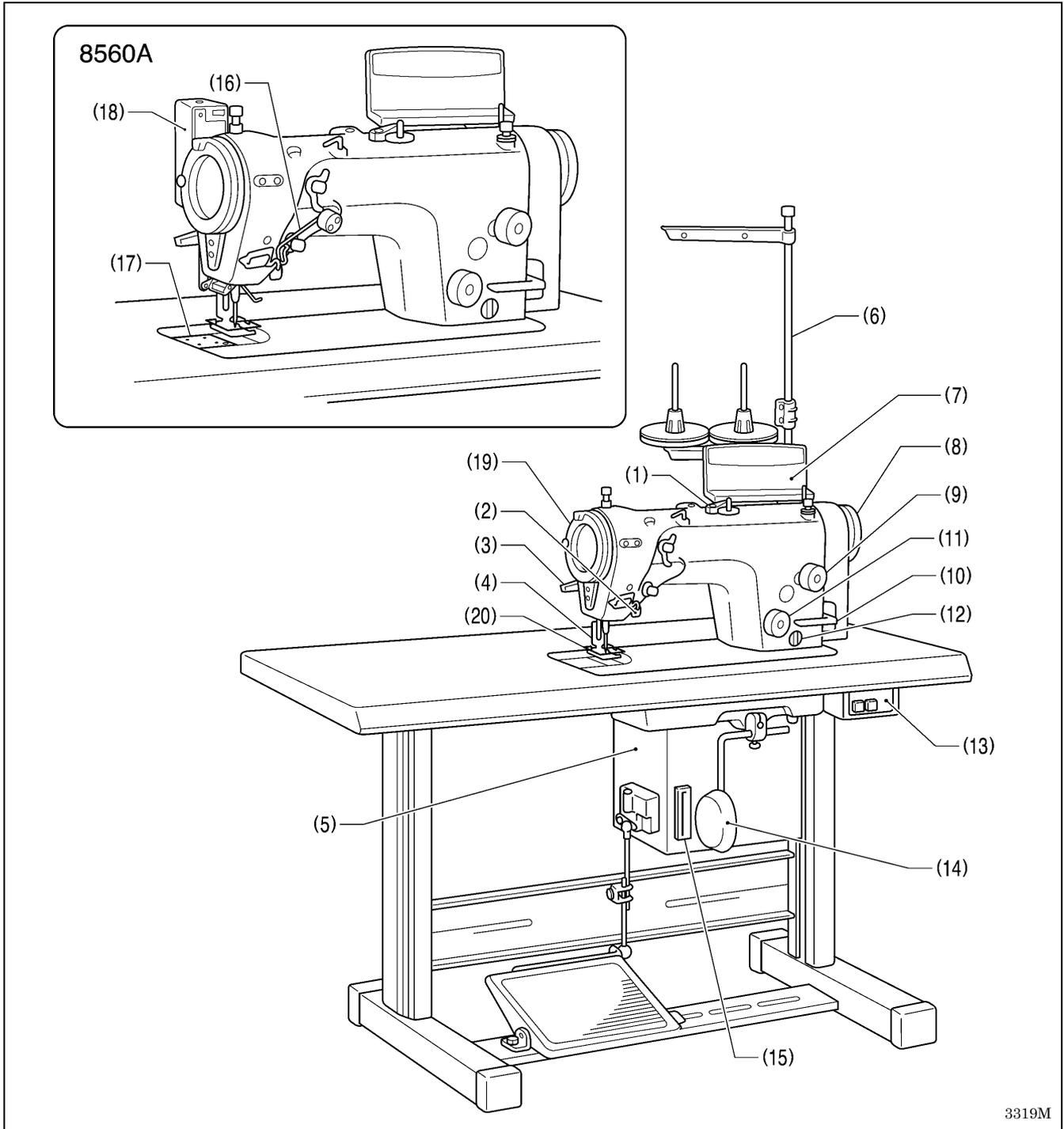


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2. NAMES OF MAJOR PARTS



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- | | |
|-------------------------|--|
| (1) Bobbin winder | (2) Actuator |
| (3) Lifting lever | (4) Presser foot |
| (5) Control box | (6) Cotton stand |
| (7) Operation panel | (8) Machine pulley |
| (9) Stitch length dial | (10) Reverse lever |
| (11) Condense dial | (12) Oil gauge window |
| (13) Power switch | (14) Knee lifter assembly |
| (15) CF slot | (16) Upper thread feeding device (8560A) |
| (17) Knife unit (8560A) | (18) Thread wiper (8560A) |

Safety devices

- | | |
|---------------------------------|-------------------|
| (19) Thread take-up guard cover | (20) Finger guard |
|---------------------------------|-------------------|

* CF™ is a trademark of SanDisk Corporation.

3. INSTALLATION

⚠ CAUTION



Machine installation should only be carried out by a qualified technician.



Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.



The sewing machine weighs approximately 49 kg. The installation should be carried out by two or more people.



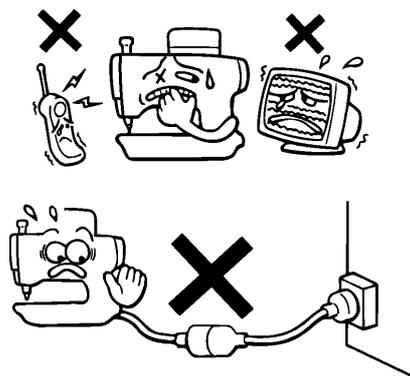
Do not connect the power cord until installation is complete. The machine may operate if the treadle is depressed by mistake, which could result in injury.



Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

About the machine set-up location

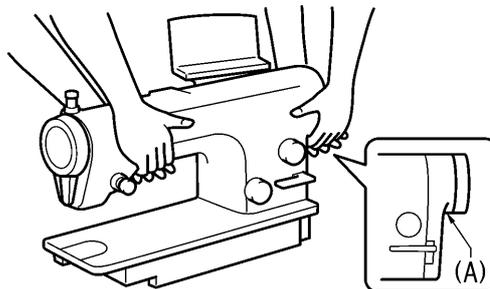
- Do not set up this sewing machine near other equipment such as televisions, radios or cordless telephones, otherwise such equipment may be affected by electronic interference from the sewing machine.
- The sewing machine should be plugged directly into an AC wall outlet. Operation problems may result if extension cords are used.



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Carrying the machine

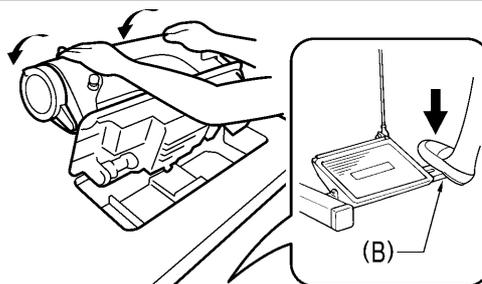
- The machine should be carried by the arm by two people as shown in the illustration.
- * Hold the motor cover (A) by hand also so that the pulley does not rotate.



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Tilting back the machine head

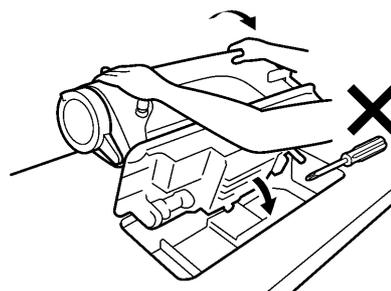
- Hold section (B) with your foot so that the table does not move, and then push the arm with both hands to tilt back the machine head.



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Returning the machine head to the upright position

- Clear away any tools, etc. which may be near the table holes.
- While holding the arm with both hands, gently return the machine head to the upright position.

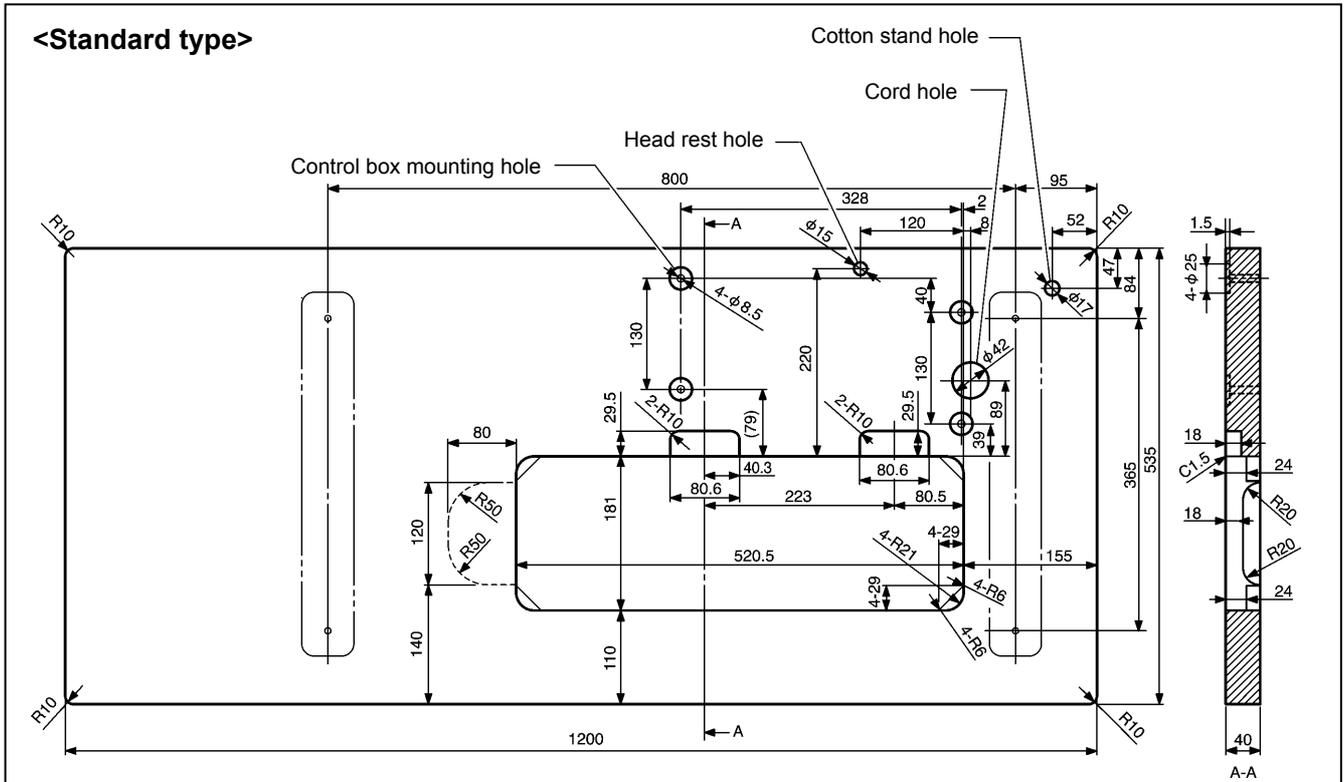


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3. INSTALLATION

3-1. Table processing diagram

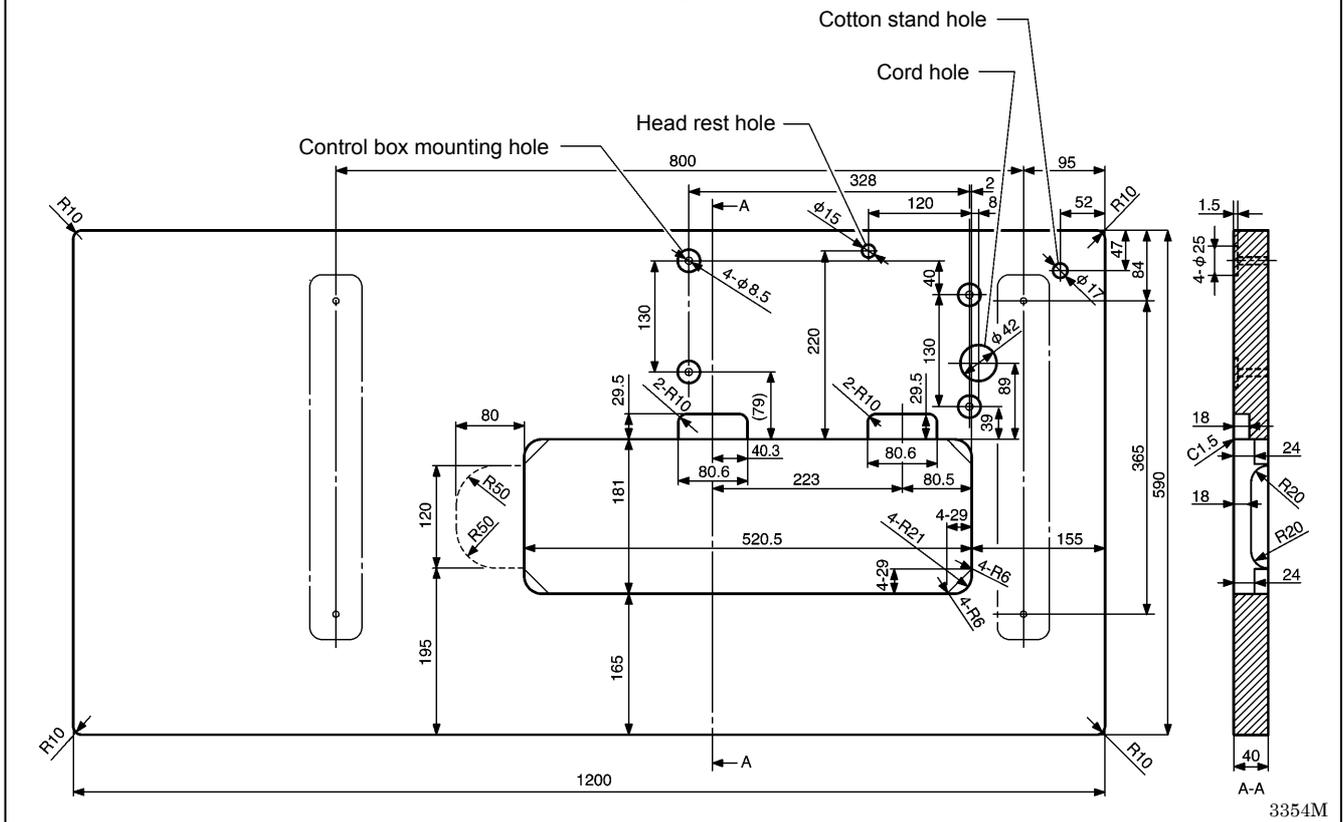
- The top of the table should be 40 mm in thickness and should be strong enough to hold the weight and with-stand the vibration of the sewing machine.
- Drill holes as indicated in the illustration below.
- Select a method that is easy to carry out for the type of table used.



3353M

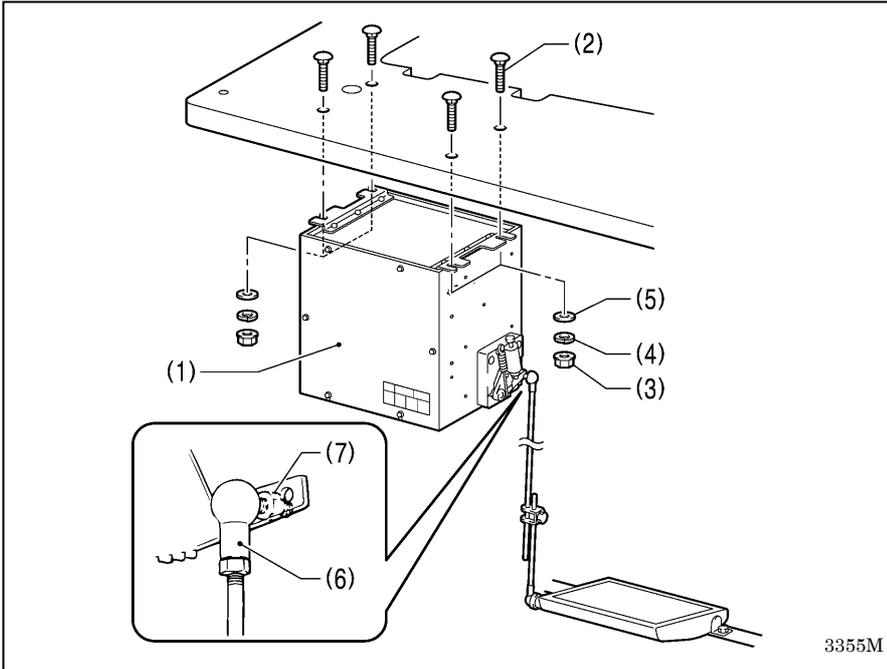
<Wide type>

This type has a wider front/back dimensions at the front of the sewing machine.



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3-2. Installation



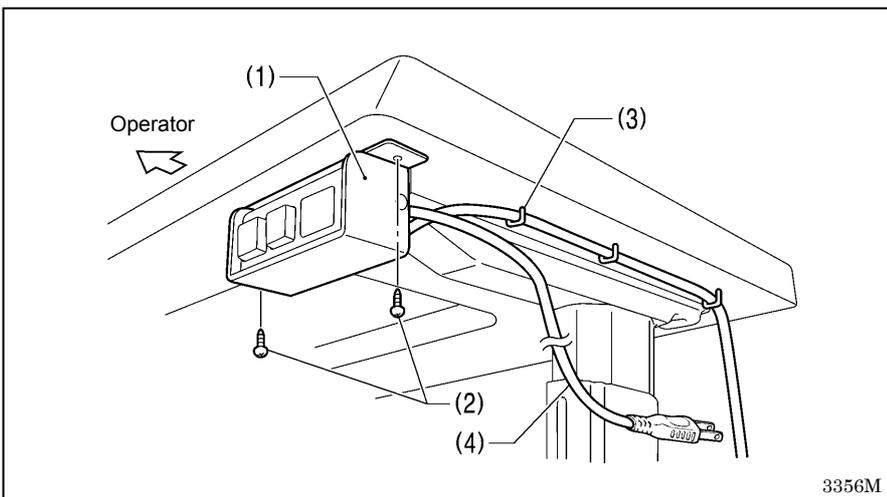
1. Control box

- (1) Control box
- (2) Bolts [4 pcs]
- (3) Nuts [4 pcs]
- (4) Spring washers [4 pcs]
- (5) Washers [4 pcs]

2. Connecting rod

- (6) Connecting rod
- (7) Nut

3355M

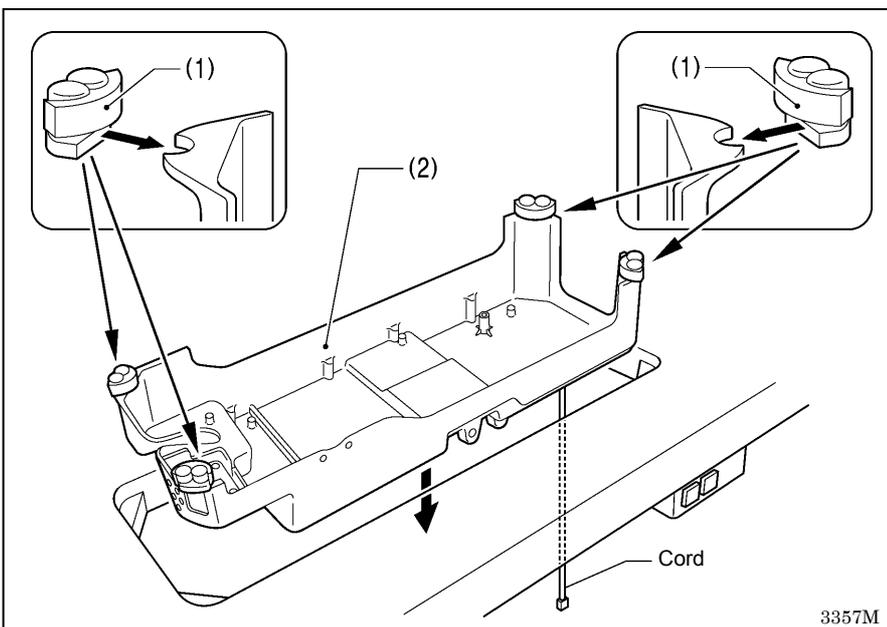


3. Power switch

- (1) Power switch
- (2) Screws [2 pcs]
- (3) Staples [5 pcs]

Secure the power cord (4) in a suitable place depending in the position of the wall outlet.

3356M

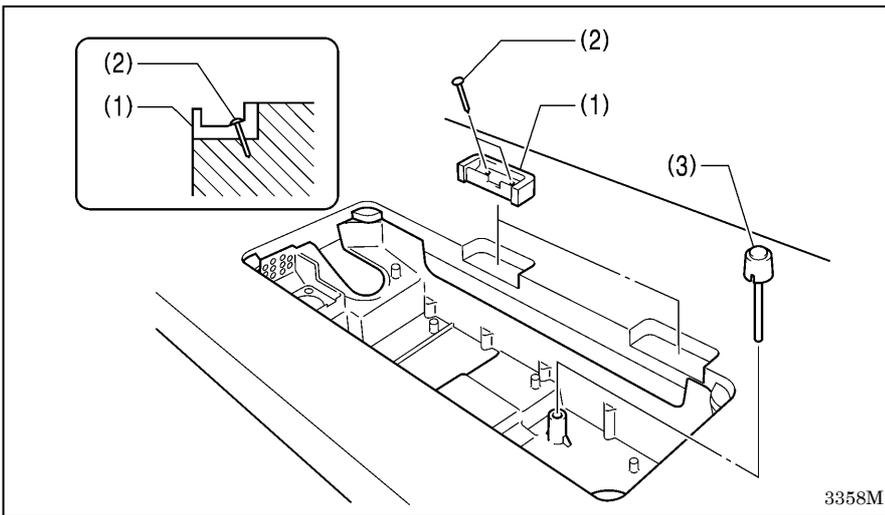


4. Oil pan

- (1) Head cushions [4 pcs]
- (2) Oil pan

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3. INSTALLATION

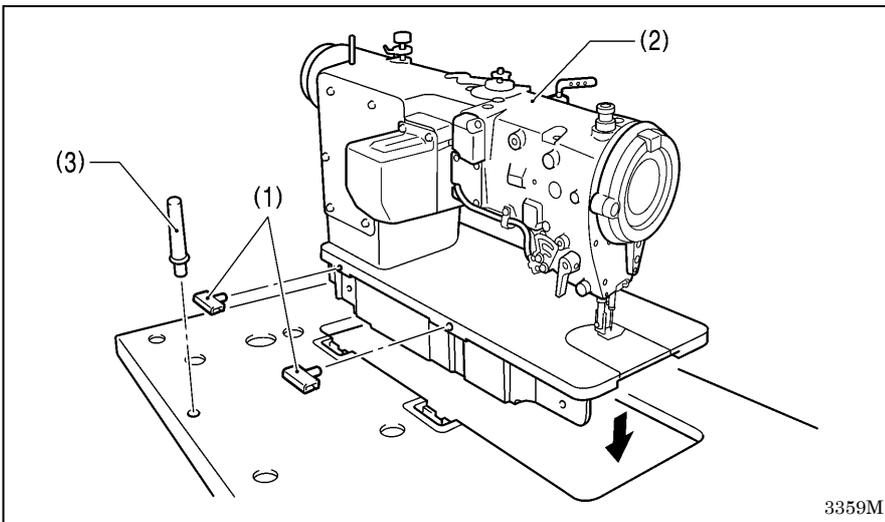


5. Rubber cushions

- (1) Rubber cushions [2 pcs]
- (2) Nails [4 pcs]

6. Knee lifter complying bar

- (3) Knee lifter complying bar

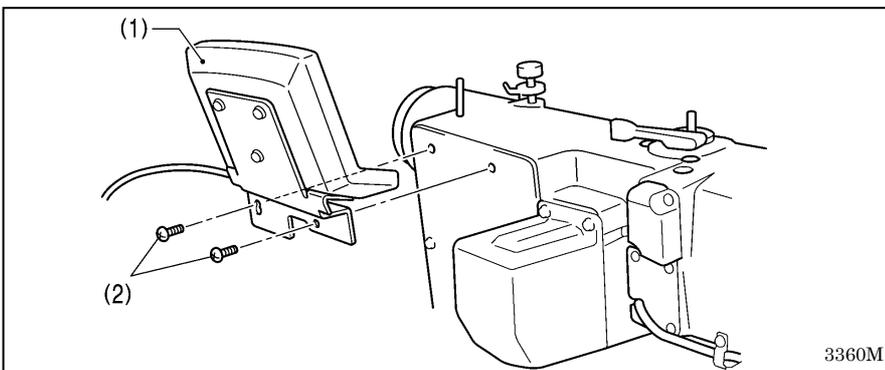


7. Machine head

- (1) Hinges [2 pcs]
- (2) Machine head
- (3) Head rest

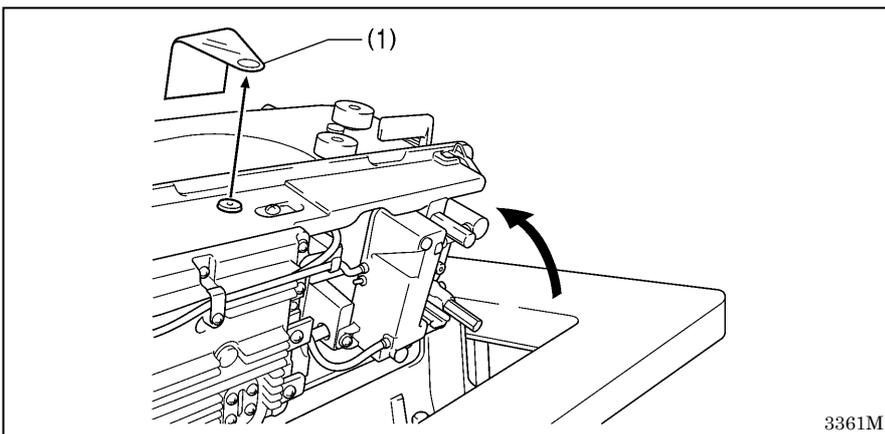
NOTE:

- Tap the head rest (3) securely into the table hole.
- If the head rest (3) is not pushed in as far as it will go, the machine head will not be sufficiently stable when it is tilted back.



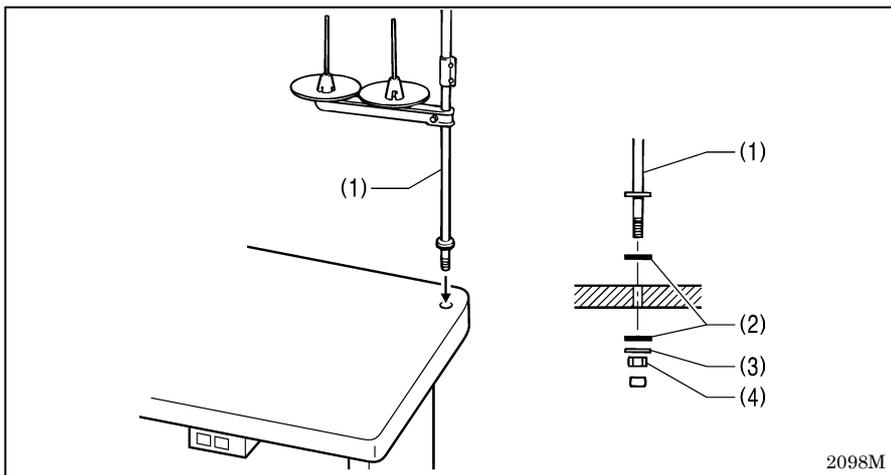
8. Operation panel

- (1) Operation panel
- (2) Screws [2 pcs]
(Use for tightening rear cover)



9. Sticker (Remove)

- (1) Sticker

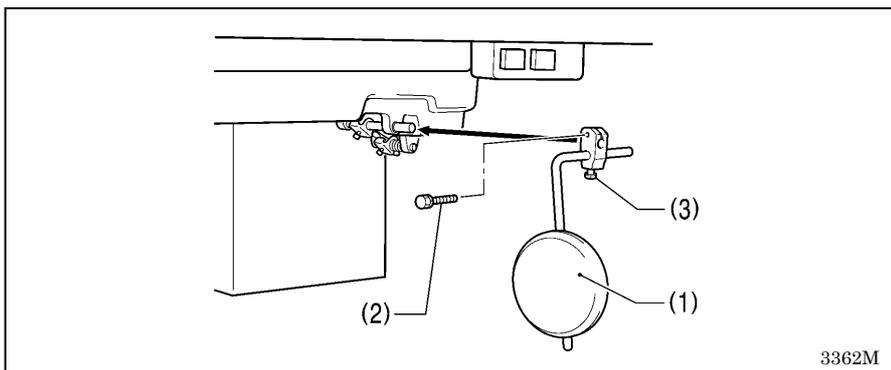


10. Cotton stand

(1) Cotton stand

NOTE:

Securely tighten the nut (4) so that the two rubber cushions (2) and the washer (3) are securely clamped and so that the cotton stand (1) does not move.

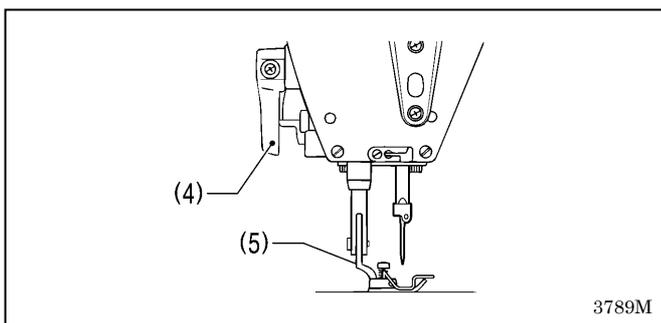


11. Knee lifter plate

(1) Knee lifter plate

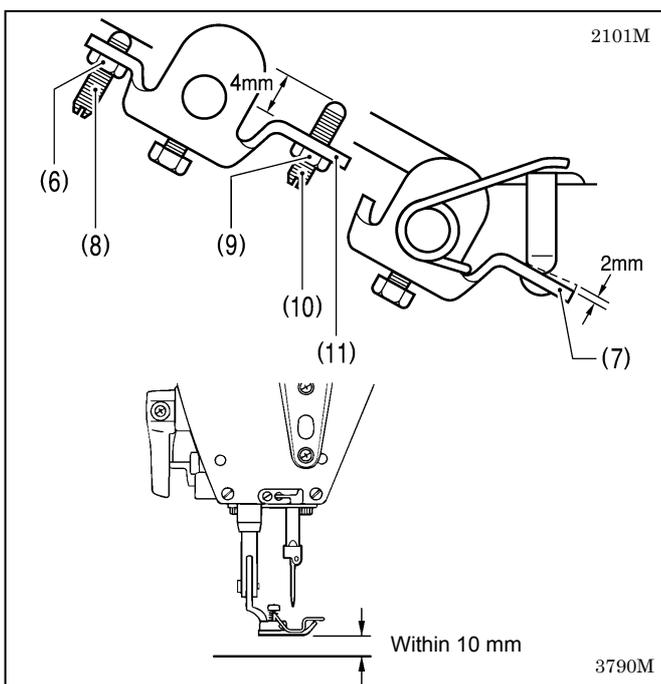
(2) Bolt

* Loosen the bolt (3) and move the knee lifter plate (1) to a position where it is easy to use.



<Knee lifter adjustment>

1. Turn the machine pulley so that the feed dog is below the top of the needle plate.
2. Lower the presser foot (5) by using the lifting lever (4).

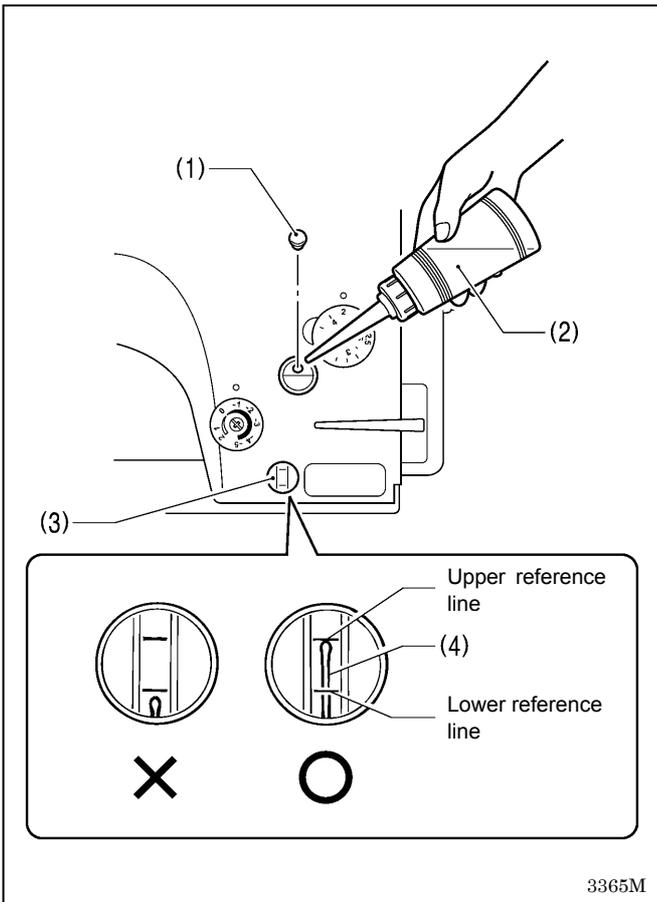


3. Loosen the nut (6).
4. Turn the screw (8) to adjust so that the amount of play in the knee lifter (7) is approximately 2 mm when the knee lifter plate (1) is gently pressed.
5. Securely tighten the nut (6).
6. Loosen the nut (9).
7. Turn the screw (10) until the distance between the end of the screw (10) and the knee lifter (11) is approximately 4 mm.
8. Turn the adjusting screw (10) to adjust so that the presser foot (5) is at the desired position within a distance of 10 mm of the needle plate when the knee lifter plate (1) is fully pressed.
9. After adjustment is completed, securely tighten the nut (9).

3-3. Lubrication

CAUTION

- ⊘ Do not connect the power cord until lubrication has been completed, otherwise the machine may operate if the treadle is depressed by mistake, which could result in injury.
- ⊘ Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin, otherwise inflammation can result. Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea. Keep the oil out of the reach of children.



- The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.
- Use only the lubricating oil (Nisseki Mitsubishi Sewing Lube 10N; VG10) specified by Brother.
* If this type of lubricating oil is difficult to obtain, the recommended oil to use is <Exxon Mobil EssoTex SM10; VG10>.

1. Remove the rubber cap (1).
2. Use the accessory oiler (2) to add lubricating oil until the oil gauge (4) comes to the top reference line of the oil gauge window (3).

NOTE:

- Pour in the lubricating oil slowly while checking the position of the oil gauge (4).
- Do not let the oil gauge (4) go higher than the top reference line when adding the oil.

3. Replace the rubber cap (1).

- * Be sure to add more oil if the oil gauge (4) is below the lower reference line.

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3-4. Connecting the cords

⚠ DANGER



Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the face plate of the control box. Touching areas where high voltages are present can result in severe injury.

⚠ CAUTION



Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.

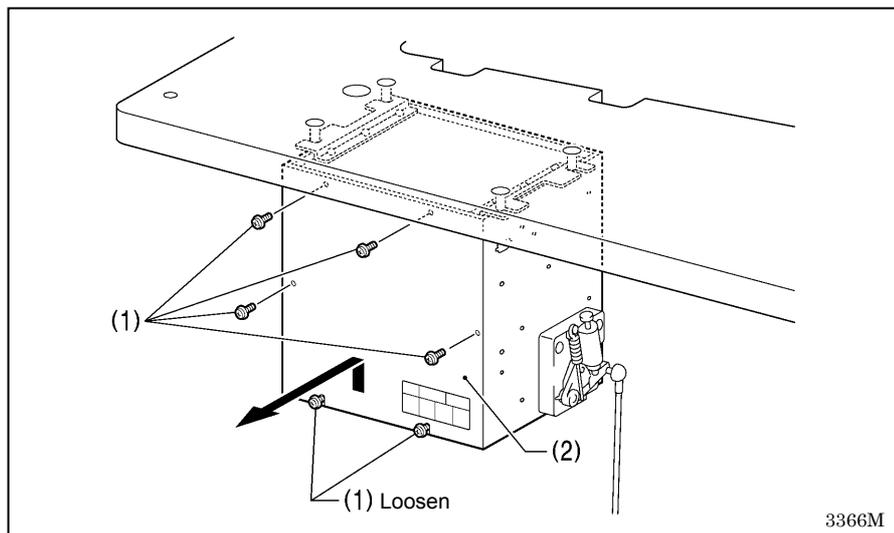


Do not connect the power cord until all cords have been connected. The machine may operate if the treadle is depressed by mistake, which could result in injury.



Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

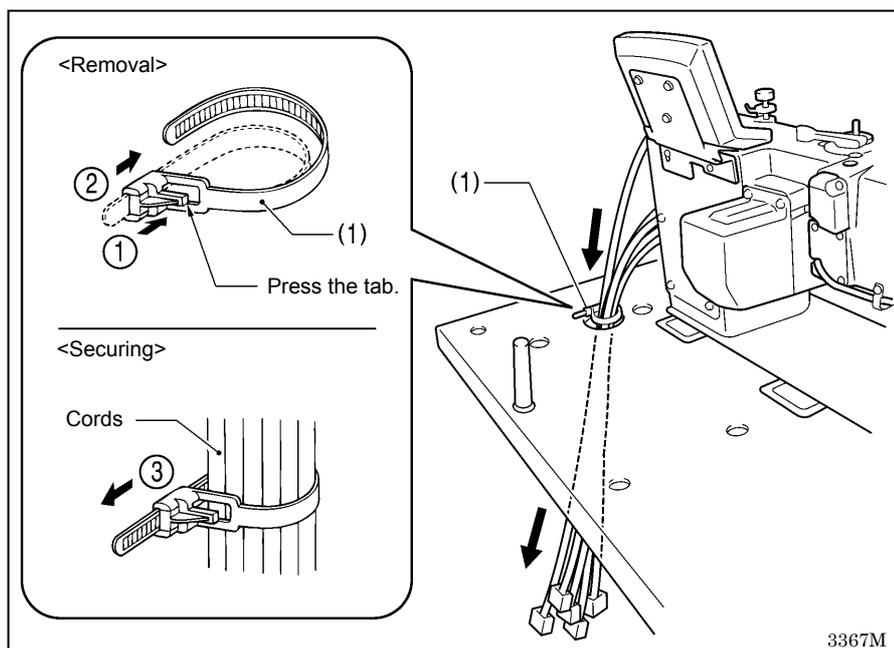
3-4-1. Opening the control box cover



- (1) Screw [6 pcs: With washer]
- (2) Cover

3366M

3-4-2. Connecting the cords

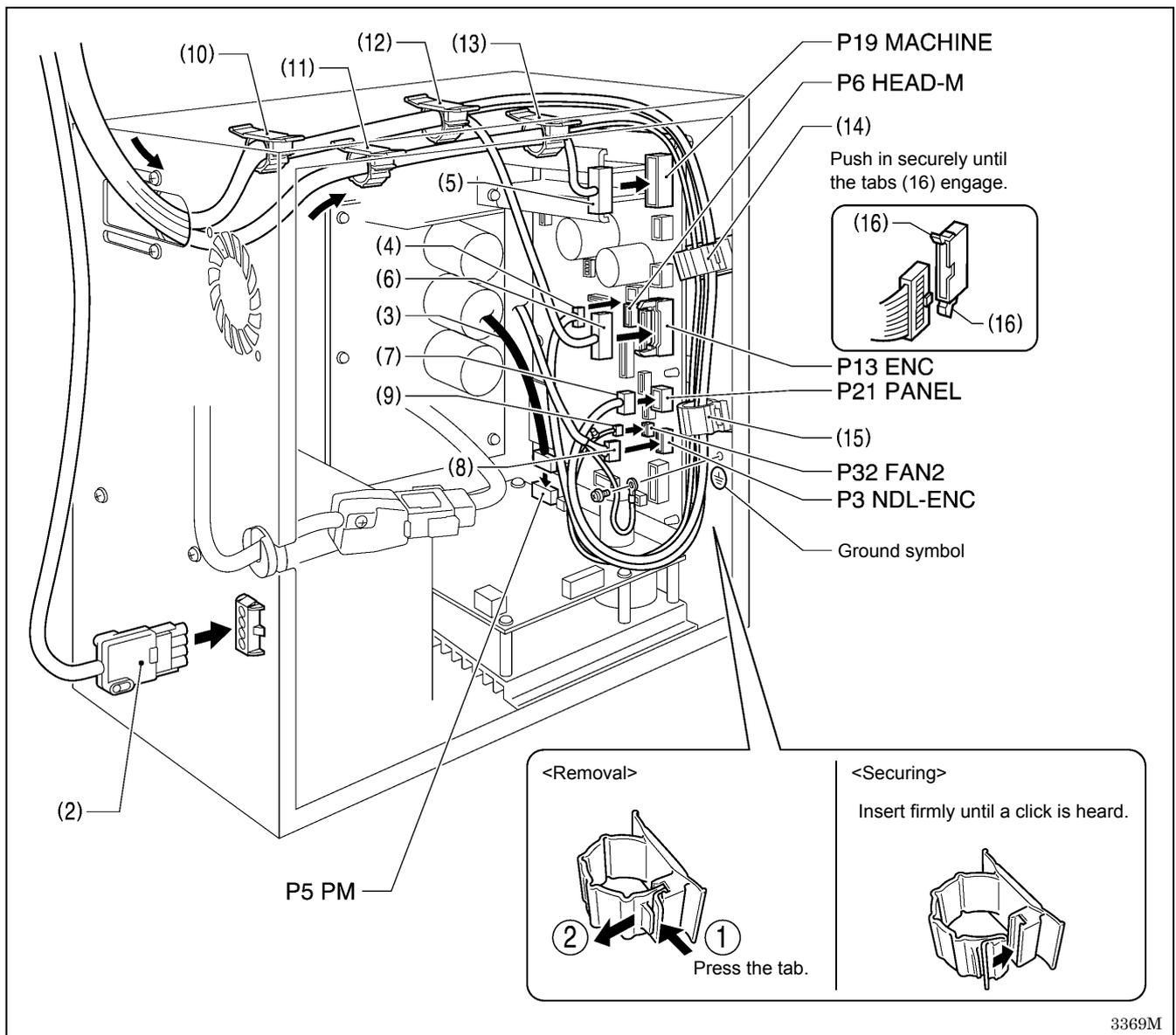


1. Sewing machine cords

- (1) Repeat cable tie

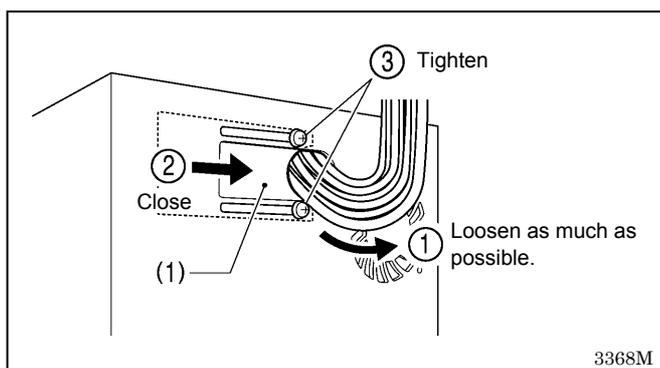
3367M

3. INSTALLATION



3369M

Connector	P.C. board indication	Cord clamp
(2) 4-pin motor connector	Outside of control box	
(3) 5-pin zigzag motor connector	P5 PM	(10)
(4) 7-pin head detector unit connector	P6 HEAD-M	(10) (12) (14) (15)
(5) 14-pin machine connector	P19 MACHINE	(11) (13)
(6) 14-pin encoder connector	P13 ENC	(10) (12)
(7) 8-pin operating panel connector	P21 PANEL	(10) (12) (14) (15)
(8) 5-pin zigzag motor encoder connector	P3 NDL_ENC	(10)
(9) 3-pin DC fan connector (oil pan)	P32 FAN2	(11) (13) (14) (15)



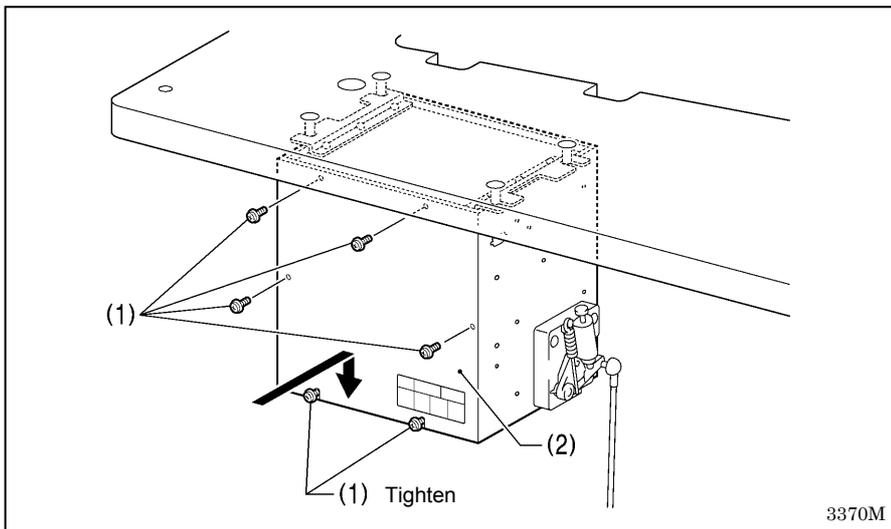
3368M

2. Closing the cord presser plate

(1) Cord presser plate

NOTE:

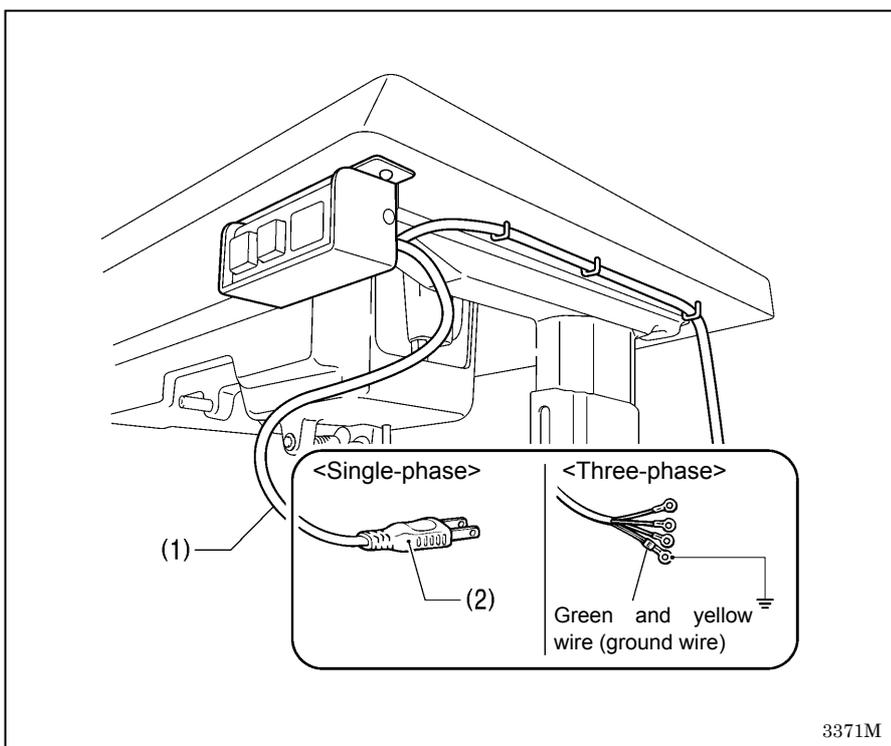
- Loosen the cables outside the control box without stretching them too much inside the control box.
- If the cord presser plate (1) is not closed firmly, dust will get inside the control box and may cause problems.



3. Closing the cover

- (1) Screw [6 pcs: With washer]
- (2) Cover

3370M



4. Power cord

- (1) Power cord

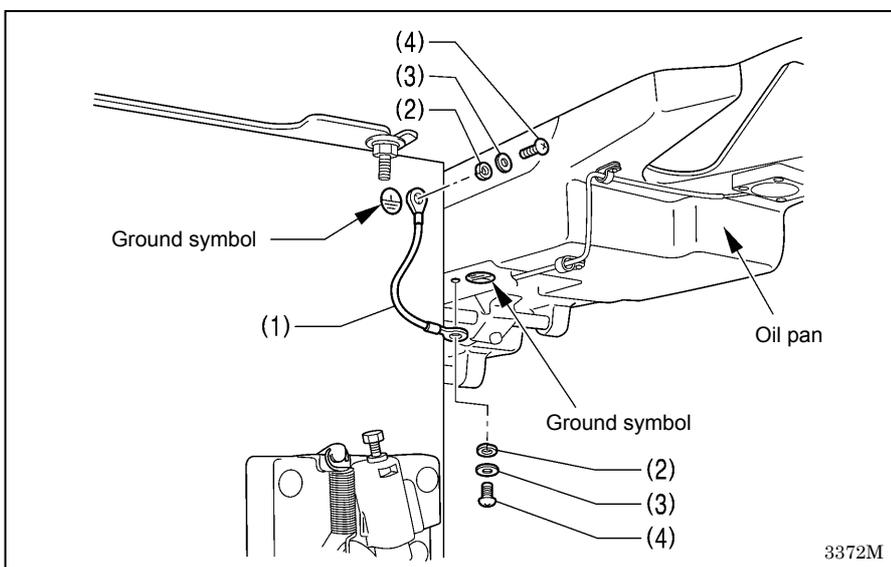
<For single-phase specifications>
Insert the power cord plug (2) into a wall outlet.

<For three-phase specifications>
1. Attach an appropriate plug to the power cord (1). (The green and yellow wire is the ground wire.)
2. Insert the plug into a properly-grounded AC power supply.

NOTE:

Do not use extension cords, otherwise machine operation problems may result.

3371M



5. Ground wire

- (1) Ground wire
- (2) Spring washer [2 pcs]
- (3) Plain washer [2 pcs]
- (4) Screw [2 pcs]

3372M

3-5. Test operation (Operating the treadle)

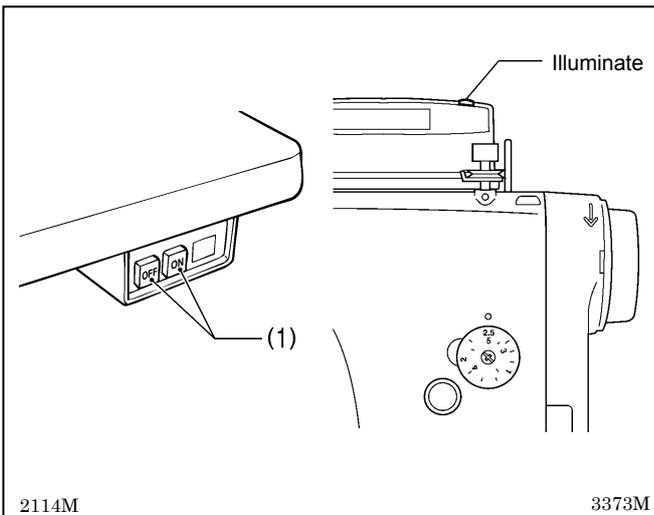
! CAUTION



Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.

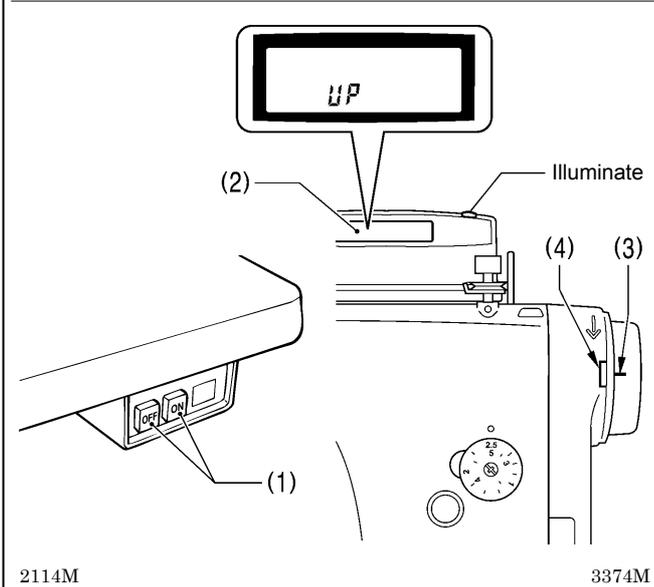
3-5-1. Turning on the power

- Release the treadle when turning on the power.
(If the treadle is depressed, “Err 95” will appear in the main display. At this time, “PoFF” will appear when you take your foot off the treadle, so turn the power off and back on again.)
- After the power is turned on, the subsequent operation of the sewing machine will vary according to the needle bar position at that time.



<If the needle bar is at the needle up stop position>

Turn on the POWER switch (1).
The buzzer will sound for about one second, and then the needle bar will move horizontally to the sewing start position. Sewing will then be possible.



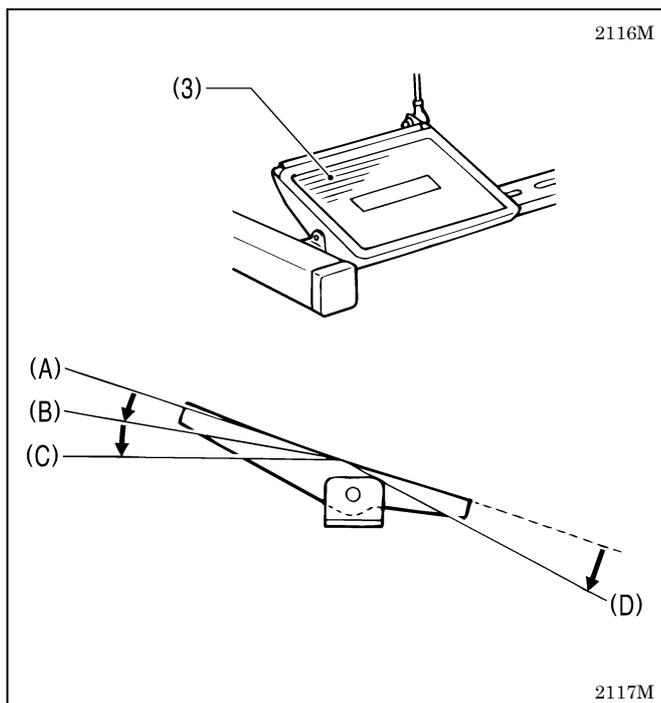
<If the needle bar is not at the needle up stop position>

1. Turn on the POWER switch(1). The buzzer will sound for about one second, and then “UP” will appear in the main display (2).
2. Turn the machine pulley slowly to move the needle bar to the needle up stop position. (Align the reference line (3) on the sewing machine pulley within the indent (4) in the motor cover.)
The needle bar will then move horizontally to the sewing start position and sewing will then be possible.

Panel setting status

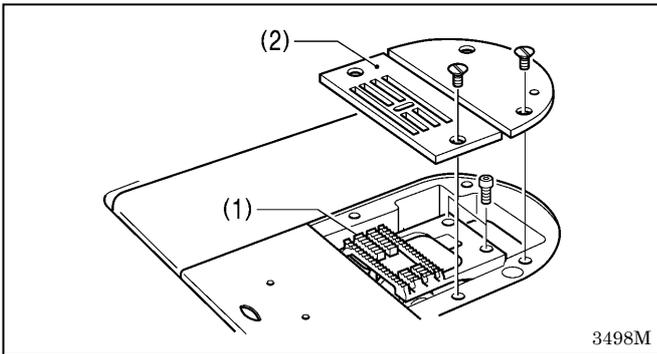
- The panel setting status will be the same status that was active at the time the power was last turned off.
- The pattern number will appear in the main display while the buzzer is sounding, and after that the zigzag width and zigzag base line position will appear.

3-5-2. Operating the treadle



1. When the treadle (3) is gently depressed to position (B), low-speed sewing is carried out.
2. If it is then depressed as far as (C), high-speed sewing is carried out.
3. When the treadle (3) is pressed forward and then back to the neutral position (A), the needle will stop below the needle plate (when needle down stop mode has been set).
If the needle bar has been set to stop in the needle up position, the needle will stop at a position above the needle plate (needle up stop position).
4. When the treadle (3) is depressed all the way to position (D) (or if the treadle (3) is depressed to position (D) and then returned to the neutral position (A)), the mechanism will sew half a stitch or one stitch, and then the needle bar will stop at the needle up stop position.
(With the 8560A, the thread will be trimmed at this point.)
Furthermore, no needle zigzagging will be carried out at this time.

3-6. Changing the feed amount to long stitch specifications (from 2.0mm to 5.0mm)

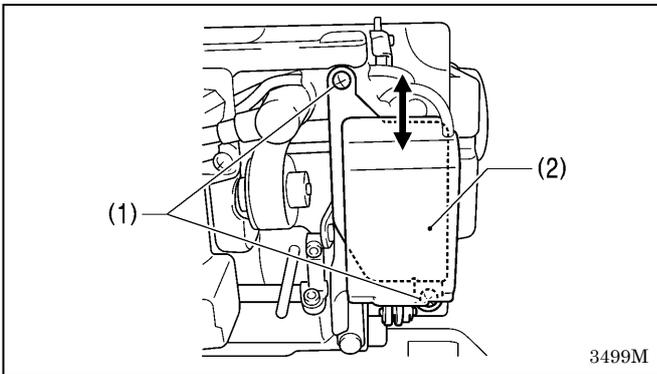


1. Replace the feed dog (1) and needle plate (2) with the ones for long stitches.
2. After this, change the maximum feed amount as described below.

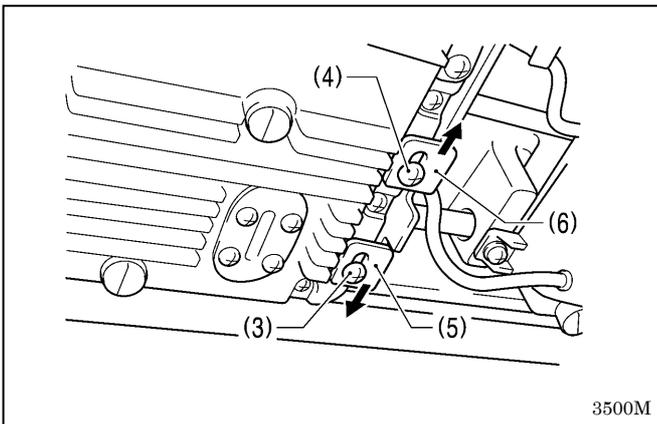
Changing the maximum feed amount

If the feed dog has been replaced by one that does not match the feed amount that is currently being used, the feed dog may touch the needle plate if the stitch length dial or condense dial are mistakenly set to settings that are larger than the maximum feed amount for the feed dog, and this could cause problems such as damage or noise.

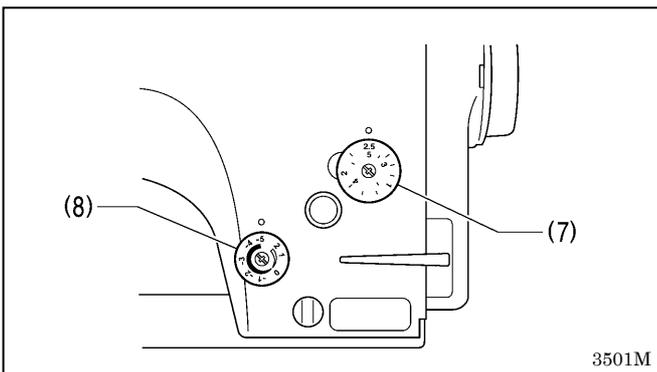
In order to prevent dial setting errors such as this, change the maximum feed amount setting for the sewing machine to match the maximum feed amount for the feed dog.



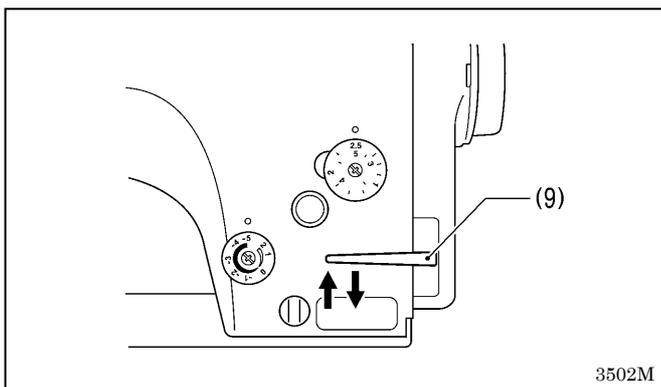
1. Tilt back the machine head.
2. For models/specifications other than the 8550A-031, loosen the two screws (1) so that the quick reverse solenoid (2) can be moved up and down.



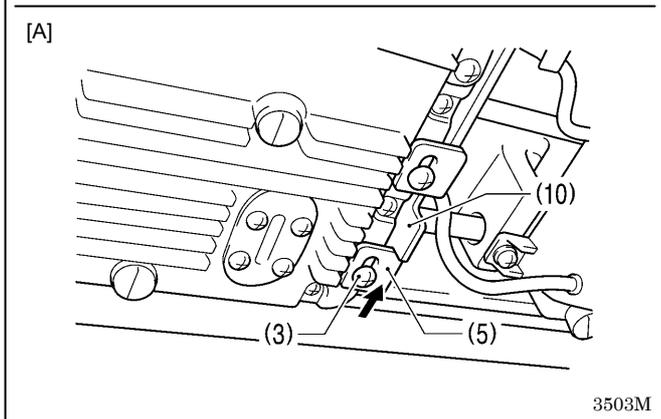
3. Loosen the screws (3) and (4).
4. Move the stopper (5) down as far as possible, and move the stopper (6) up as far as possible



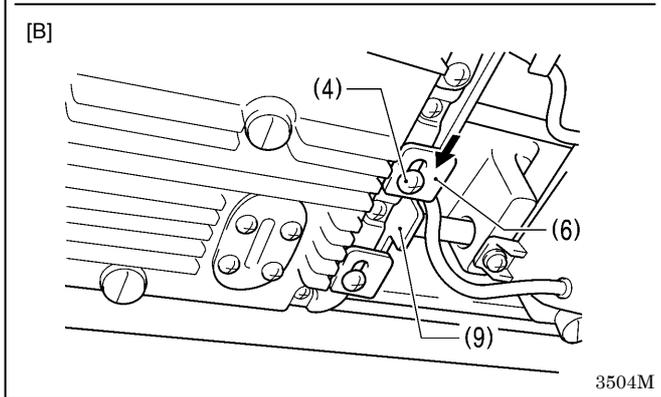
5. Turn the stitch length dial (7) and the condense dial (8) to the maximum feed amount for the feed dog being used. (Set the condense dial (8) to a negative number.)



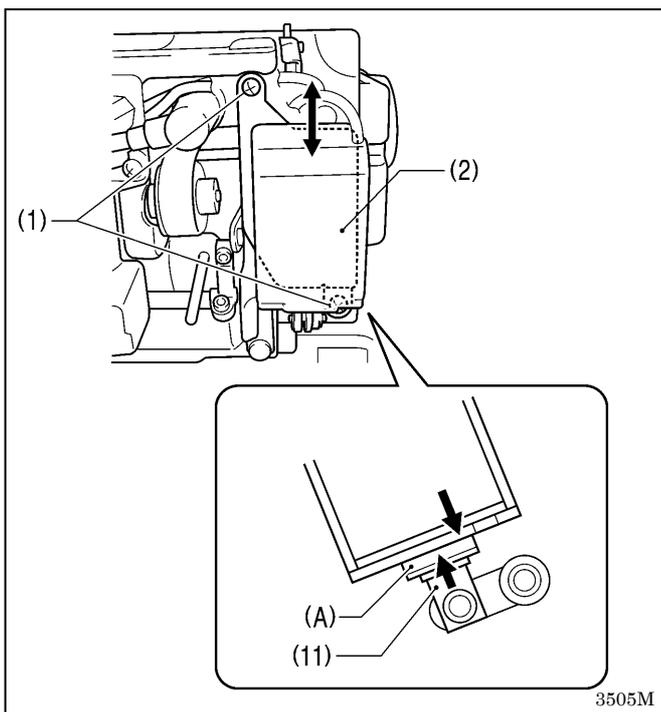
6. Check that the feed dog does not touch the needle plate both when the reverse lever (9) is not lowered and when it is lowered.
If it touches, adjust the forward/back installation position (centering) of the feed dog.



7. Without lowering the reverse lever (9), move the stopper (5) up until it touches F-regulator connecting rod (10), and then tighten the screw (3). (Fig. A)



8. With the reverse lever (9) lowered all the way, move the stopper (6) down until it touches the F-regulator connecting rod (10), and then tighten the screw (4). (Fig. B)



9. For models/specifications other than the 8550A-031, with the reverse lever (9) lowered all the way (with the plunger (11) of the quick reverse solenoid moved to its highest position), touch the quick reverse solenoid (2) against section (A) of the plunger (11), and then tighten the two screws (1).

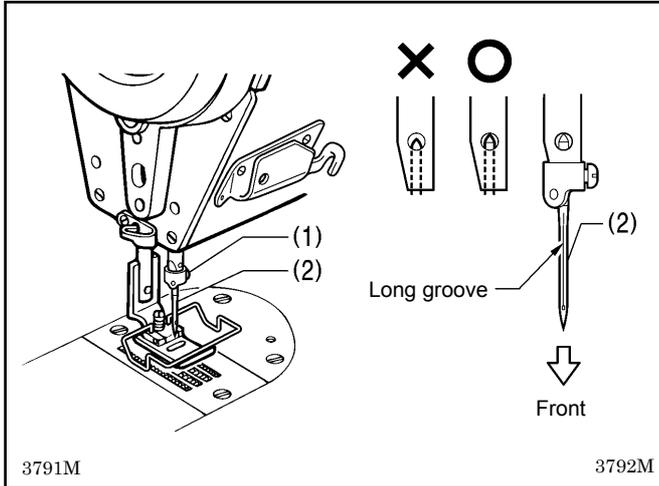
4. PREPARATION BEFORE SEWING

4-1. Installing the needle

CAUTION



Turn off the power switch before installing the needle.
The machine may operate if the treadle is depressed by mistake, which could result in injury.



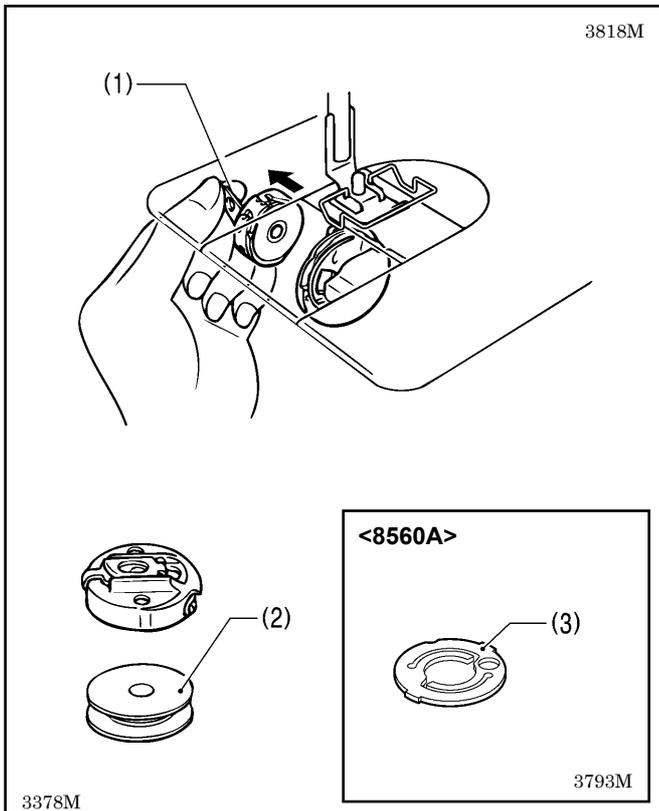
1. Turn the machine pulley to move the needle bar to its highest position.
2. Loosen the screw (1).
3. Insert the needle (2) in a straight line as far as it will go, making sure that the long groove on the needle is toward the front, and then securely tighten the screw (1).

4-2. Removing the bobbin case

CAUTION



Turn off the power switch before removing the bobbin case.
The machine may operate if the treadle is depressed by mistake, which could result in injury.



1. Turn the machine pulley to raise the needle until it is above the needle plate.
2. Pull the latch (1) of the bobbin case upward and then remove the bobbin case.
3. The bobbin (2) will come out when the latch (1) is released.

* Use bobbins (2) made of light alloy as specified by BROTHER.

8560A

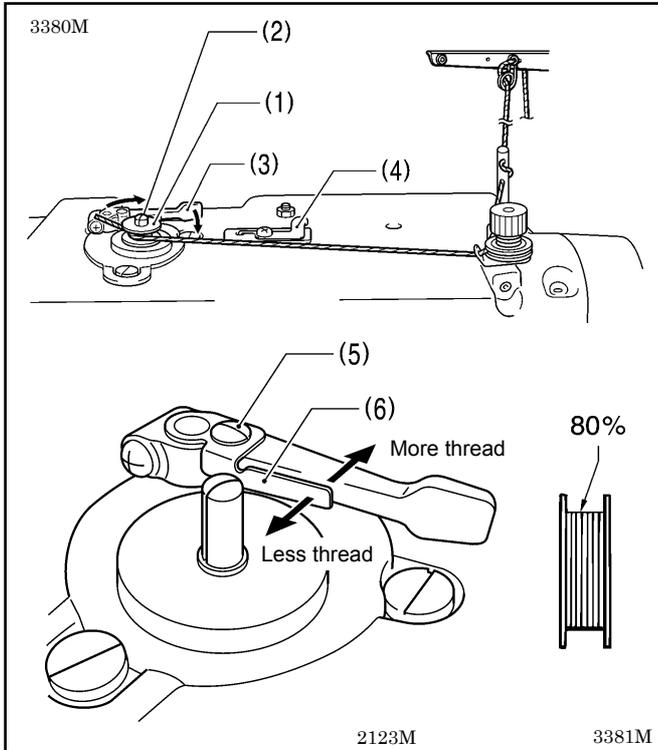
There is an anti-spin spring (3) inside the bobbin case. The anti-spin spring (3) prevents the bobbin from racing at times such as during thread trimming.

4-3. Winding the lower thread

CAUTION



Do not touch any of the moving parts or press any objects against the machine while winding the lower thread, as this may result in personal injury or damage to the machine.



1. Turn on the power switch.
2. Place the bobbin (1) onto the bobbin winder shaft (2).
3. Wind the thread several times around the bobbin (1) in the direction indicated by the arrow.
4. Push the bobbin presser arm (3) toward the bobbin(1).
5. Raise the presser foot with the lifting lever.
6. Depress the treadle. Lower thread winding will then start.
7. Once winding of the lower thread is completed, the bobbin presser arm (3) will return automatically.
8. After the thread has been wound on, remove the bobbin and cut the thread with the knife (4).

* Loosen the screw (5) and move the bobbin presser (6) to adjust the amount of thread wound onto the bobbin.

NOTE:

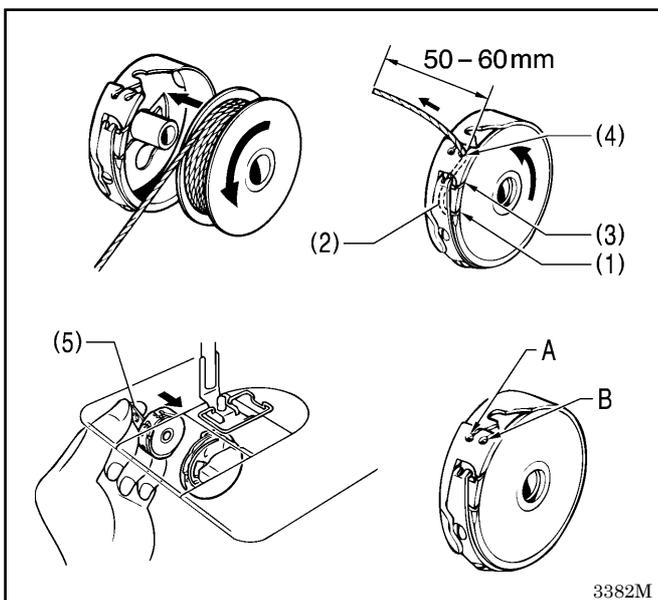
The amount of thread wound onto the bobbin should be a maximum of 80 % of the bobbin capacity.

4-4. Installing the bobbin case

CAUTION



Turn off the power switch before installing the bobbin case. The machine may operate if the treadle is depressed by mistake, which could result in injury.



1. Turn the sewing machine pulley to align the reference line on the pulley with the indent in the motor cover.
2. Hold the bobbin so that the thread spools out counterclockwise, and place the bobbin into the bobbin case.
3. Pass the thread through slot (1) and hook it under the tension spring (2).
4. Pass the thread back through the slot (3) and then pull it out from the thread guide (4).

A and B on the thread guide (4) (guide to identification)

A	Normally A should be used.
B	The amount of lower thread feeding-out is greater than for A, so this is ideal for extremely stretchy materials and medium-weight materials.

5. Check that the bobbin rotate counterclockwise when the thread is pulled out.
6. While holding the latch (5) of the bobbin case, insert the bobbin case into the rotary hook.

4-5. Threading the upper thread

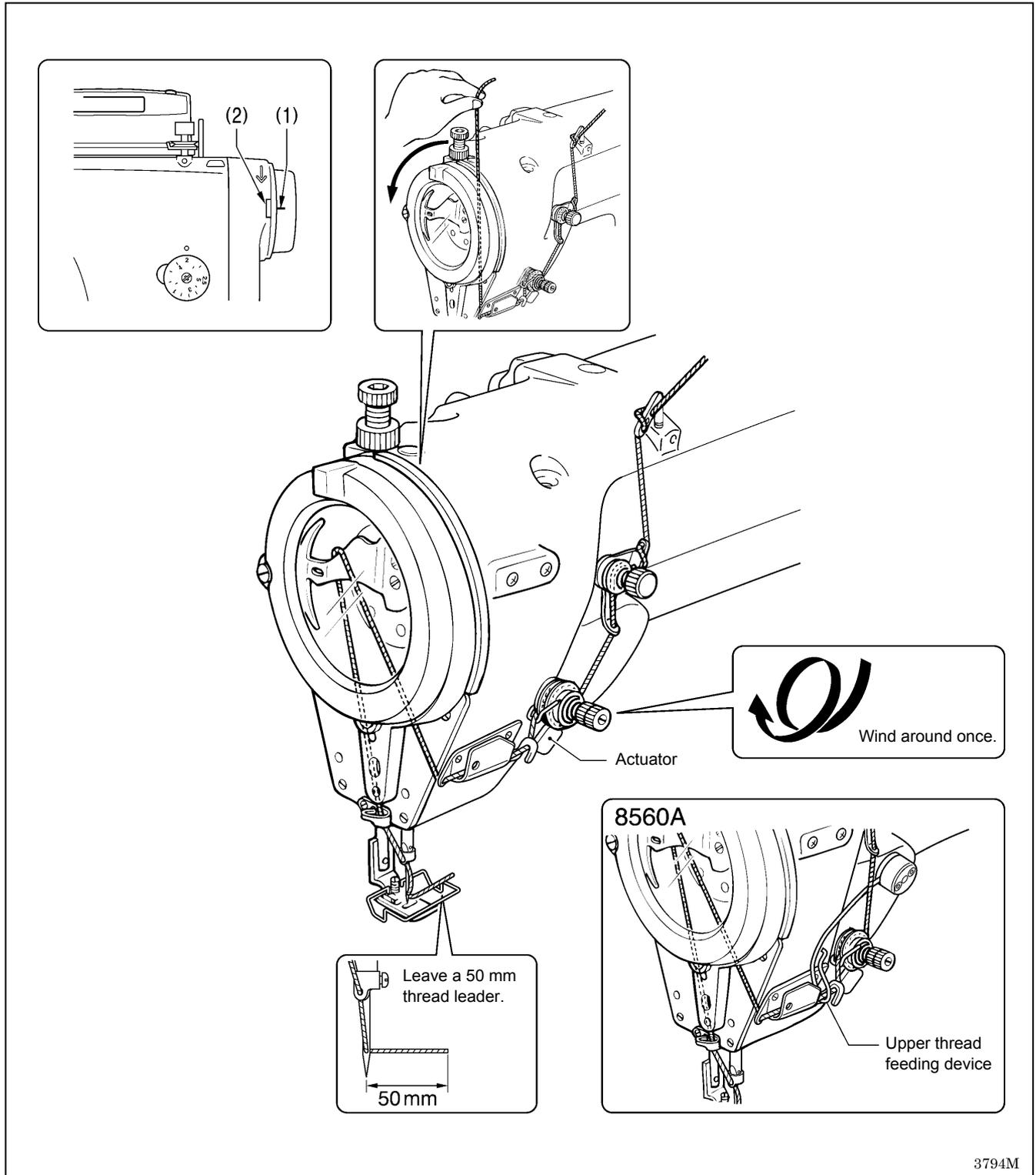
⚠ CAUTION



Turn off the power switch before threading the upper thread.
The machine may operate if the treadle is depressed by mistake, which could result in injury.
If the actuator is pressed by mistake when using the correction sewing function, the needle will move in a zigzag motion while the machine is operating, and injury may result.

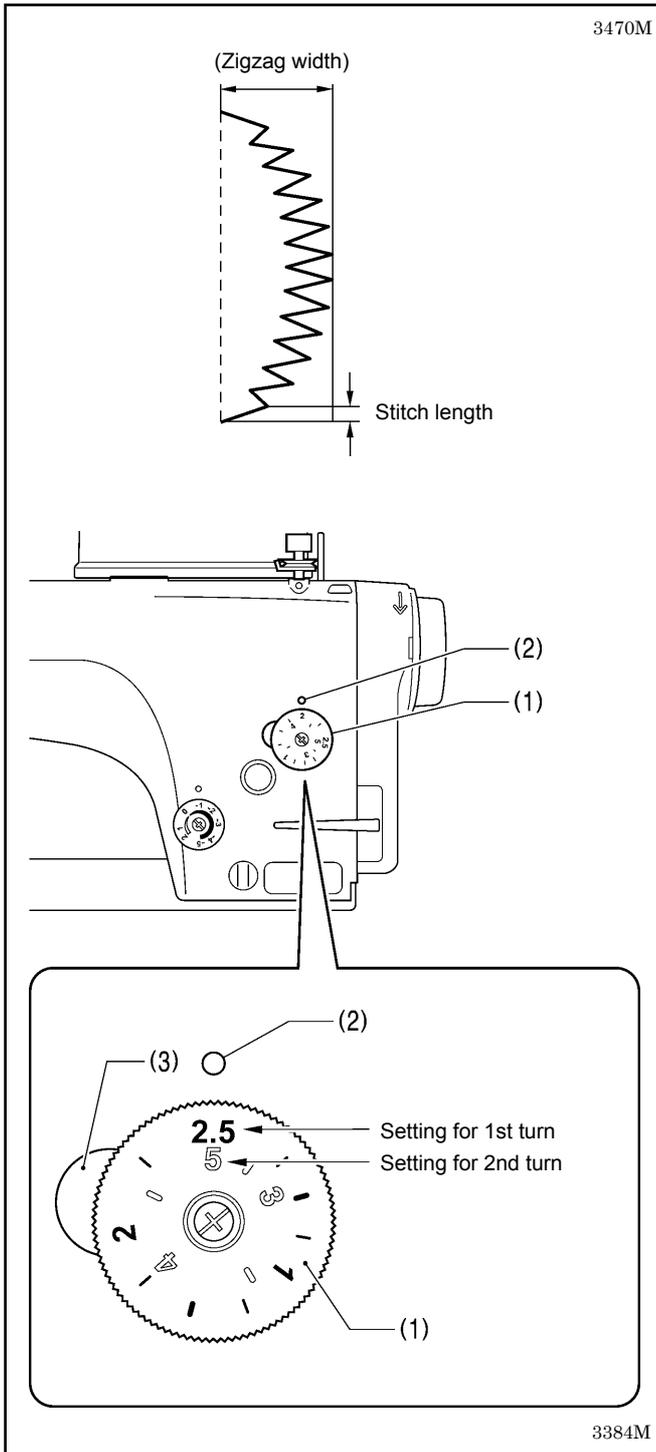
Turn the sewing machine pulley to align the reference line (1) on the pulley with the indent (2) in the motor cover (needle up stop position).

This will make threading easier and it will prevent the thread from coming out at the sewing start.



3794M

4-6. Adjusting the stitch length



Turn the stitch length dial (1) until the desired stitch length number is aligned with the index mark (2) above the dial.

- * The larger the number, the longer the stitch length will be.
- * The numbers on the dial are for use as a guide. The length of the finished stitches may vary depending on the type and thickness of material being sewn. Adjust while looking at the finished stitches.

If the stitch length dial (1) is turned to a setting greater than 2.5

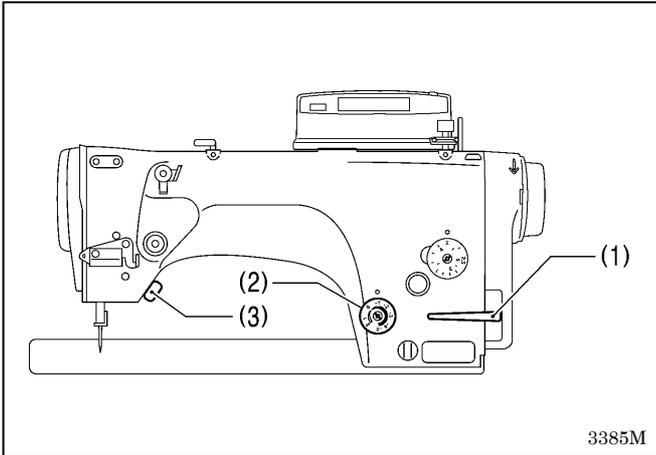
- * In this case, replace gauge parts such as the feed dog with parts for using with a feed amount of more than 2.0 mm.

In addition, change the maximum feed amount setting while referring to page 14, and then adjust the stitch length dial (1) as described below.

1. Turn the stitch length dial (1) all the way to "2.5".
2. After this, push the left lever (3) while turning the stitch length dial (1) so that it can be turned a second time. When the stitch length dial (1) is turned a second time, the settings will be those on the inside of the scale (3-5).

- * When turning the dial from a larger number to a smaller number, it can be turned to the second time setting without pushing the left lever (3).

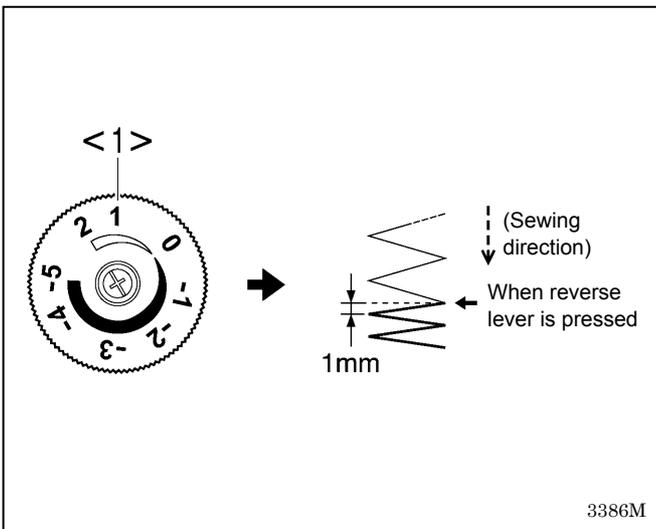
4-7. Backtacking



- Backtack stitches with short stitch lengths can be sewn easily during sewing just by pressing the reverse lever (1). This is useful for preventing fraying of the seam at the sewing end.
- Before sewing, turn the condense dial (2) to the left or right to set the stitch length for these shorter backtack stitches.

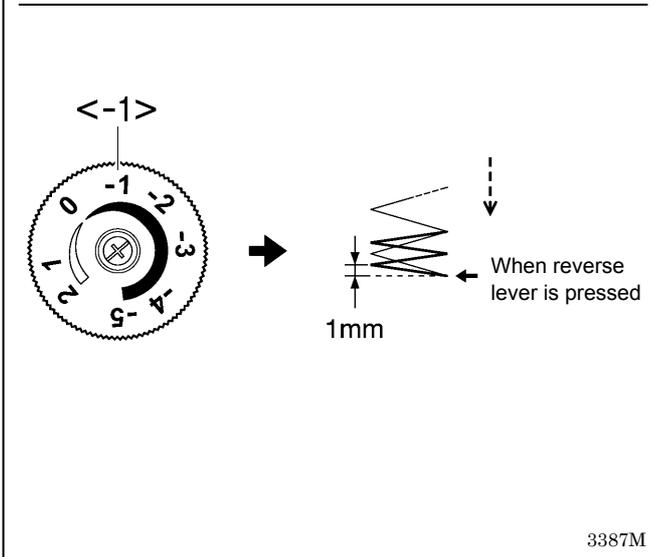
If using the 8560A, 8550A-A31

The actuator (3) can be used instead of the reverse lever (1).



< Sewing condensed stitches >

- When the condense dial (2) is set to a positive number, backtack stitches with a stitch length that matches the dial setting will be sewn in the normal sewing direction while the reverse lever is pressed.
- If the condense dial (2) is set to "0", backtack stitches will be sewn without the material being fed while the reverse lever is pressed.



< Backtacking >

When the condense dial (2) is set to a negative number, backtack stitches with a stitch length that matches the dial setting will be sewn in the reverse sewing direction while the reverse lever (1) is pressed.

* The numbers on the dial are for use as a guide. The length of the finished stitches may vary depending on the type and thickness of material being sewn. Adjust while looking at the finished stitches.

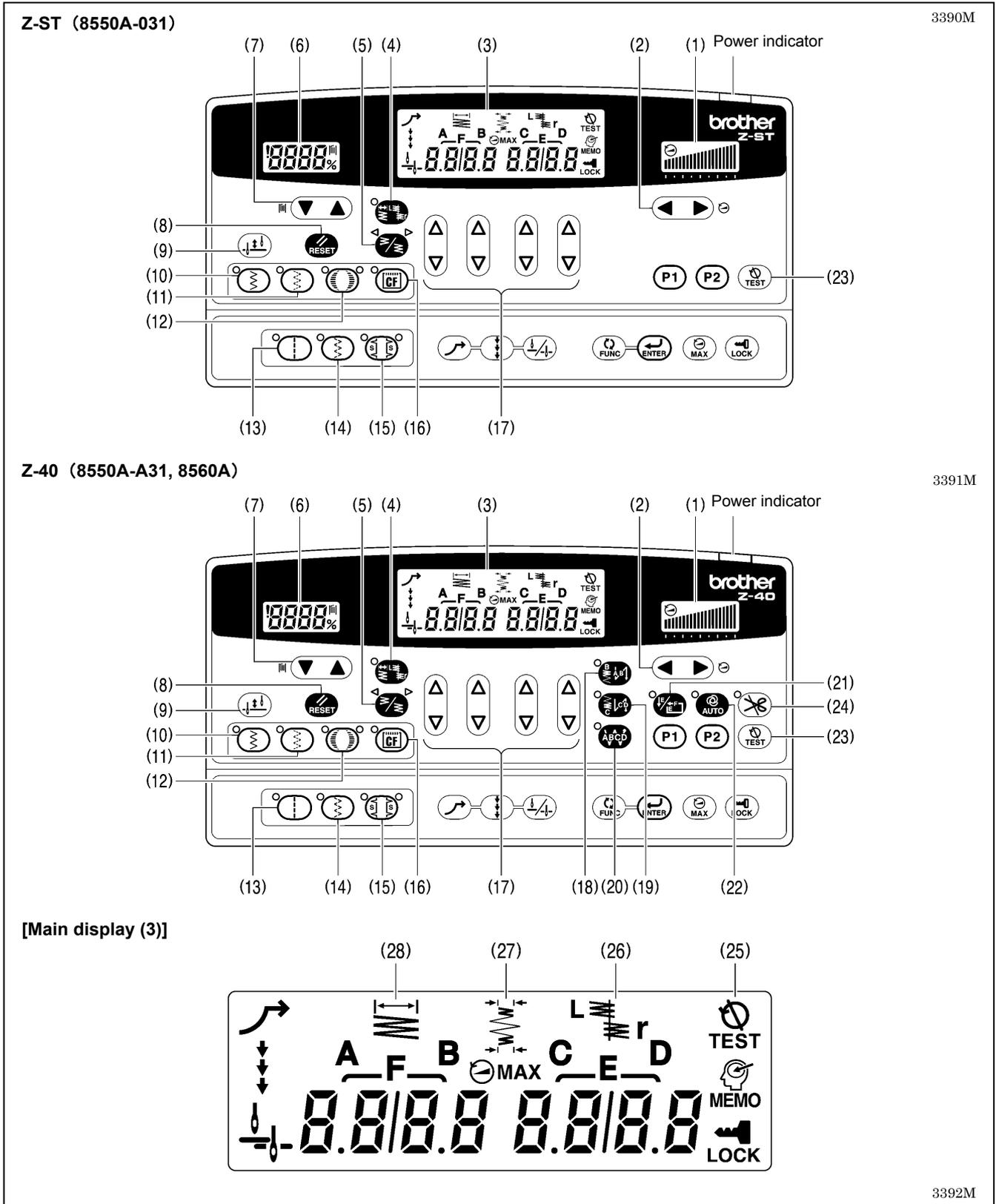
When the condense dial (2) is set to a number from -2 to -5

In this case, replace gauge parts such as the feed dog with parts for using with a feed amount of more than 2.0 mm. In addition, change the maximum feed amount setting while referring to page 14, and then adjust the condense dial (2) to a number from -2 to -5.

5. USING THE OPERATION PANEL (BASIC OPERATIONS)

5-1. Names and functions

- The operation panel keys cannot be operated while sewing is in progress.
Check the key selections and pattern settings before starting sewing.



5. USING THE OPERATION PANEL (BASIC OPERATIONS)

The power indicator illuminates when the power switch is turned on.

(1) Sewing speed control display



This shows the sewing speed when the treadle is depressed to the maximum amount.

- If all bars are illuminated, it indicates that the maximum speed can be set.
- If all bars are switched off, it indicates the minimum speed (220 rpm).

2148M

(2) Sewing speed control keys



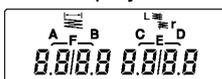
These keys let you adjust the sewing speed that is used when the treadle is depressed to the maximum amount.

The sewing speed can also be adjusted while sewing is in progress.

- When the  key is pressed, the sewing speed becomes faster.
- When the  key is pressed, the sewing speed becomes slower.

2149M 2150M 2151M

(3) Main display



Shows the zigzag width and zigzag base line position when normal sewing is in progress, Shows the current setting values for the zigzag width, zigzag base line position and the type of scallop stitch.

- In start backtack display, AB illuminates and the number of stitches for A and B are displayed.
- In end backtack display, CD illuminates and the number of stitches for C and D are displayed.
- In continuous backtack display, ABCD illuminates and the number of stitches for A, B, C and D are displayed.
- In fixed-stitch sewing/label sewing display, EF illuminates and the number of stitches for E and F are displayed.

If the number of stitches for F is "0", fixed stitch sewing is carried out, and if it is any other setting, label sewing is carried out.

3393M

(4) Zigzag width/Zigzag base line position key



This key lets you change the zigzag width and move the sewing pattern to the left and right.

- When this key is pressed, the indicator illuminates, and the currently-set zigzag width is displayed in the four left columns and the zigzag base line position is displayed in the four right columns.
- A zigzag width display of [5.0] means that the zigzag width is 5.0 mm.
- A zigzag base line position display of [L2.0] means that the pattern is moved 2.0 mm to the left, and a display of [r2.0] means that the pattern is moved 2.0 mm to the right.

3394M

(5) Zigzag stop position key



This key is used to set the needle stop position to the left or the right of the zigzag when the sewing machine stops.

- Each time the zigzag stop position key is pressed, the indicator display changes in the order  •  • (OFF).
- When  is lit: the needle always moves to the left of the zigzag when the sewing machine stops.
- When  is lit: the needle always moves to the right of the zigzag when the sewing machine stops.
- When both indicators are off, the needle stops at its current position when the sewing machine stops.

3395M 3396M 3397M

(6) Lower thread counter display



This shows the lower thread counter value.

- The counter is reduced by "1" for every ten stitches sewn.

2154M

(7) Lower thread counter keys

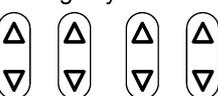


These keys are used to set the initial value for the lower thread counter.

Setting is only possible immediately after the lower thread counter has been reset.

- When the  key is pressed, the value increases, and when it is held down, the value increases more quickly.
- When the  key is pressed, the value decreases, and when it is held down, the value decreases more quickly.

2155M 2168M 2169M

<p>(8) RESET key</p> 	<p>This key is used to return the lower thread counter to its initial value and to cancel warning conditions.</p> <ul style="list-style-type: none"> • If this key is pressed when the lower thread counter value is “0” or less, the value will return to the initial value. • If this key is pressed for 2 seconds or more while the lower thread counter value is “1” or more, the value will return to the initial value. <p style="text-align: right;">2156M</p>
<p>(9) Half stitch key</p> 	<p>When the sewing machine is stopped, the needle bar can be moved up and down by pressing this key.</p> <p style="text-align: right;">3398M</p>
<p>(10) Plain zigzag key</p> 	<p>When this key is pressed so that the indicator illuminates, a plain zigzag pattern is selected.</p> <ul style="list-style-type: none"> • When a plain zigzag pattern has been selected, the indicator illuminates. <p style="text-align: right;">3399M</p>
<p>(11) 3-step zigzag key</p> 	<p>When this key is pressed so that the indicator illuminates, a 3-step zigzag pattern is selected.</p> <ul style="list-style-type: none"> • When a 3-step zigzag pattern has been selected, the indicator illuminates. <p style="text-align: right;">3400M</p>
<p>(12) Scallop key</p> 	<p>When this key is pressed so that the indicator illuminates, a scallop pattern is selected.</p> <ul style="list-style-type: none"> • Illumination switches between the left and right indicators each time this key is pressed. • When a scallop pattern has been selected, one of the indicators (left or right) illuminates. <p style="text-align: right;">3401M</p>
<p>(13) Straight stitch key</p> 	<p>When this key is pressed so that the indicator illuminates, a straight stitch pattern is selected.</p> <ul style="list-style-type: none"> • When a straight stitch pattern has been selected, the indicator illuminates. <p style="text-align: right;">3402M</p>
<p>(14) 2-step zigzag key</p> 	<p>When this key is pressed so that the indicator illuminates, a 2-step zigzag pattern is selected.</p> <ul style="list-style-type: none"> • When a 2-step zigzag pattern has been selected, the indicator illuminates. <p style="text-align: right;">3403M</p>
<p>(15) Blind stitch key</p> 	<p>When this key is pressed so that the indicator illuminates, a blind stitch pattern is selected.</p> <ul style="list-style-type: none"> • Illumination switches between the left and right indicators each time this key is pressed. • When a blind stitch pattern has been selected, one of the indicators (left or right) illuminates. <p style="text-align: right;">3404M</p>
<p>(16) CF key (for option)</p> 	<ul style="list-style-type: none"> • This key is disabled when there is no custom pattern available. • If a custom pattern is available, the indicator will illuminate when this key is pressed and the custom pattern will be selected. • When a custom pattern has been selected, the indicator illuminates. <p style="text-align: right;">3405M</p>
<p>(17) Setting keys</p> 	<p>These keys are used to make settings for zigzag width, zigzag base line position and scallop stitching.</p> <p>[Z-40 only]: In addition, they are also used to make the settings for the number of backtack stitches A, B, C and D and the number of fixed stitches E and F.</p> <ul style="list-style-type: none"> • When the  key is pressed, the value increases. • When the  key is pressed, the value decreases. <p style="text-align: right;">2137M 2138M 2139M</p>

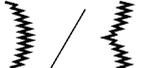
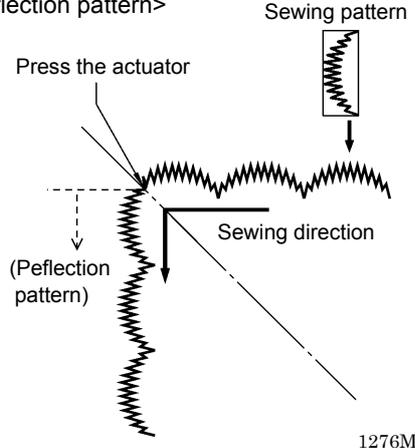
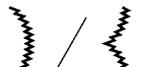
5. USING THE OPERATION PANEL (BASIC OPERATIONS)

(18) Start backtack key [Z-40 only]		When this key is pressed so that the indicator illuminates, the number of start backtack stitches (0–99) in the A and B stitch number displays is sewn.	3406M
(19) End backtack key [Z-40 only]		When this key is pressed so that the indicator illuminates, the number of end backtack stitches (0–99) in the C and D stitch number displays is sewn. When the treadle is depressed backward, the end backtack stitches are sewn and then the thread is trimmed automatically. <ul style="list-style-type: none"> If the treadle has not yet been depressed backward, the end backtack function can be set to ON, the number of stitches can be changed and the function can be set back to OFF. 	3407M
(20) Continuous backtack key [Z-40 only]		When this key is pressed so that the indicator illuminates, the number of backtack stitches (0–99) in the A, B, C and D stitch number displays is sewn continuously. After the sewing machine sews a full cycle of stitches set by A, B, C and D, the thread is trimmed automatically.	2142M
(21) Fixed stitch/name label key [Z-40 only]		When this key is pressed so that the indicator illuminates while the number of stitches set for F is "0", the number of stitches set for E (1–250) that appears in the main display is sewn, and then sewing stops automatically. When this key is pressed so that the indicator illuminates while the number of stitches set for F is something other than "0", fixed stitch sewing is carried out repeatedly for the number of stitches set for E and F (1–250) that appears in the main display .	3408M
(22) AUTO key [Z-40 only]		This can only be used to make settings together with continuous backtack key (20) and fixed stitch/name label key (21). <ul style="list-style-type: none"> When this key is pressed so that the indicator illuminates, the set number of stitches (start or end backtack stitches, fixed stitches or thread trimming) are sewn automatically simply by depressing the treadle once. 	2147M
(23) TEST key		This key is used when adjusting the needle and rotary hook timing. icon <ul style="list-style-type: none"> When the TEST key is pressed, the TEST icon (25) illuminates. In this condition, the sewing machine motor will not operate even if the treadle is depressed. Needle zigzag movement can be carried out by turning the machine pulley by hand. If the TEST key is pressed once more, the icon (25) will switch off and the sewing machine will return to the normal state of operation. 	3409M
(24) Thread trimming lock key [Z-40 only]		When this key is pressed so that the indicator illuminates, the sewing machine stops in the needle up position without thread trimming being carried out even if the treadle is depressed backward. <ul style="list-style-type: none"> If the AUTO key (22) is illuminated, the sewing machine stops in the needle up position without thread trimming being carried out after the set number of stitches have been sewn. 	2152M
(25) TEST icon		This illuminates when the TEST key (23) is pressed.	3410M
(26) Zigzag base line position icon		This illuminates when the zigzag base line position is being displayed in the main display.	3411M
(27) Backtack zigzag width icon		This illuminates when the backtack zigzag width is being displayed in the main display .	3412M
(28) Zigzag width icon		This illuminates when the zigzag width is being displayed in the main display .	3413M

5-2. Pattern setting method

5-2-1. Sewing pattern table

- This sewing machine is equipped with the following built-in sewing patterns. Select the pattern number from the operation panel to use a pattern. (Refer to page 26.)
- Different zigzag widths and zigzag lengths can be set for each sewing pattern. (Refer to page 19 and 29.)

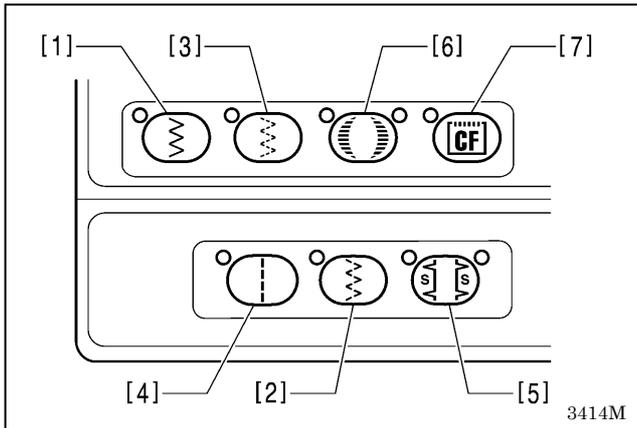
		Sewing pattern	Pattern no. (Main display)	Notes
Straight stitch			<input type="text" value="1 - - -"/>	
Plain zigzag			<input type="text" value="2 - - -"/>	
2-step zigzag			<input type="text" value="3 - - -"/>	
3-step zigzag			<input type="text" value="4 - - -"/>	
Scallop (left)	Crescent scallop (24sts.)		<input type="text" value="5 - 1"/> / <input type="text" value="5 - 5"/>	If A is set in the column marked with  , a reflection pattern can be sewn by stopping the sewing machine and then pressing the actuator. (Refer to page 29 of instruction manual CD.)
	Even scallop (12sts.)		<input type="text" value="5 - 2"/> / <input type="text" value="5 - 6"/>	
	Standard scallop (24sts.)		<input type="text" value="5 - 3"/> / <input type="text" value="5 - 7"/>	
	Even scallop (24sts.)		<input type="text" value="5 - 4"/> / <input type="text" value="5 - 8"/>	
Scallop (right)	Crescent scallop (24sts.)		<input type="text" value="6 - 1"/> / <input type="text" value="6 - 5"/>	<p><Reflection pattern></p>  <p>1276M</p>
	Even scallop (12sts.)		<input type="text" value="6 - 2"/> / <input type="text" value="6 - 6"/>	
	Standard scallop (24sts.)		<input type="text" value="6 - 3"/> / <input type="text" value="6 - 7"/>	
	Even scallop (24sts.)		<input type="text" value="6 - 4"/> / <input type="text" value="6 - 8"/>	
Blind stitch (left)			<input type="text" value="7 - * *"/>	In the columns marked with *, the number of stitches sewn in a straight line can be set within the range of 1 to 99 stitches.
Blind stitch (right)			<input type="text" value="8 - * *"/>	
Custom made pattern		-	<input type="text" value="9 - * *"/>	Sewing patterns created using the PS-300B (optional device) can be sewn. (The pattern number is set in the columns marked with *.)

3320M-3333M, 3334M-3348M

(No. of stitches)

1430M

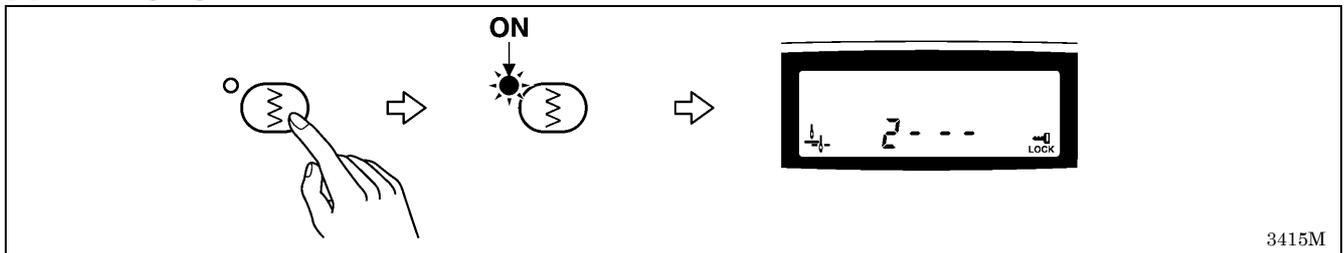
5-2-2. Setting the sewing pattern



Press the sewing pattern select keys ([1] to [7] in the illustration left) to select the sewing pattern. The indicator for the key that was pressed will illuminate and the pattern number that has been set for that key will appear in the main display.

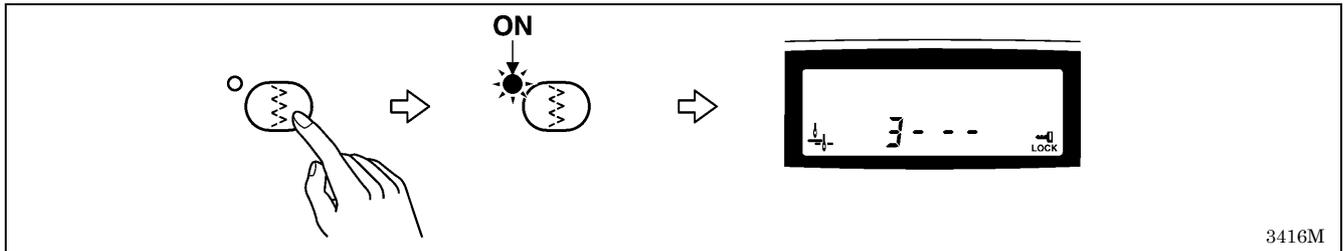
* When a sewing pattern has been set, be sure to set the zigzag width. (Refer to page 29.)

[1] Plain zigzag



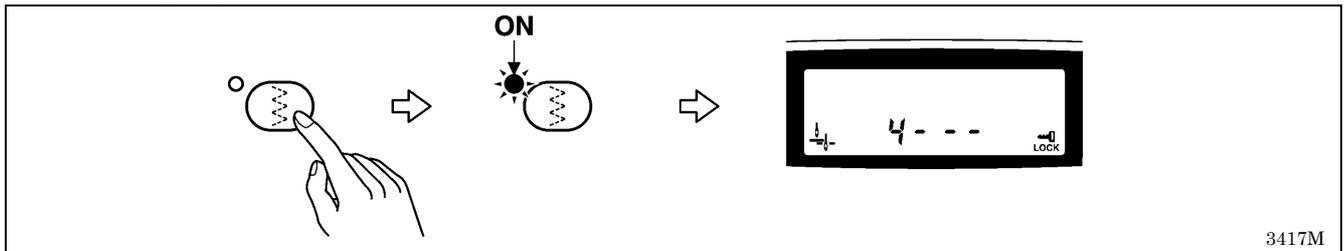
3415M

[2] 2-step zigzag



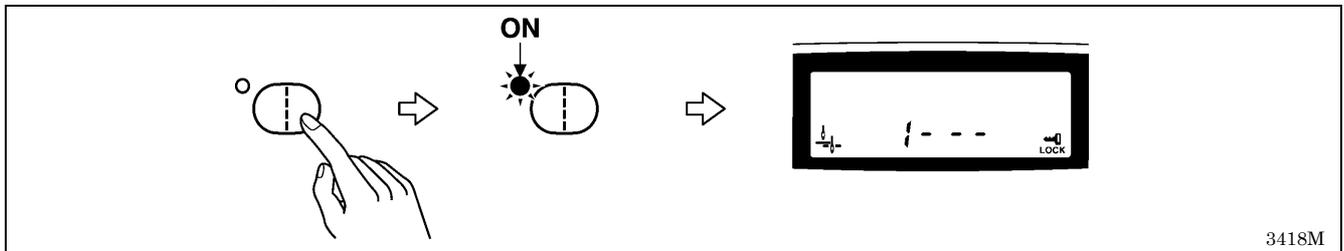
3416M

[3] 3-step zigzag



3417M

[4] Straight stitching



3418M

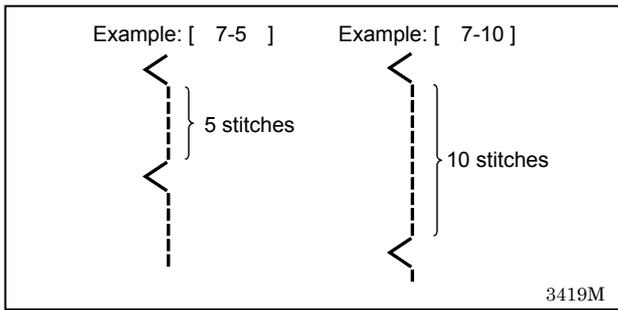
Note:

If the needle bar is at the needle up stop position, the needle bar will move to the sewing start position when the sewing pattern settings are changed.

If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

[5] Blind stitching

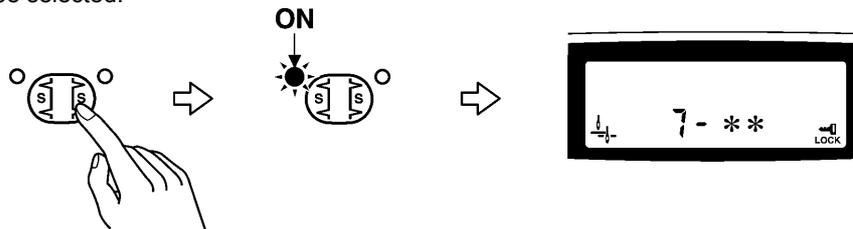
If selecting blind stitching, set the number of stitches to be sewn in a straight line.



1

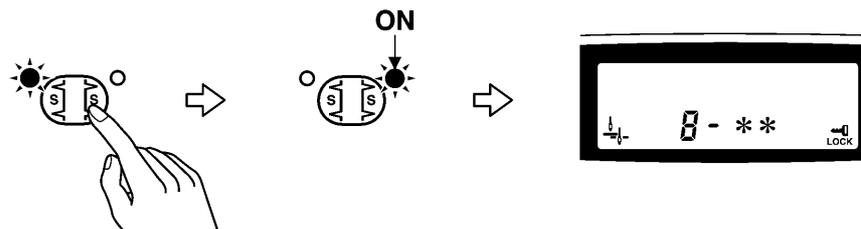
Setting the sewing pattern

When the blind stitch key is pressed, the indicator in the top-left corner of the key will illuminate and “left” blind stitching will be selected.



3420M

If the key is pressed once more, the indicator in the top-right corner of the key will illuminate and “right” blind stitching will be selected.



3421M

(The blind stitch selection switches between “left” and “right” each time the key is pressed.)

* If no pattern number appears in the main display when blind stitching is selected (an indicator in the blind stitch key is illuminated), the selected pattern number will appear when this key is pressed.

NOTE:

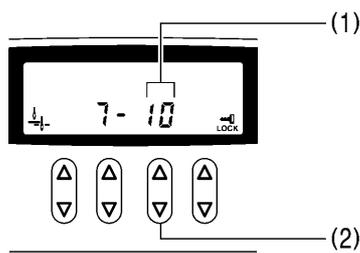
If the needle bar is at the needle up stop position, the needle bar will move to the sewing start position when the sewing pattern settings are changed.

If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

2

Setting the number of straight stitches

Example: Pattern number [7-**]



Use the Δ ∇ keys (2) to set the number of straight stitches (1) appearing in the main display .

(For example, if the number of straight stitches is 5, set to “7-5”, and if the number of straight stitches is 10, set to “7-10”.)

3422M 3423M

5. USING THE OPERATION PANEL (BASIC OPERATIONS)

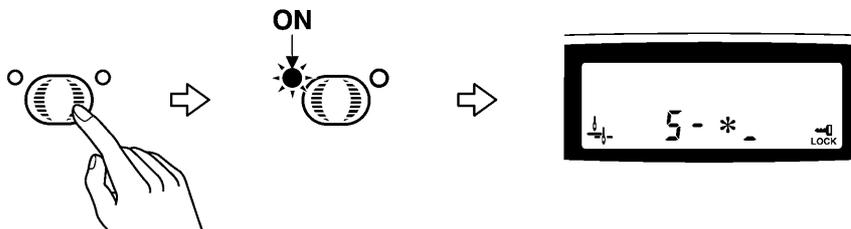
[6] Scallop patterns

When selecting a scallop pattern, set the type of scallop to be sewn.

1

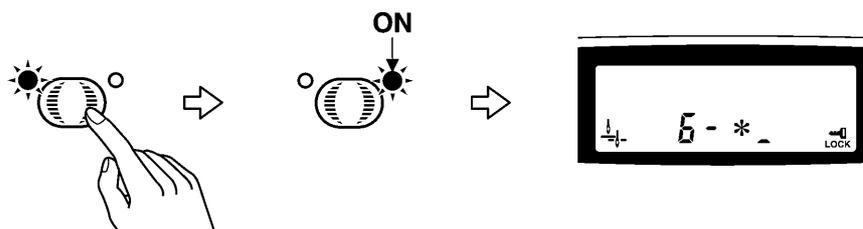
Setting the sewing pattern

When the scallop key is pressed, the indicator in the top-left corner of the key will illuminate and "left" scalloping will be selected.



3424M

If the key is pressed once more, the indicator in the top-right corner of the key will illuminate and "right" scalloping will be selected.



3425M

(The scallop selection switches between "left" and "right" each time the key is pressed.)

- * If no pattern number appears in the main display when scalloping is selected (an indicator in the scallop key is illuminated), the selected pattern number will appear when this key is pressed.

NOTE:

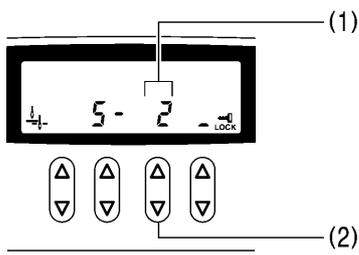
If the needle bar is at the needle up stop position, the needle bar will move to the sewing start position when the sewing pattern settings are changed.

If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

2

Setting the type of scallop stitches

Example: Pattern number [5-2_]



Press the Δ ∇ keys to select the type of scallop. The number (1) for the selected type will appear in the main display.

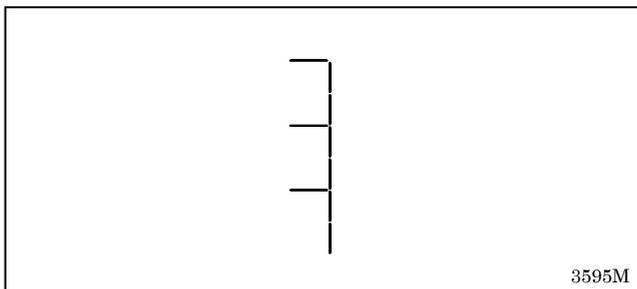
NOTE:

If the needle bar is at the needle up stop position, it will move to the sewing start position when the type of scallop is changed.

If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

3426M 3423M

[7] T stitch



3595M

Memory switch settings can be used to sew T stitches easily.

(Refer to the service manual or ask the place of purchase for details on the memory switch setting method.)

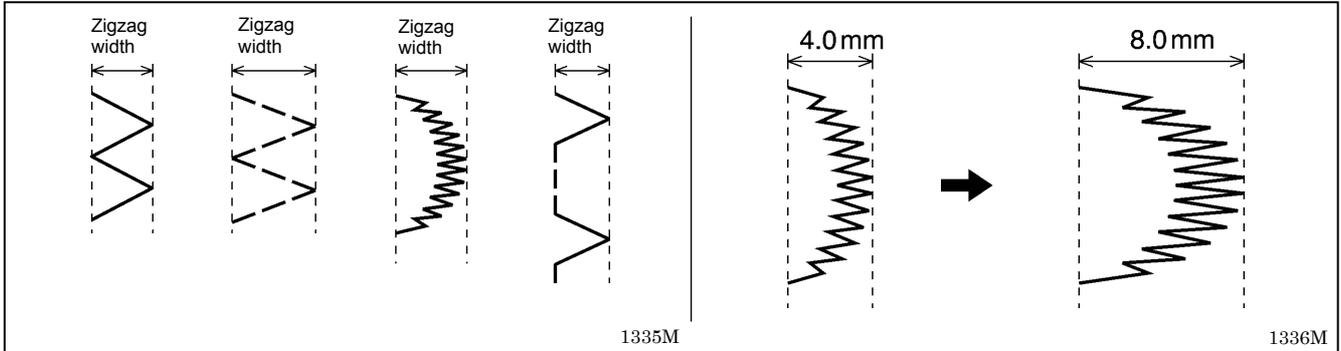
5-2-3. Setting the zigzag width

Set the zigzag width after selecting the pattern number.

The zigzag width is defined as the distance between the leftmost needle drop point and the rightmost needle drop point.

If the zigzag width is increased or reduced, the width of the sewing pattern is also increased or reduced by the same proportion.

* The zigzag width will be automatically set to [0.0] only when the straight stitch has been selected as the sewing pattern.



<Setting method>

2162M

The currently-set zigzag width will appear in the main display (1).
 (For example, [5.0] represents 5.0 mm.)
 * When the zigzag width is being displayed, the zigzag width icon (2) will illuminate.

(3)

Press the $\Delta \nabla$ selection keys (3) to change the zigzag width. 3430M
 The standard setting range for the zigzag width is set to 0 - 8 mm at the factory. 3423M

NOTE:

- The zigzag width cannot be changed if the indicator is not illuminated, even when the zigzag width is being displayed in the main display . When changing the zigzag width, press the zigzag width/zigzag base line position key so that the indicator is illuminated, and then change the setting.
- If the needle bar is at the needle up stop position, the needle bar will move to the sewing start position when the zigzag width is changed.
 If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

Sewing speed limits

The sewing speed is limited by the amount of zigzag movement. Accordingly, the actual sewing speed may differ from the setting speed for the following sewing patterns as a result of the zigzag width setting. The speeds are controlled automatically as shown below.

* For straight stitches and 3-step zigzag stitches, the sewing speed is not limited by the zigzag width setting.

For plain zigzag and blind stitch

Zigzag width	0-4 mm	4.1-5.0 mm	5.1-6.0 mm	6.1-9.0 mm	9.1-10.0 mm
Sewing speed	5000 rpm	4000 rpm	3500 rpm	3000 rpm	2500 rpm

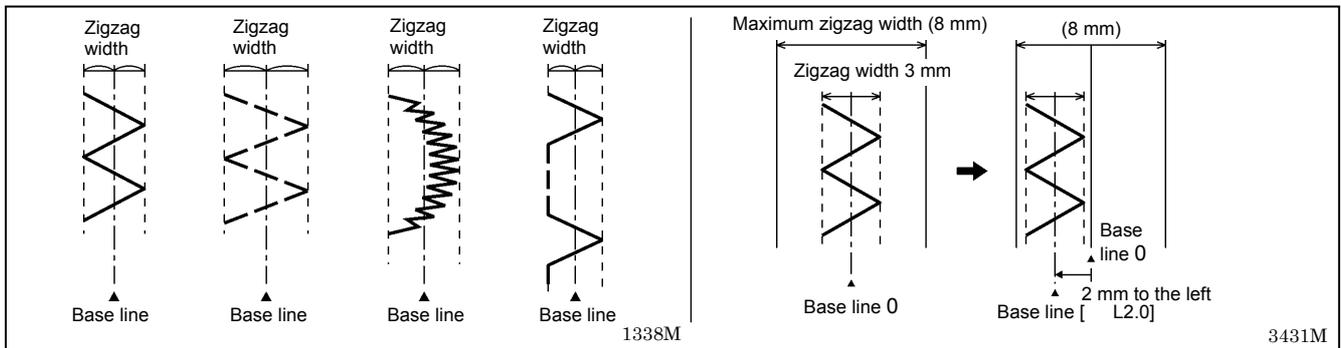
For 2-step zigzag

Zigzag width	0-8 mm	8.1-10.0 mm
Sewing speed	5000 rpm	4000 rpm

5-2-4. Setting the zigzag base line position

The zigzag base line is the “center” of the zigzag stitch, or in other words, it is like a center line drawn through the sewing pattern.

By moving the zigzag base line position, you can move the sewing pattern to the left and right within the maximum range for the pattern width.



<Setting method>

3432M 3423M

The currently-set zigzag base line position will appear in the main display (1).
 (For example, [L2.0] indicates that the pattern position is 2.0 mm to the left, and [r2.0] indicates that the pattern position is 2.0 mm to the right.)
 * When the zigzag base line position is being displayed, the zigzag base line position icon.

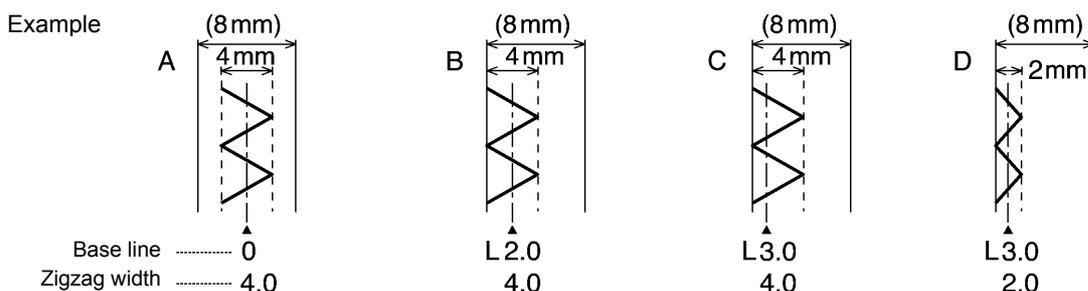
Press the $\Delta \nabla$ selection keys (3) to change the zigzag base line position.
 * If changing the setting from [0] first change the numerals, and then set “L” or “r”.
 Use the 2nd $\Delta \nabla$ keys (4) from the right to change the L and r settings.

NOTE:

- The zigzag base line position cannot be changed if the indicator is not illuminated, even when the zigzag base line position is being displayed in the main display. When changing the zigzag base line position, press the zigzag width/zigzag base line position key so that the indicator is illuminated, and then change the setting.
- If the needle bar is at the needle up stop position, the needle bar will move to the sewing start position when the zigzag base line position is changed.
 If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

Relationship between zigzag base line position and zigzag width (when the maximum zigzag width is 8 mm)

By way of example, consider a sewing pattern (Figure A) with a zigzag base line position set to [0] and a zigzag width set to [4.0]. If the zigzag base line position is set to [L2.0], the pattern will be moved over toward the left edge (Figure B). The sewing pattern cannot move any further to the left even if a larger setting is made. (Even if the zigzag base line position is set to [L3.0], the sewing pattern position will be the same as if the setting had been [L2.0]. (Figure C.) However, in this case, if the zigzag width is set to [2.0], a sewing pattern such as that shown in Figure D will be produced.



1341M

5-2-5. Setting start backtacking (8560A, 8550A-A31 only)

After thread trimming (or after the treadle has been depressed backward for the 8550A-A31), you can sew a set number of stitches to create start backtack stitches.

<Example>

(1) A (2 stitches)
(2) B (6 stitches)

The stitch length for section A is adjusted by means of the stitch length dial (1), and the stitch length for section B is adjusted by means of the condense dial (2).

3434M 1445M 1446M

<When the condense dial is set to a "-" (minus) value>

<When number of stitches for section A is "00">

<Setting start backtacking>

1

NOTE:
This operation is possible after thread trimming has been carried out (after the treadle has been depressed backward for the 8550A-A31).

Example:
A → 2
B → 6

A(0-99)
B(0-99)

3435M

2

Depress the treadle to start sewing the start backtack stitches.
After this, stitches will be sewn at the pitch set by the stitch length dial (1).

NOTE:

- The sewing machine will continue operating until the set number of start backtack stitches has been sewn, even if the treadle is returned to the neutral position. (The sewing machine operates at a speed of 1,200 rpm when sewing start backtack stitches.)
- Stop in the needle up stop position at that point. (For the 8560A, the thread will be trimmed and then the needle will stop in the needle up stop position.) (If the zigzag stop position has been set, the needle will stop in the set position.)

2159M

<Turning the start backtack function on and off>

The condition changes as shown below each time the start backtack key is pressed.

Illuminate

Off

Zigzag width/Zigzag base line position

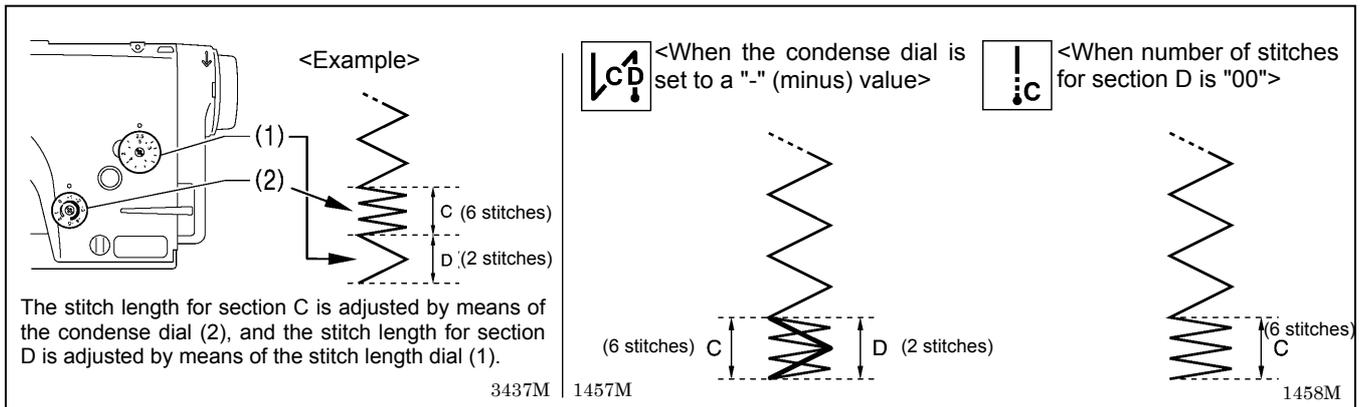
Number of start backtack stitches

Zigzag width/Zigzag base line position

3436M

5-2-6. Setting end backtacking (8560A, 855A-A31 only)

After the treadle has been depressed backward, you can sew a set number of stitches to create end backtack stitches.

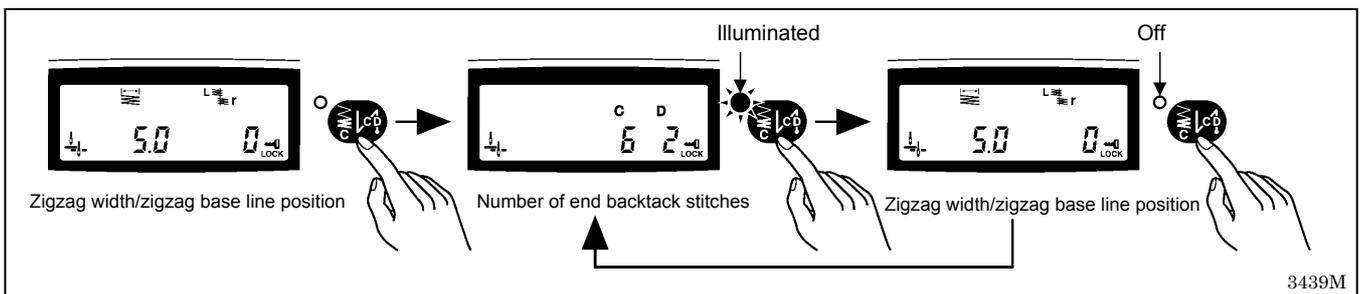


<Setting end backtacking>

<p>1</p>	<p>ON</p> <p>Example: C → 6 D → 2</p> <p>C(0-99) D(0-99)</p> <p>3438M</p>
<p>2</p>	<p>When the treadle is depressed, the stitches are sewn at the length that has been set using the stitch length dial (1).</p> <p>2159M</p>
<p>3</p>	<p>When the treadle is depressed backward, end backtacking is carried out and then the sewing machine stops in the needle up position. (The sewing machine operates at a speed of 1,200 rpm when sewing end backtack stitches.) (For the 8560A, thread trimming is carried out automatically and then the sewing machine stops in the needle up position.)</p> <p>NOTE:</p> <ul style="list-style-type: none"> • If the treadle is depressed backward before sewing the number of start backtack stitches is complete, end backtacking will not be carried out. • If the indicator of the thread trimming lock key is illuminated, the sewing machine will stop in the needle up position without thread trimming being carried out (for the 8560A). <p>2160M</p>

<Turning the end backtack function on and off>

The condition changes as shown below each time the end backtack key e is pressed.



6. SEWING

CAUTION



Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.



Turn off the power switch at the following times.

The machine may operate if the treadle is depressed by mistake, which could result in injury.

- When threading the needle
- When replacing the bobbin and needle
- When not using the machine and when leaving the machine unattended



Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



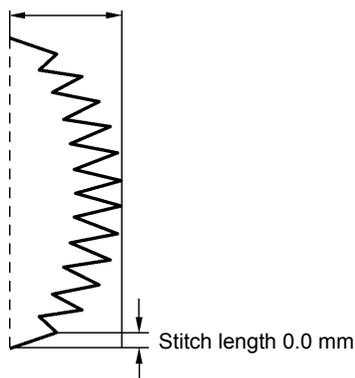
Never touch the knife on the face plate when opening the thread takeup guard cover at times such as when taking up slack in the thread, otherwise injury may result.



Use both hands to hold the machine head when tilting it back or returning it to its original position. If only one hand is used, the weight of the machine head may cause your hand to slip, and your hand may get caught.

Example: Pattern number [6-1]

Zigzag width (00.0) mm



3470M

1. Press the ON power switch.
(Refer to page 12.)
2. Use the operation panel to make the necessary settings such as sewing pattern and zigzag width.
(Refer to page 21.)
3. Set the stitch length using the stitch length dial.
(Refer to page 19.)
4. Depress the treadle to start sewing.

Document CD



For cleaning, standard adjustments and more details, please refer to the instruction manual contained in the Document CD.

3168M

Contents of the Document CD

The following documents are contained in PDF format.

- Basic Operation Manual
- Instruction Manual
- Parts Book

How to use the Document CD

Refer to "Using Document CD" which comes with the Document CD or the help function of the Document CD.

Recommended system configuration for using the Document CD

OS:	Microsoft® Windows® 98 Second Edition, Windows® 2000 Service Pack 4, Windows® XP Service Pack 2
Browser version:	Microsoft® Internet Explorer 6 Service Pack 1 or higher
Screen resolution:	1024 x 768 pixels or more
Plug in (required to access):	Adobe Reader 6.0 or higher

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