

S-1000A

HIGH SPEED SINGLE NEEDLE STRAIGHT LOCK STITCHER

Please read this manual before using the machine.

Please keep this manual within easy reach for quick reference.

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Thank you very much for buying a BROTHER sewing machine. Before using your new machine, please read the safety instructions 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. The meanings of these indications and symbols are given below.

Indications



CAUTION

The instructions which follow this term indicate situations where failure to follow the instructions may result in minor or moderate injury.

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

CAUTION

Environmental requirements

-  Use the sewing machine in an area which is free from sources of strong electrical noise such as electrical line noise or static electric noise. 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 power 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 approximately 30 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.
-  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.
-  Secure the table so that it will not move when tilting back the machine head. If the table moves, it may crush your feet or cause other injuries.
-  All cords should be secured at least 25 mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.
-   Install the belt covers to the machine head and motor.
-  If using a work table which has casters, the casters should be secured in such a way so that they cannot move.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil, so that it does not get into your eyes or onto your skin. If care is not taken, inflammation can result. Furthermore, do not drink the lubricating oil. Diarrhea or vomiting may result. 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 motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.

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 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.



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.



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 motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.

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, so that it does not get into your eyes or onto your skin. If care is not taken, inflammation can result. Furthermore, do not drink the lubricating oil. Diarrhea or vomiting may result. Keep the oil out of the reach of children.



Use only the proper replacement parts as specified by Brother.

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.

The motor will keep turning even after the power is switched off as a result of the motor's inertia. Wait until the motor stops fully before starting work.

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



If the power switch needs to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.



Secure the table so that it will not move when tilting back the machine head. If the table moves, it may crush your feet or cause other injuries.



Use only the proper replacement parts as specified by Brother.



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.



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

CAUTION
Moving parts may cause injury.

Operate with safety devices* installed.

Turn off the power before carrying out operations such as threading, changing the needle, bobbin, knives or hook, cleaning and adjusting.

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

2

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

Be careful not to get your hands caught when returning the machine head to its original position after it has been tilted.

4

Be careful to avoid injury from the moving thread take-up.

5

Be careful to avoid injury from the moving V-belt.

7

Direction of operation

8

brother
 ミシン用潤滑油
 Lubricating Oil for Machining

▲ 注意

目に入ったり皮膚につくと、炎症を起こすことがある。保護めがね、手袋を使うこと。

飲み込むと、下痢、嘔吐する。飲み込まないこと。

- 子供の手の届かない所に置いてください。
- 目に入った場合は、清浄な水で15分間洗浄し、医師の診断を受けてください。
- 皮膚に触れた場合は、水と石けんで十分に洗ってください。
- 飲み込んだ場合は、無理に吐かせずに、直ちに医師の診断を受けてください。

第4類 危険等級III 第3石油類 火気厳禁

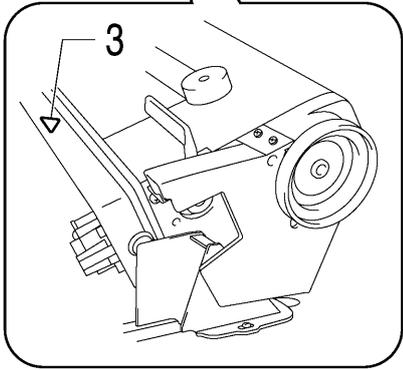
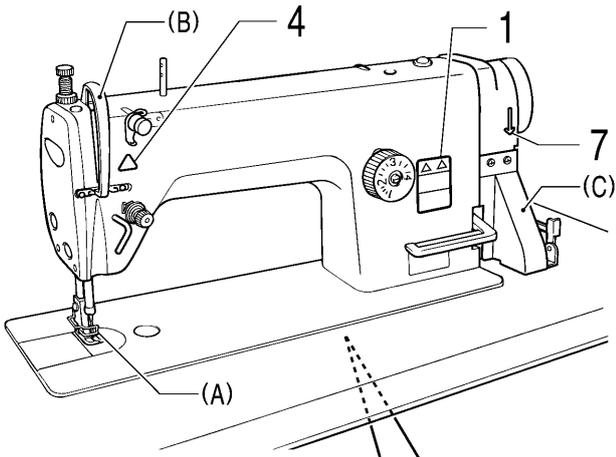
▲ CAUTION

Lubricating oil may cause inflammation to eye and skin.
 Wear protective glasses and gloves.

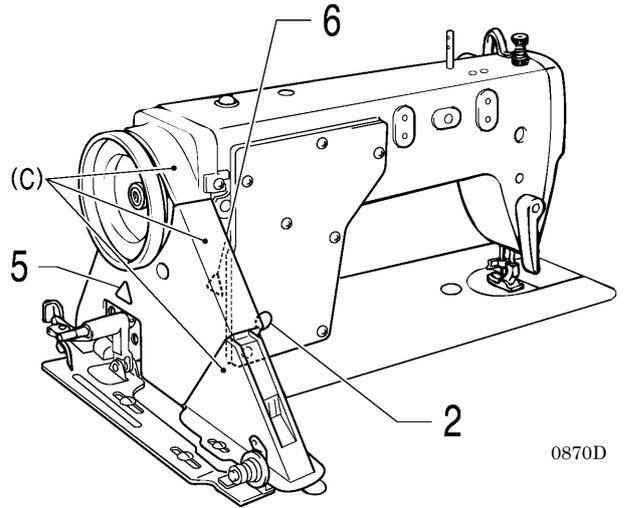
Swallowing oil can cause diarrhoea and vomiting.
 Do not swallow.

Keep away from children.
FIRST AID
 Eye contact:
 -Rinse with plenty of cold water.
 -Seek medical help.
 Skin contact:
 -Wash with soap and water.
 If swallowed:
 -Seek medical help immediately.
 -Do not induce vomiting.

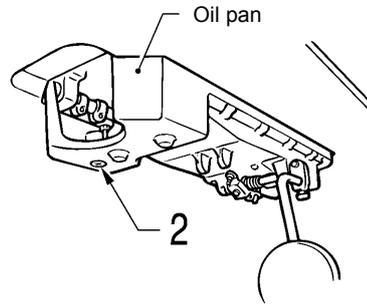
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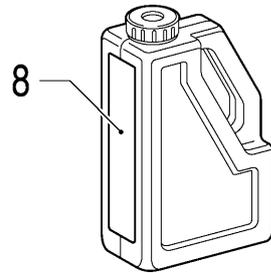
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1. INSTALLATION

⚠ 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 30 kg (70lb). 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.



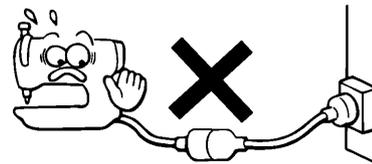
Secure the table so that it will not move when tilting back the machine head. If the table moves, it may crush your feet or cause other injuries.



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

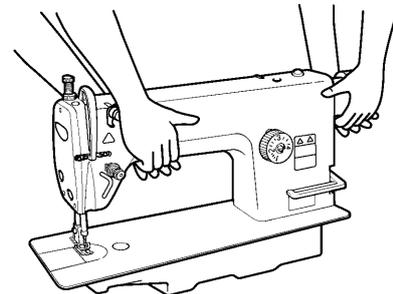
- Do not set up this sewing machine near other equipment such as televisions, radios or cordless telephones, otherwise such equipment may be affected by electronic interference from the sewing machine.
- The sewing machine should be plugged directly into an AC wall outlet. Operation problems may result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



0475D

Carrying the machine

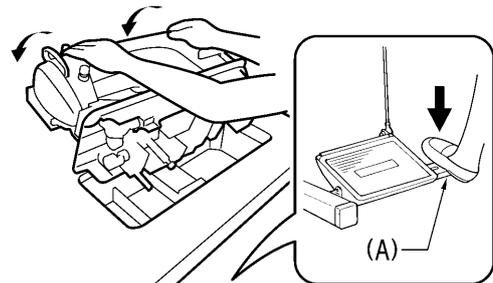
- The sewing machine should be carried by the arm and the machine pulley by two people as shown in the illustration.
- * Do not hold by any part other than the machine pulley. If this is not observed, it may result in damage to the sewing machine.



0862D

Tilting back the machine head

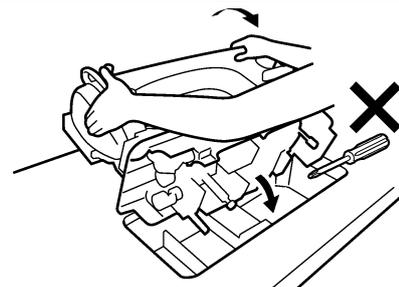
- Hold section (A) with your foot so that the table does not move, and then push the arm with both hands to tilt back the machine head.



2101B

Returning the machine head to the upright position

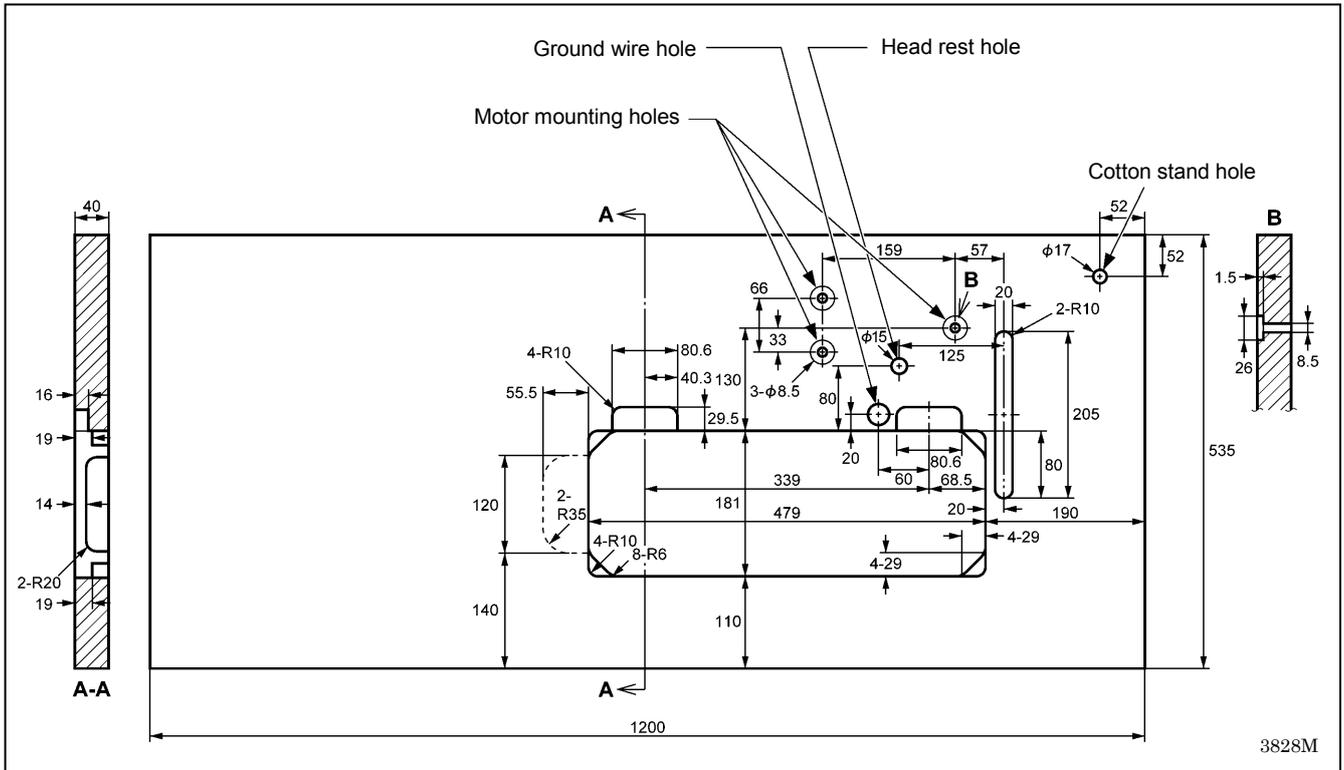
1. Clear away any tools, etc. which may be near the table holes.
2. While holding the face plate with your left hand, gently return the machine head to the upright position with your right hand.



2089M

1-1. 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.



1-2. Motor

CAUTION

- ⚠ All cords should be secured at least 25 mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.
- ⚠ Install the correct belt cover which corresponds to the motor being used.

< Motor >

- Use one of the clutch motors given in the table at right as the motor.
- Refer to the instruction manual for the motor for details on installing and using the motor.

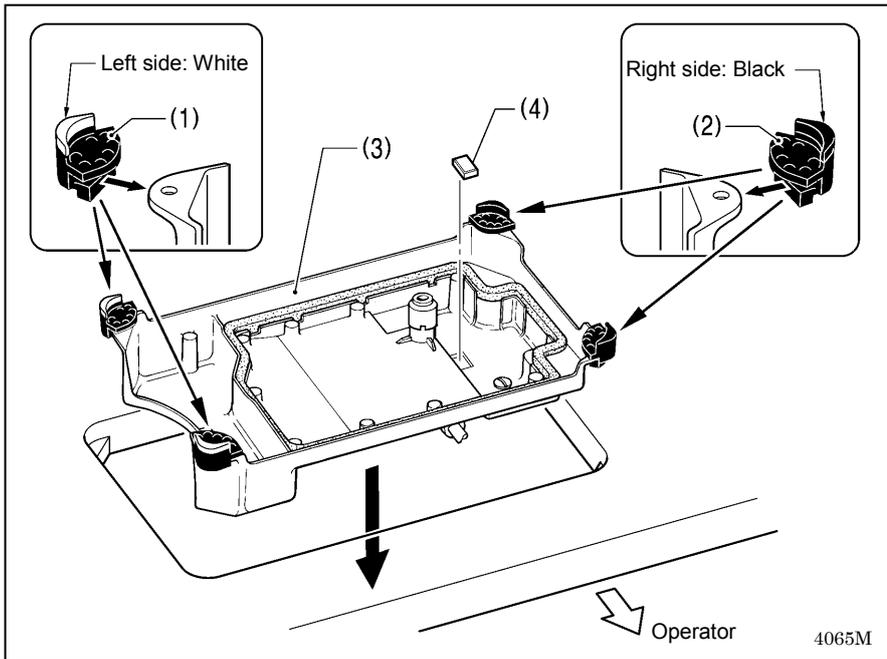
Power	Motor
Single-phase	2-pole, 400 W motor
Three-phase	2-pole, 400 W motor

< Motor pulley and V-belt >

Select the correct motor pulley and V-belt by referring to the table below to suit the power frequency of your area.

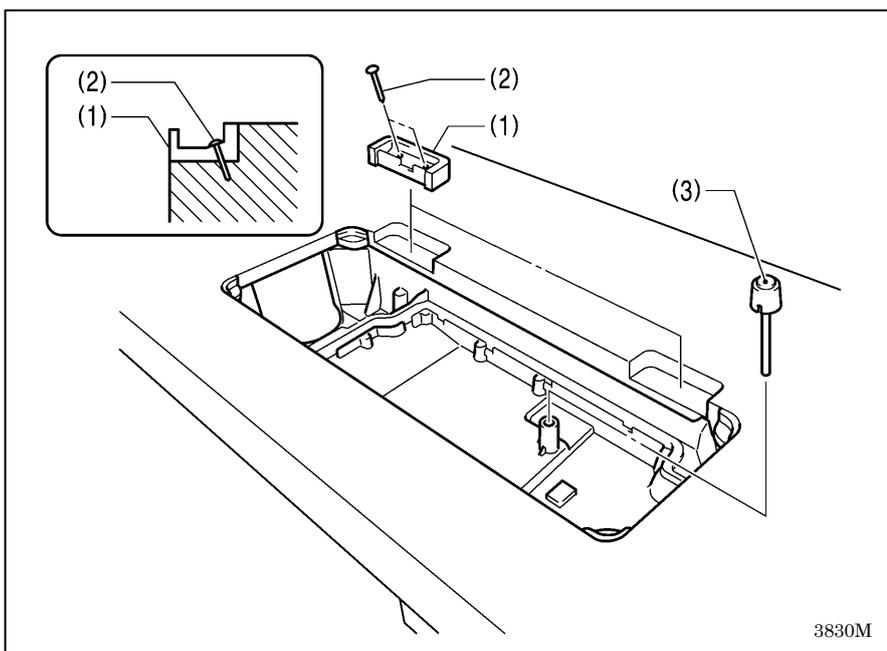
Sewing speed	50Hz		60Hz	
	Motor pulley (Outer diameter)	V-belt	Motor pulley (Outer diameter)	V-belt
3,500 sti/min	90	43	75	42
4,000 sti/min	100	43	85	43

1-3. Installation



1. Oil pan

- (1) Head cushions (left) [2 pcs]
- (2) Head cushions (right) [2 pcs]
- (3) Oil pan
- (4) Magnet

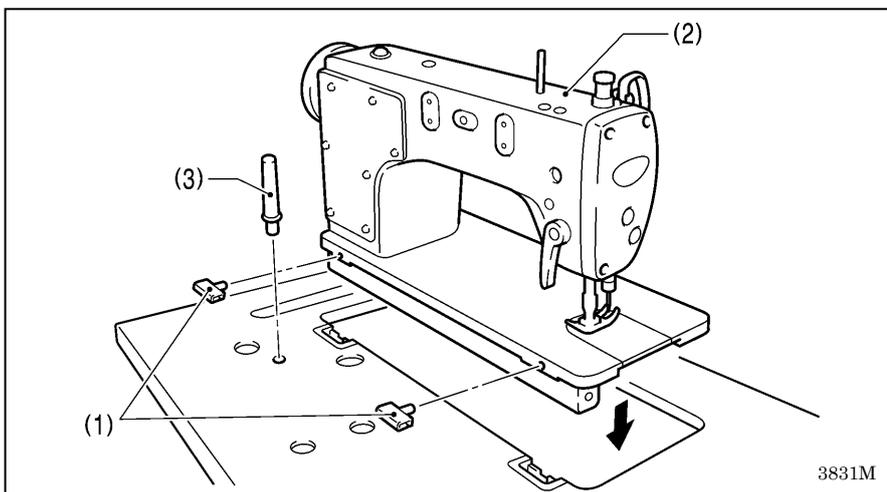


2. Rubber cushions

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

3. Knee lifter complying bar

- (3) Knee lifter complying bar

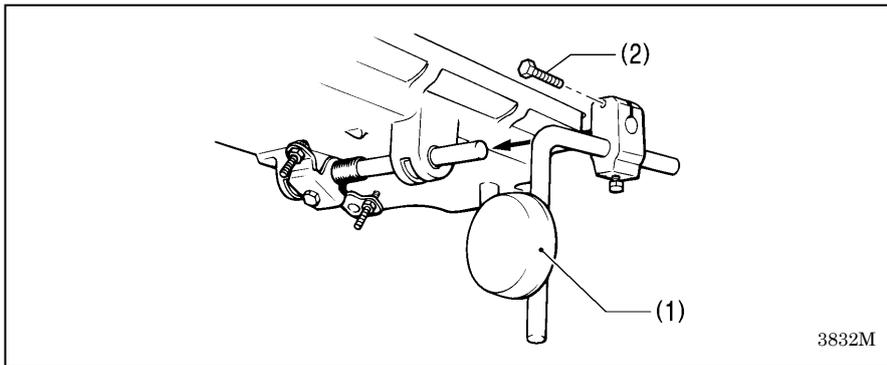


4. Machine head

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

NOTE:

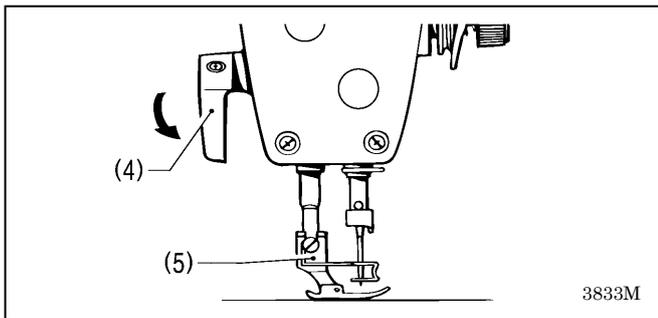
Tap the head rest (3) securely into the table hole. If the head rest (3) is not pushed in as far as it will go, the machine head will not be sufficiently stable when it is tilted back.



5. Knee lifter plate

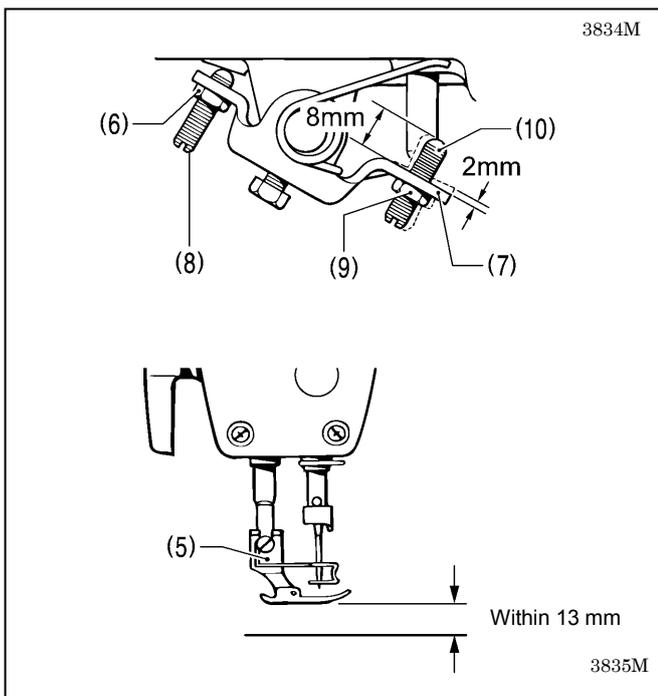
- (1) Knee lifter plate
- (2) Bolt

* Loosen the bolt (2) and move the knee lifter plate (1) to a position where it is easy to use.

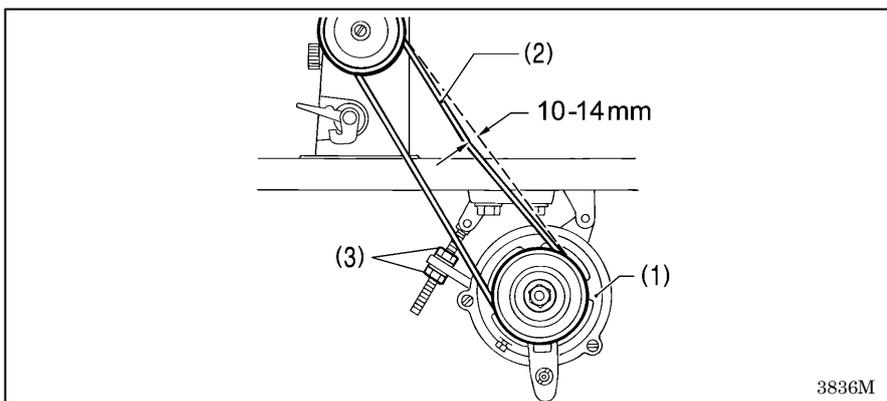


<Knee lifter adjustment>

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).



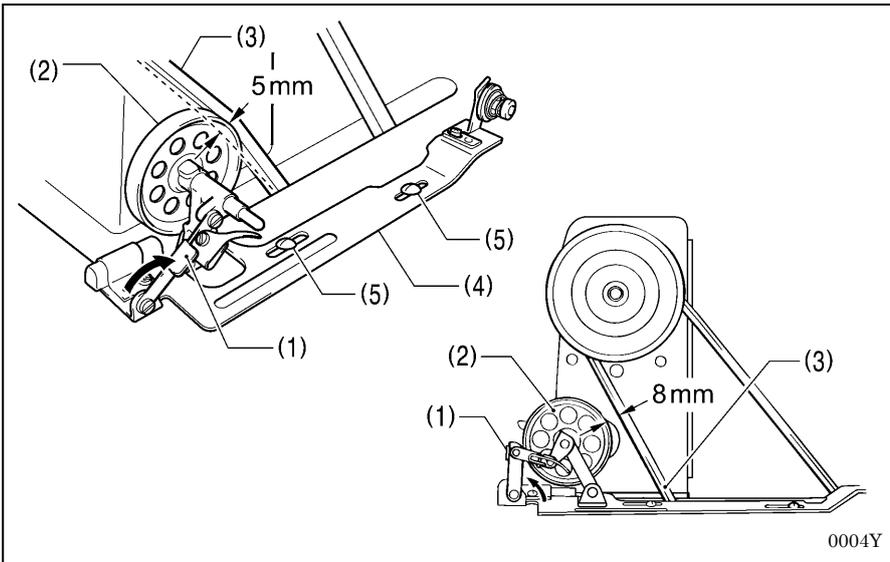
3. Loosen the nut (6).
4. Turn the screw (8) to adjust so that the amount of play in the knee lifter (7) is approximately 2 mm when the knee lifter plate (1) is gently pressed.
5. Securely tighten the nut (6).
6. Loosen the nut (9).
7. Turn the screw (10) until the distance between the end of the screw (10) and the knee lifter (7) is approximately 8 mm.
8. Turn the adjusting screw (10) to adjust so that the presser foot (5) is at the desired position within a distance of 13 mm of the needle plate when the knee lifter plate (1) is fully pressed.
9. After adjustment is completed, securely tighten the nut (9).



6. V-belt

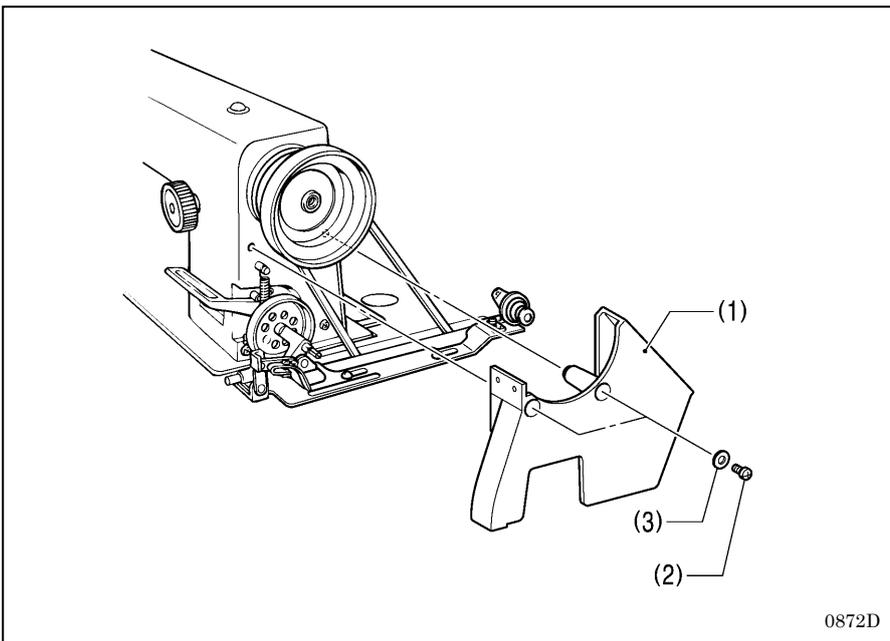
- (1) motor (Sold separately)
- (2) V-belt (Sold separately)

* Turn the two nuts (3) to adjust so that there is 10 - 14 mm of deflection in the V-belt (2) when it is pressed at the midway point with a force of 5 N.



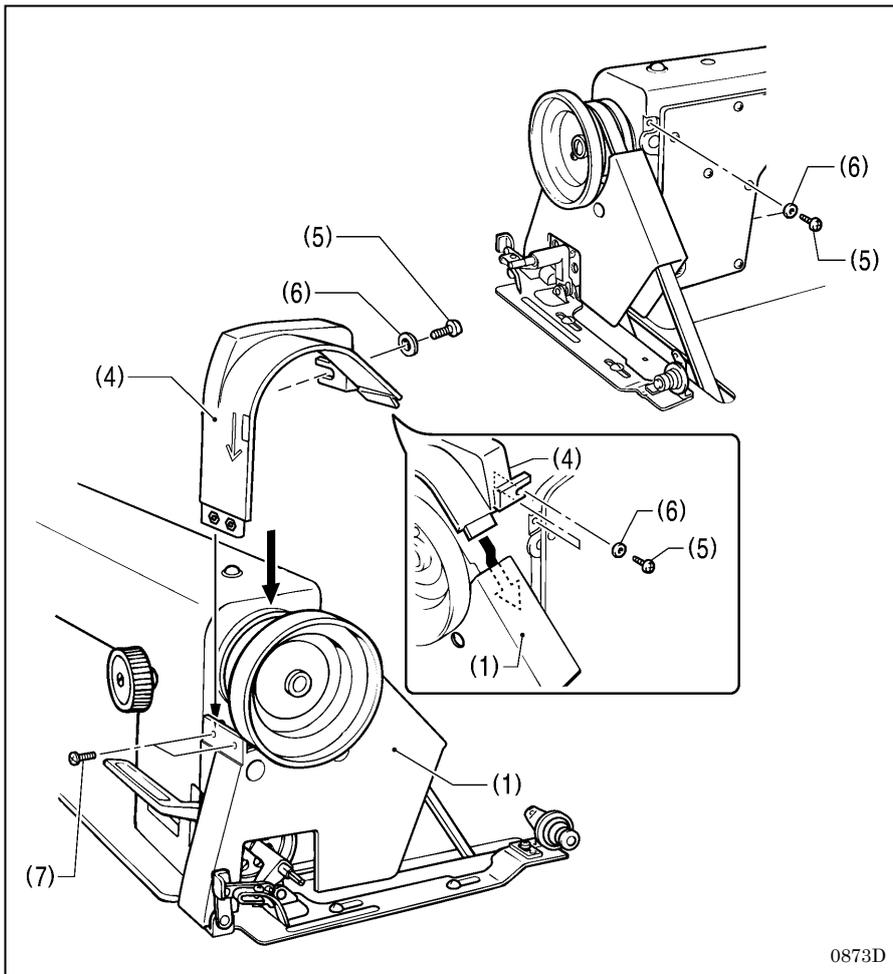
7. Bobbin winder

1. Push down the bobbin presser arm (1) as far as it will go.
2. Place the bobbin winder wheel (2) so that it pushes the belt (3) by approximately 5 mm, and then place the bobbin winder (4) so that it is parallel with the belt hole in the table.
3. Install the bobbin winder (4) to the table with the two screws (5).
4. Pull the bobbin presser arm (1) back and check that there is approximately 8 mm of clearance between the bobbin winder wheel (2) and the belt (3).



8. Belt cover

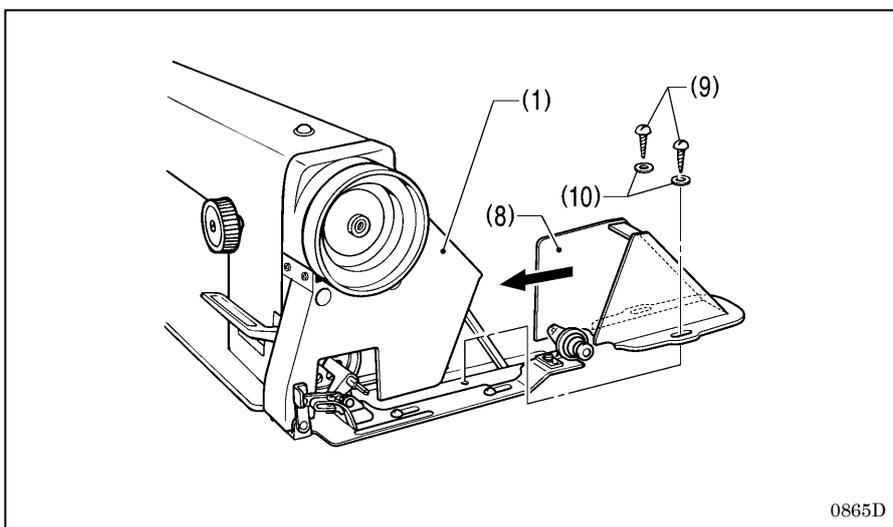
1. Remove the two screws (2) and two washers (3) from the side of the sewing machine.
Install the belt cover (1) to the sewing machine with the two screws (2) and two washers (3).



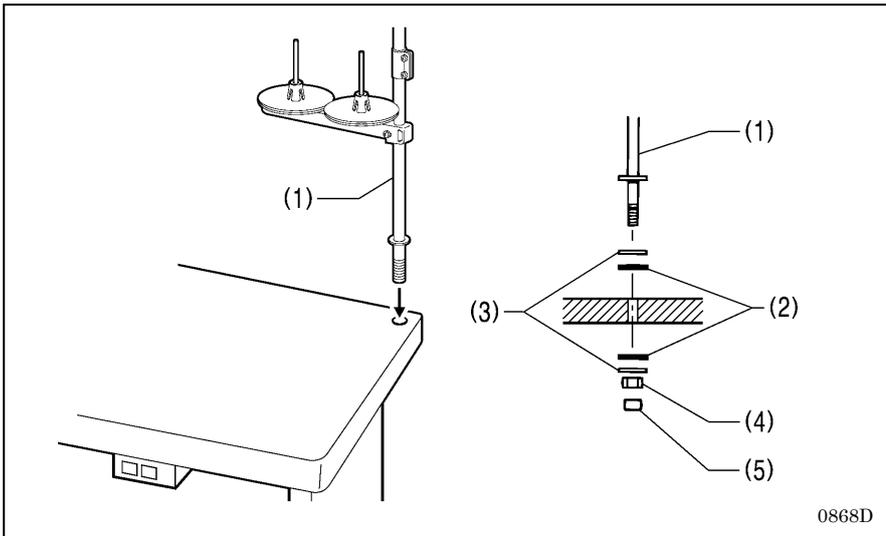
2. Remove the screw (5) and washer (6) from the rear of the sewing machine.

3. Place belt cover U (4) onto the machine pulley.

4. Install belt cover U (4) to the sewing machine with the screw (5) and washer (6), and then install it to the belt cover (1) with the two screws (7) which are included as accessories.



5. Place belt cover D (8) so that it overlaps the belt cover (1) by 2 - 3 mm, and then install it to the table with the two screws (9) and two washers (10).



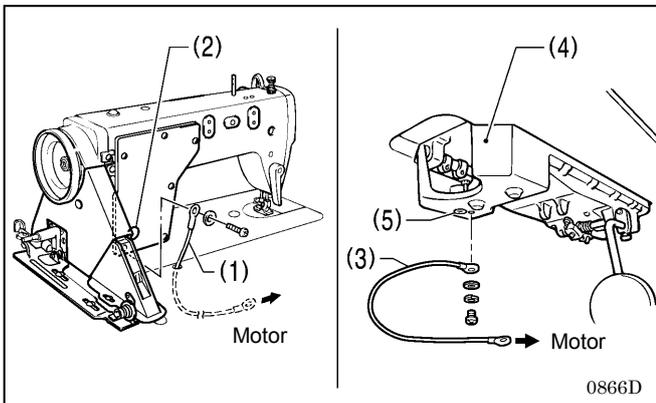
9. Cotton stand

(1) Cotton stand

NOTE:

Securely tighten the nut (4) so that the two rubber cushions (2) and the two washers (3) are securely clamped and so that the cotton stand (1) does not move. Install the column cap (5).

1-4. Ground wire connections



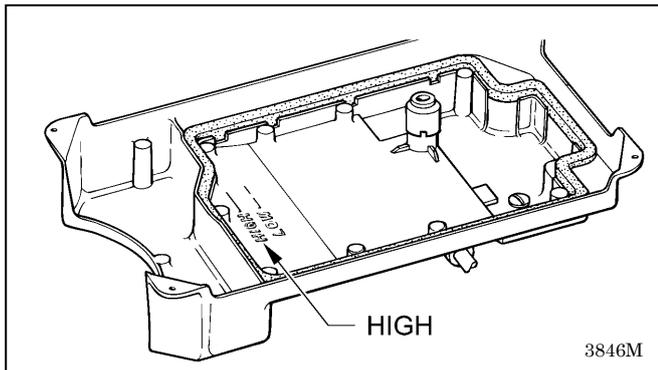
Use the correct type of ground wire. (Be sure to read the instruction manual for the motor together with this instruction manual.)

1. Connect the ground wire (1) to the sewing machine head and motor. (The attachment location is indicated by a ground symbol (2).)
2. Connect the ground wire (3) to the oil pan (4) and motor. (The attachment location is indicated by a ground symbol (5).)

1-5. 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, so that it does not get into your eyes or onto your skin.
If care is not taken, inflammation can result. Furthermore, do not drink the lubricating oil. Diarrhea or vomiting may result.
Keep the oil out of the reach of children.



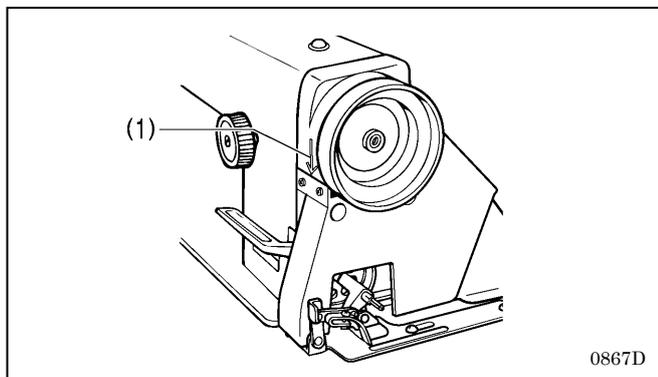
- The sewing machine should always be lubricated and the oil supply replenished before it is used for the first time, and also after long periods of non-use.
 - Use only the lubricating oil (JX Nippon Oil & Energy Corporation Sewing Lube 10N; VG10) specified by Brother.
* If this type of lubricating oil is difficult to obtain, the recommended oil to use is <Exxon Mobil EssoTex SM10; VG10>.
1. Tilt back the machine head.
 2. Slowly pour in lubricating oil until the oil level reaches the HIGH mark.
- * If the oil level drops below the LOW mark, add more lubricating oil.

1-6. Checking the machine pulley rotating direction

CAUTION

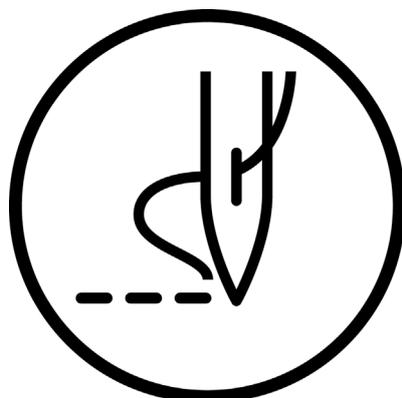


Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



1. Insert the power cord plug into the wall outlet, and then turn on the power switch.
 2. Depress the treadle slightly and check that the machine pulley starts to turn in the direction of the arrow (1).
- * If the direction of rotation is reversed, change the direction of rotation to the correct direction while referring to the instruction manual for the motor.

brother



Basic Operation Manual

* Please note that the contents of this manual may differ slightly from the actual product purchased as a result of product improvements.

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