

GC6760

INSTRUCTION BOOK // PARTS CATALOGUE

LOCKSTITCH DIRECT-DRIVE FAST SEAMER
WITH DROP FEED AND NEEDLE FEED



TYPICAL

Thank you very much for buying our company's 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 lever, 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 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 mature of the thing that must be done. (For example, the symbol at left means " you must make the ground connection".)
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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.



Avoid exposure to direct sunlight during use. Exposure to direct sunlight 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 dealer or a qualified electrician for any electrical work that may need to be done.



The sewing machine weighs more than 46 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.



Attach all safety device before using the sewing machine.



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.



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.



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 an error occurs in machine, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest dealer or a qualified technician.



If the machine develops a problem, contact your nearest dealer or a qualified technician.



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

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.



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.



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.

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

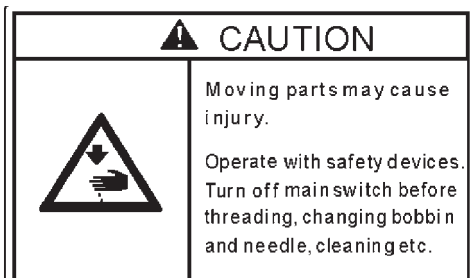
Keep the oil out of the reach of children.

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 dealer.

1



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



Direction of operation

4

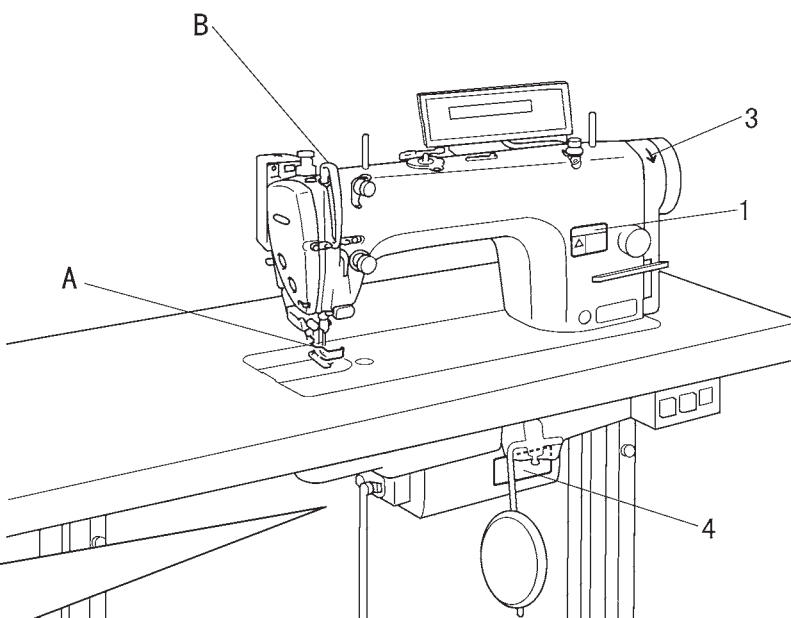
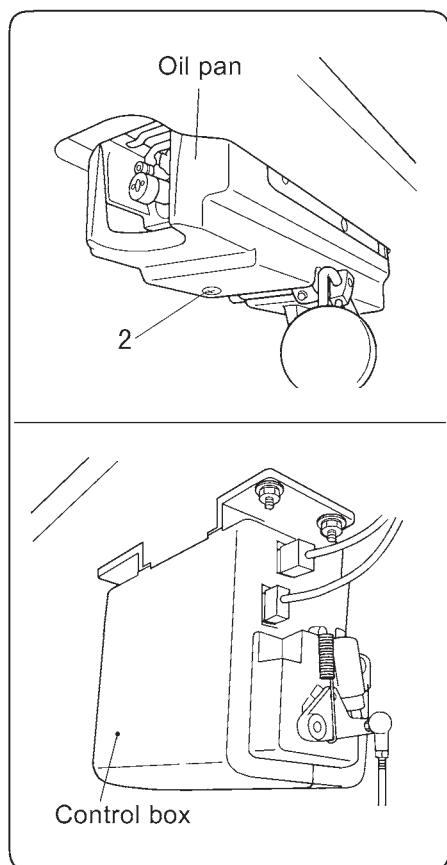


Danger

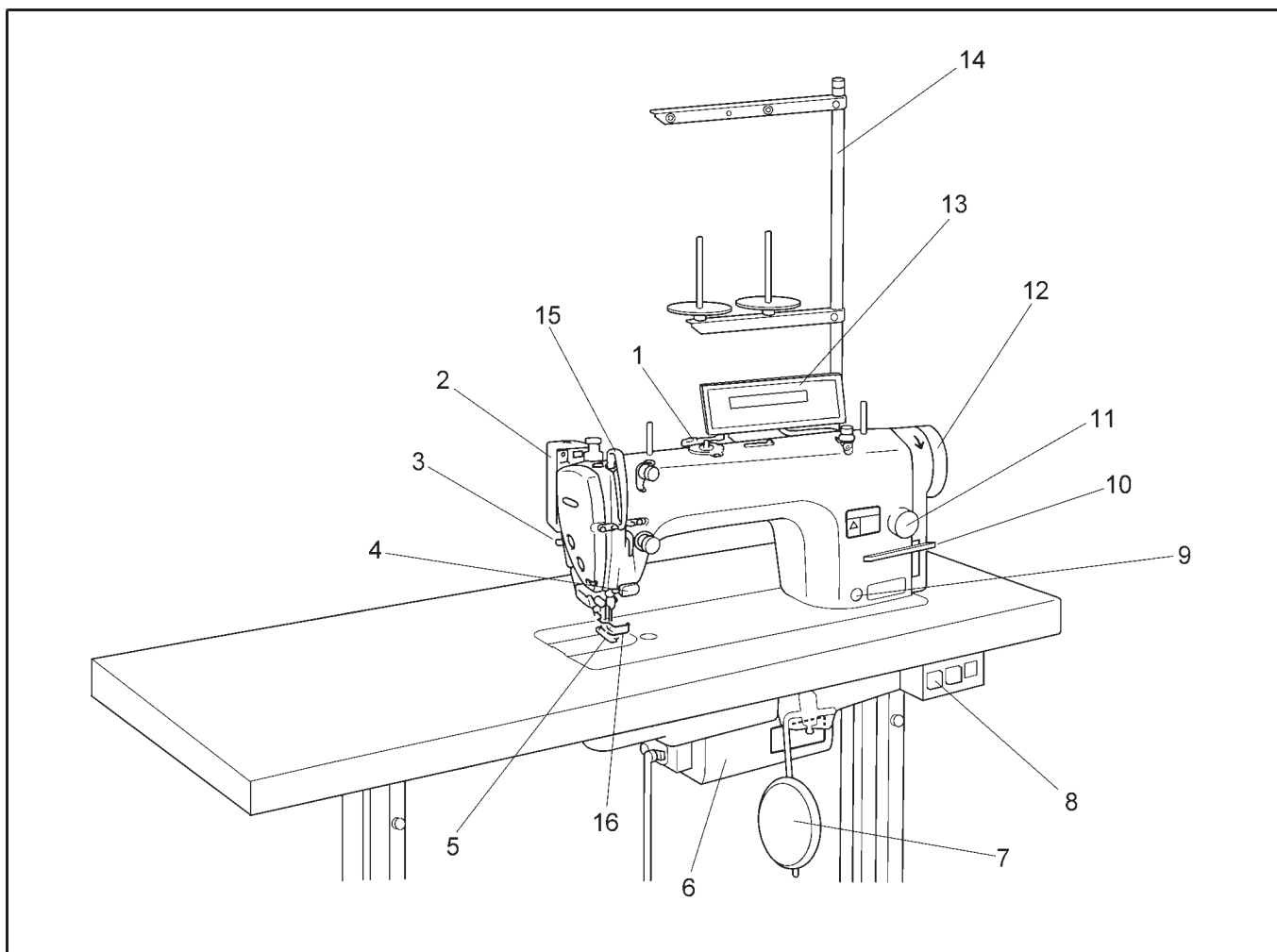
safety devices:

(A) Finger guard

(B) Thread take - up cover



1. NAMES OF MAJOR PARTS



- 1. Bobbin winder
- 3. Lifting lever
- 5. Presser foot
- 7. Knee lifter assembly
- 9. Oil gauge window
- 11. Stitch length dial
- 13. Operation panel
- Safety devices
- 15. Thread take-up cover

- 2. Thread wiper
- 4. Quick reverse (Actuator)
- 6. Control box
- 8. Power switch
- 10. Reverse lever
- 12. Machine pulley
- 14. Cotton stand

- 16. Finger guard

2.INSTALLATION



CAUTION



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



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



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



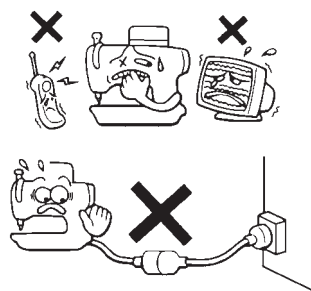
The sewing machine weighs more than 46 kg. The installation should be carried out by two or more people.



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.

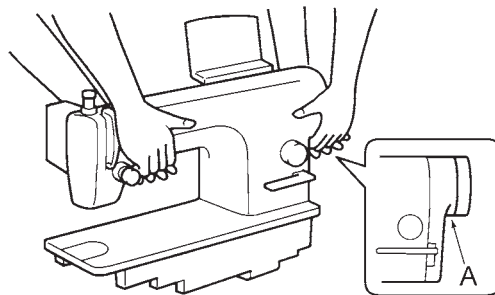
About the machine set-up location

- 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.



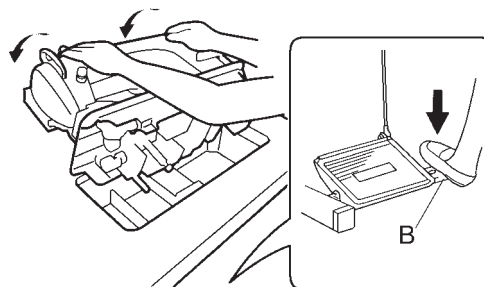
Carrying the machine

- 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.



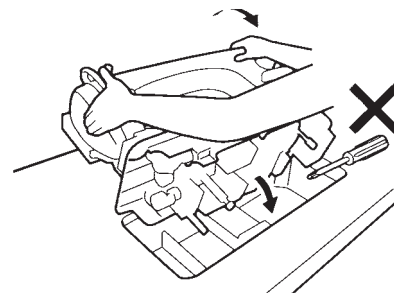
Tilting back the machine head

- 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.



Returning the machine head to the upright position

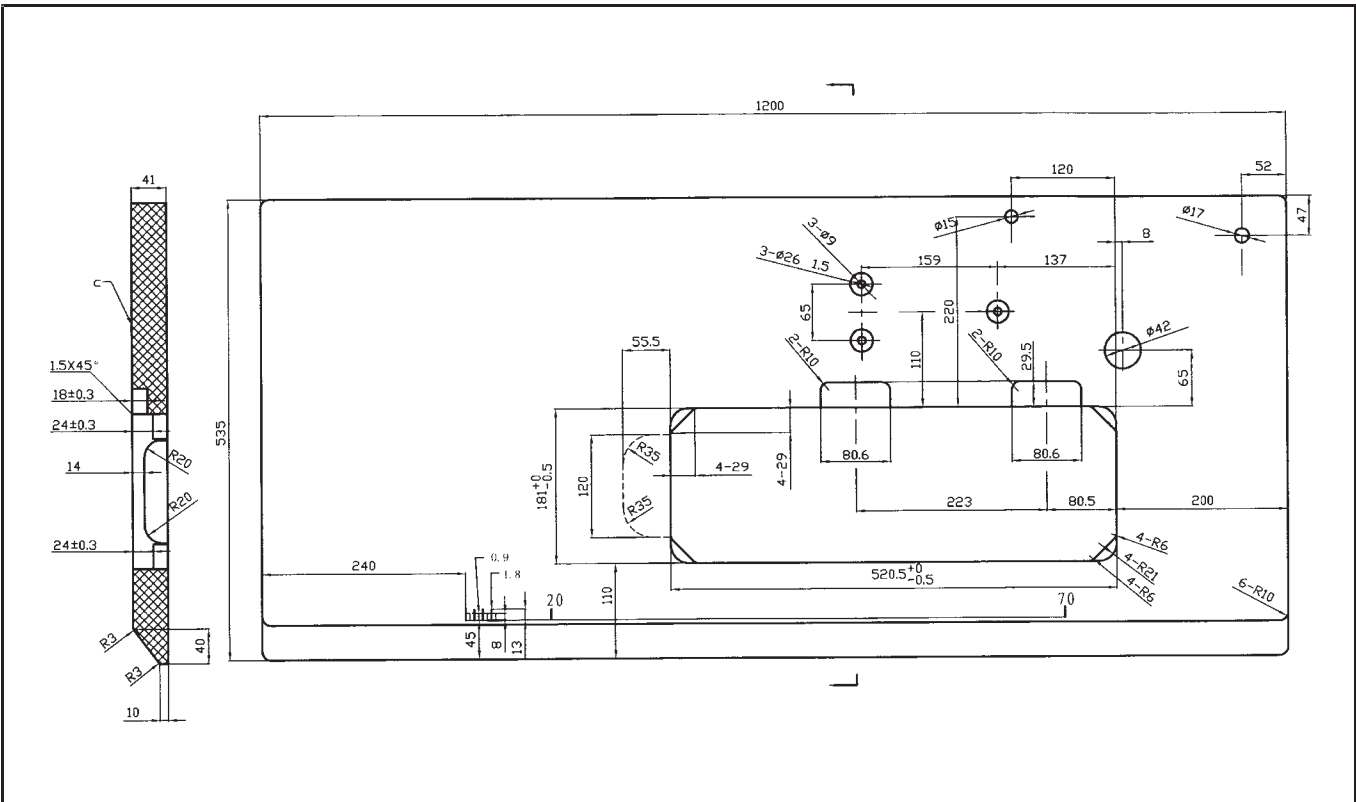
1. clear away any tools, etc. which may be near the table holes.
2. While holding the face plate with your left hand, gently return the machine head to the upright position with your right hand.



2-1. 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.

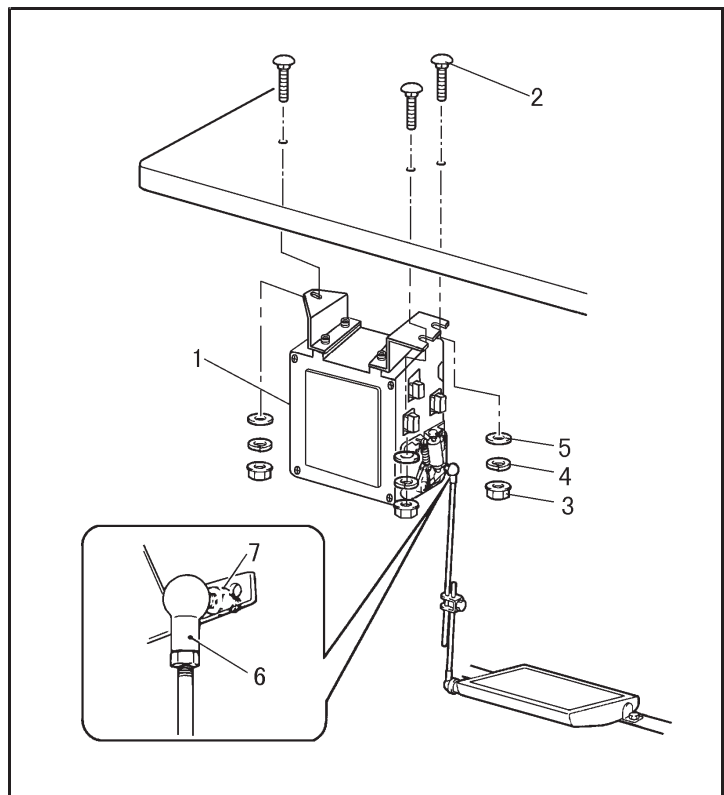
Drill holes as indicated in the illustration below.



2-2.Installation

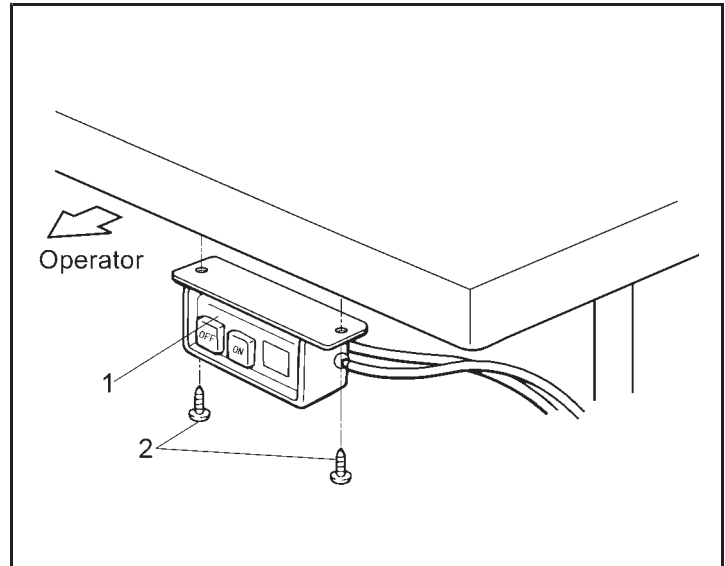
1. Control box
- (1)control box
- (2) Bolts [3 pcs]
- (3) Nuts [3 pcs]
- (4)Spring washers [3 pcs]
- (5)Washers [3 pcs]

2. Connecting rod
(6)Connecting
(7)Nut



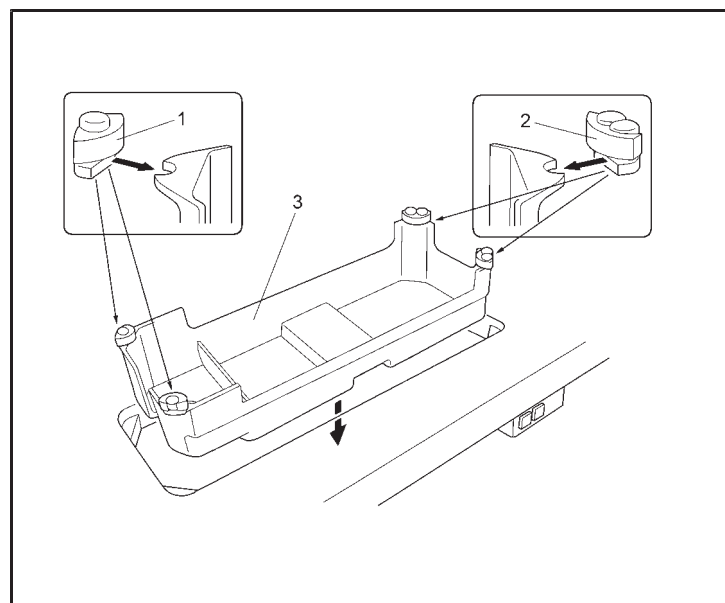
3. Power switch

- (1) Power switch.
- (2) Screws [2 pcs]



4. Oil pan

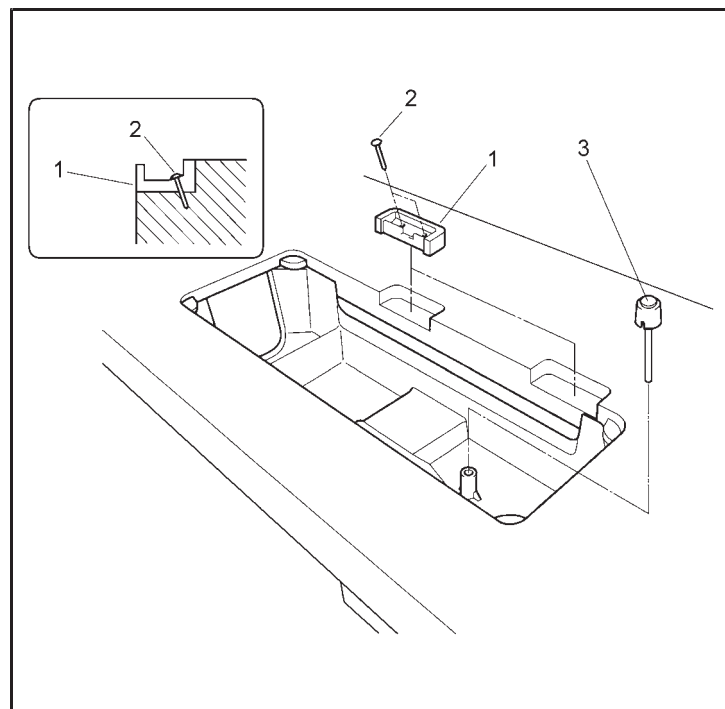
- (1) Head cushions (left) [2 pcs]
- (2) Head cushions (right) [2 pcs]
- (3) Oil pan.



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

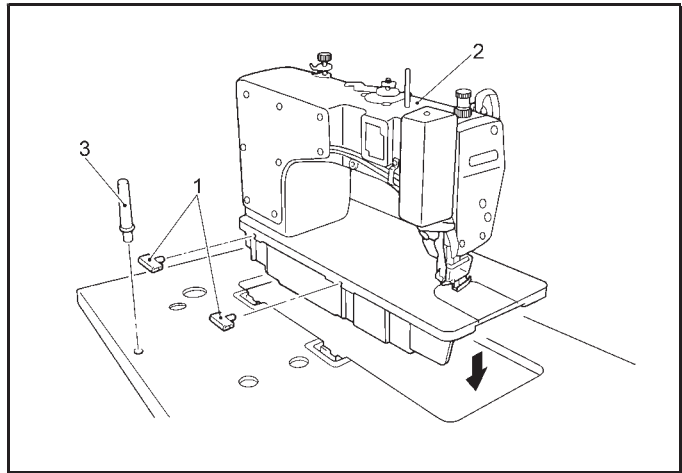
(1) Hinges [2 pcs]

(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.

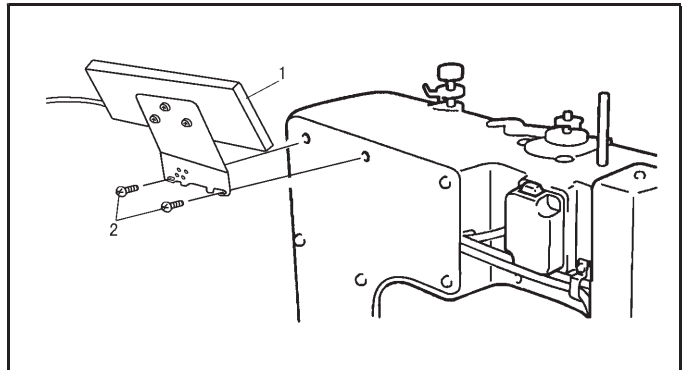


8. Operation panel

(1) Operation panel

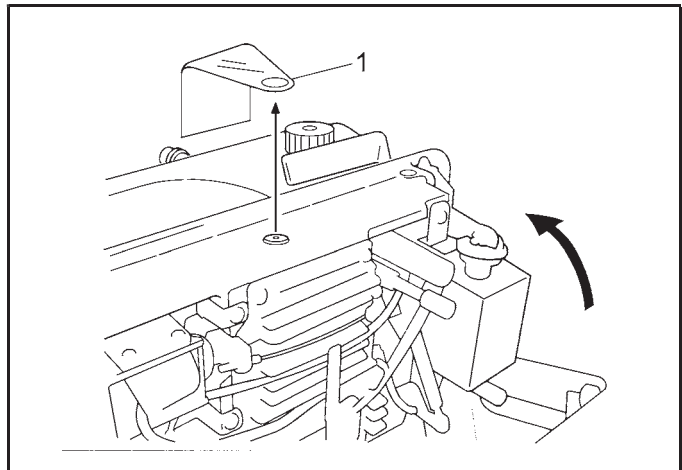
(2) Screws [2 pcs]

(Use for tightening rear cover)



9. Sticker (Remove)

(1) sticker

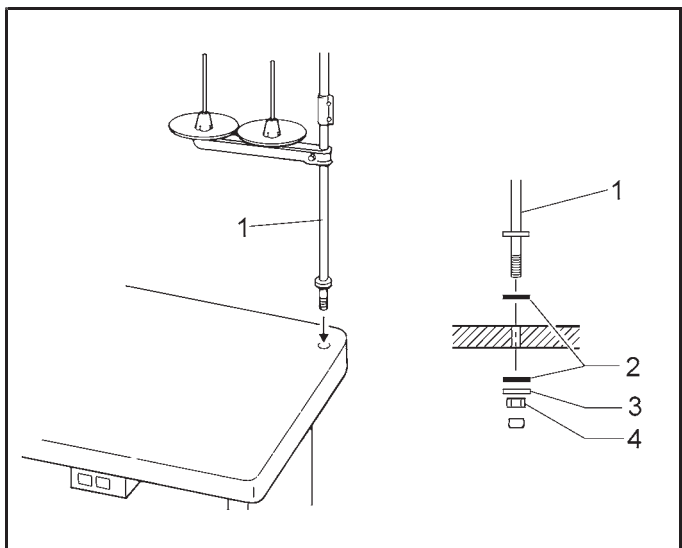


10. Cotton stand

(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.

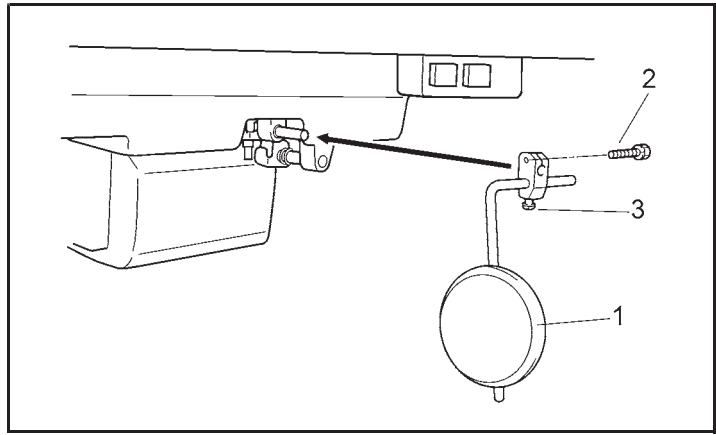


11. Knee lifter plate

(1) Knee lifter plate

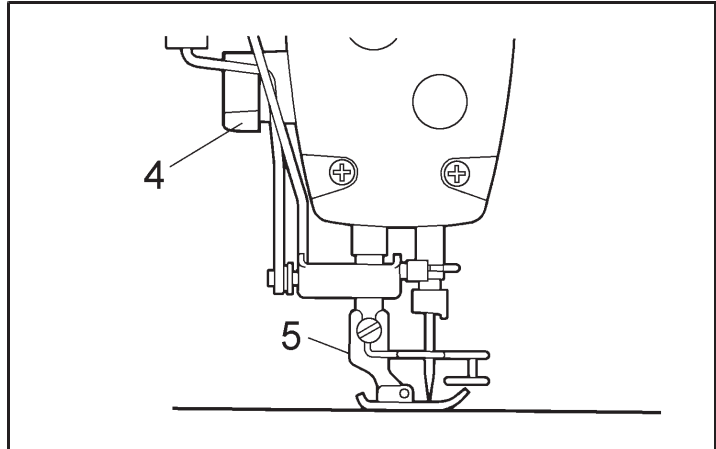
(2) Bolt

* 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).

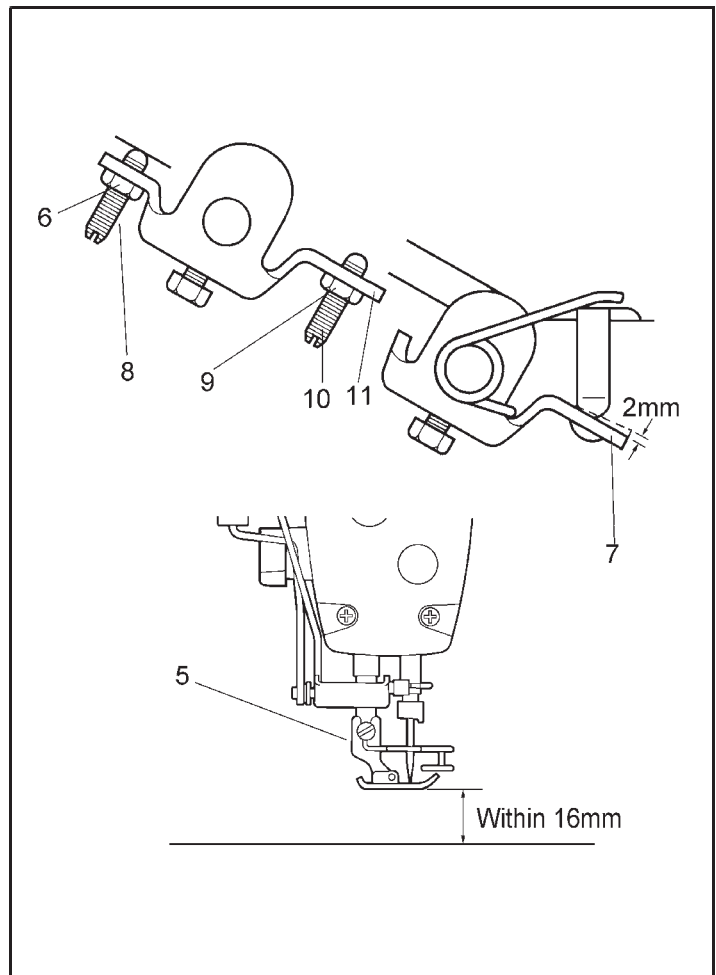


3. Loosen the nut(6).
4. Turn the screw (8) to adjust so that the amount of play in the knee lifter (7) is approximately 2 mm when the knee lifer plate (1) is gently pressed.
5. Securely tighten the nut (6)

<Adjusting the height of presser foot>

The height of the presser foot can be adjusted to a maximum of 16mm.

1. loosen the nut (9)
2. Turn the adjusting screw (10) to adjust so that the presser foot (5) is at the desired position within a distance of 16 mm of the needle plate when the knee lifter plate (1) is fully pressed.
3. After adjustment is completed, securely tighten the nut (9).



2-3. 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.

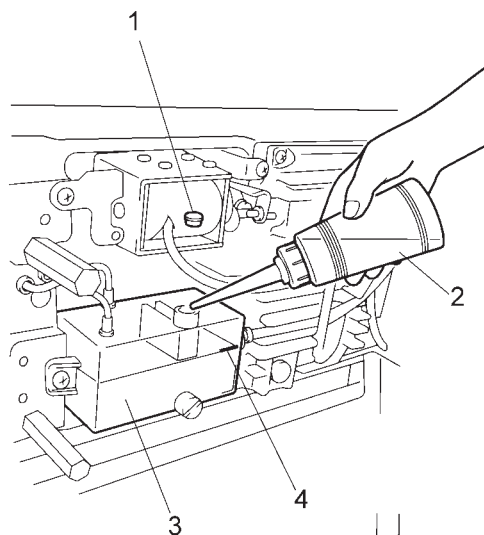
Furthermore, do not drink the oil or eat the grease under any circumstances, as they can cause vomiting and diarrhea.

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 our company.

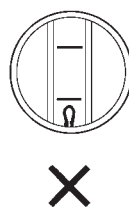
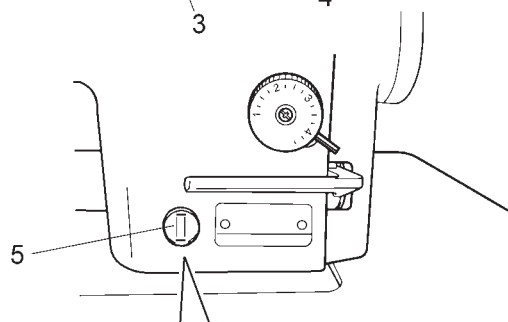
1. Tilt back the machine head
2. Remove the rubber cap (1), and pour 150 ml of lubricating oil from the accessory oil bottle (2) into the oil tank (3)
(Use the reference line (4) as a guide when pouring)
3. Replace the rubber cap (1)



4. Return the machine head to its original position.

5. Check that the oil gauge (6) comes to the upper reference line in the oil gauge window (5)

- * Be sure to add more oil if the oil gauge (6) is below the lower reference line.



Upper reference line

6

Lower reference line

2-4 Test operation (Operating the treadle)



CAUTION

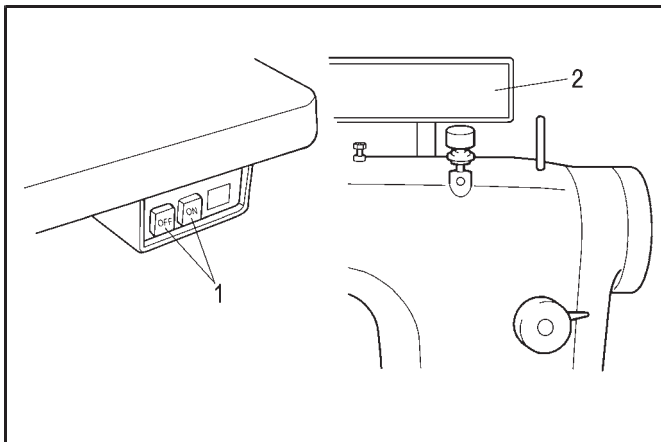


Do not touch any of the moving parts or press any objects against the machine while sewing , as this may result in personal injury or damage to the machine.

<Turning on the power>

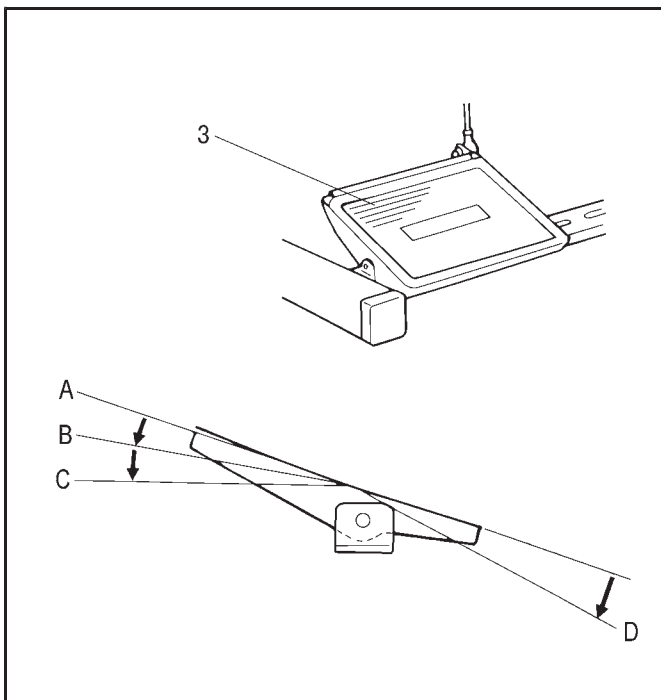
Press the ON power switch(1)

The power indicator(2)will illuminate.



<Test operation >

1. Check that the machine sews at low speed when the treadle (3) is gently pressed to position (B).
2. Then check that it sews at high speed when the treadle (3) is gently pressed to position (C).
3. After pressing the treadle (3) forward, check that the needle is lowered to the needle plat when the treadle (3) is returned to the neutral position (A).
(when needle down stopping has been set.)
4. If the treadle (3) is pressed to position (D) , thread trimming is carried out and the needle then rises above the needle plate and stops.



3. PREPARATION BEFORE SEWING

3-1.Installing the needle



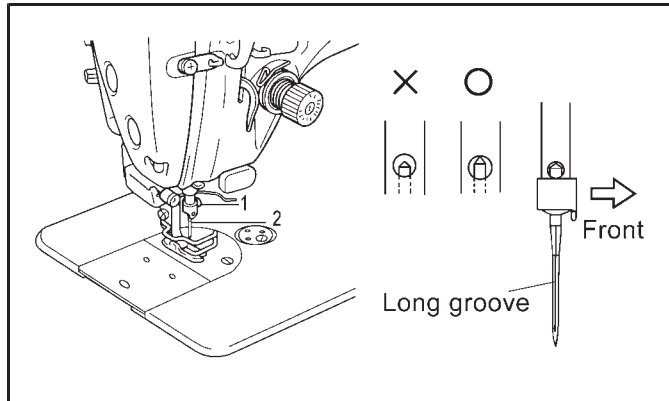
CAUTION



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 at the left, and then securely tighten the screw(1).



3 – 2. Removing the bobbin case



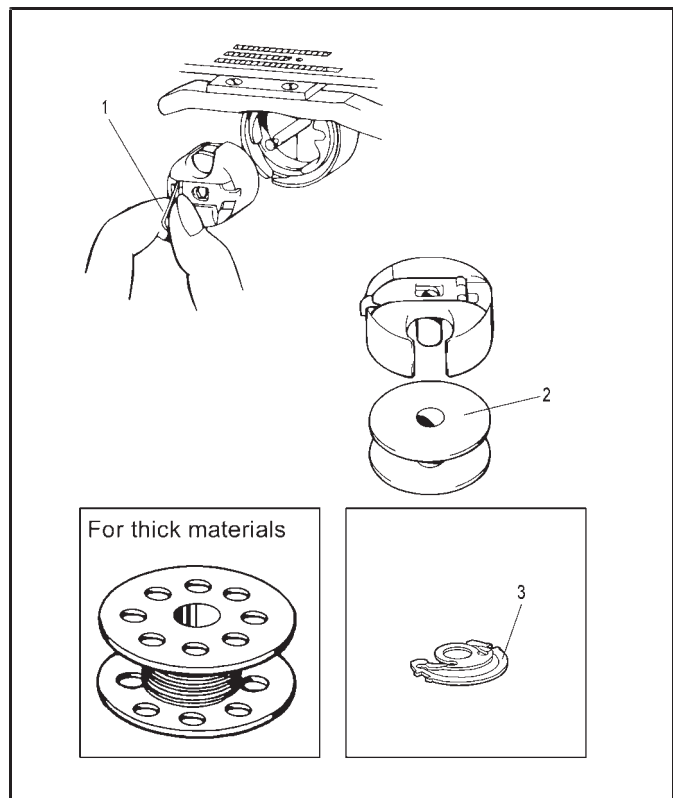
CAUTION



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 .
- * 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.



3-3. Winding the lower thread



CAUTION

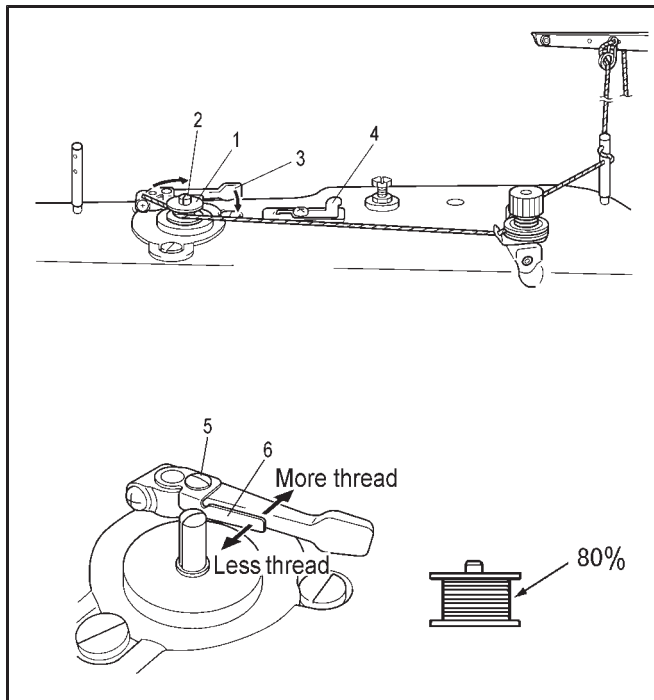


Do not touch any of the moving parts or press any objects against the machine while the lower thread, as this may result in personal injury or damage to the machine.

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 mover 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.



3-4 Installing the bobbin case



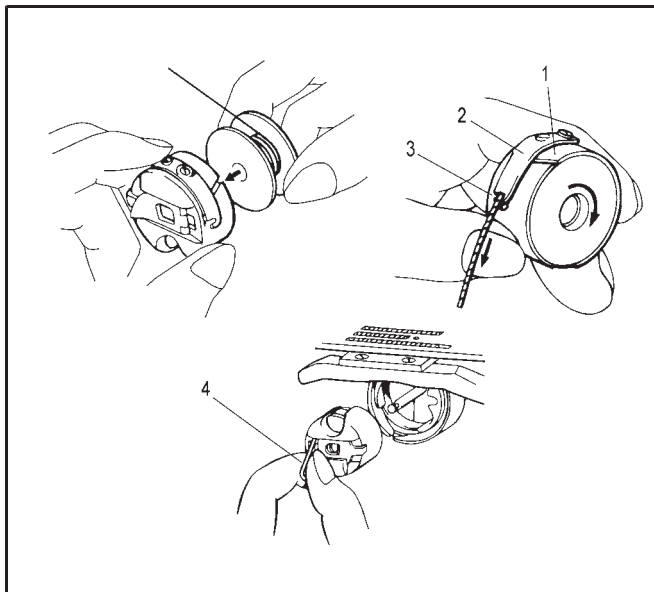
CAUTION



Turn off 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 machine pulley to raise the needle until it is above the needle plate.
2. While holding the bobbin so that the thread winds to the right, insert the bobbin into the bobbin case.
3. Pass the thread through the slot (1) and under the tension spring (2), and then pull it out from the thread guide(3).
4. Check that bobbin turns clockwise when the thread is pulled.
5. Hold the latch (4) on the bobbin case and insert the bobbin case into the rotary hook..



3-5 Threading the upper thread



CAUTION

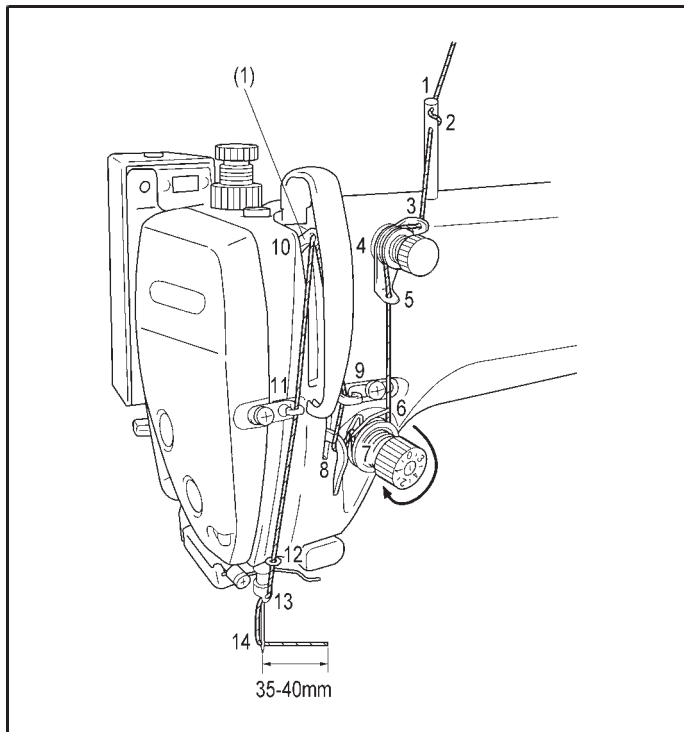


Turn off the power switch before threading the upper thread.

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

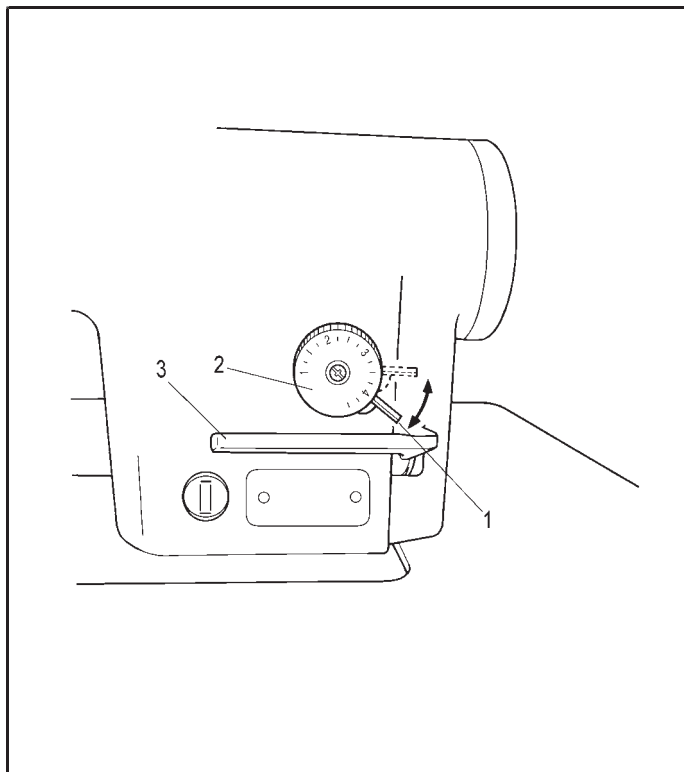
Turn the machine pulley and raise the thread take-up (1) before threading the upper thread.

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




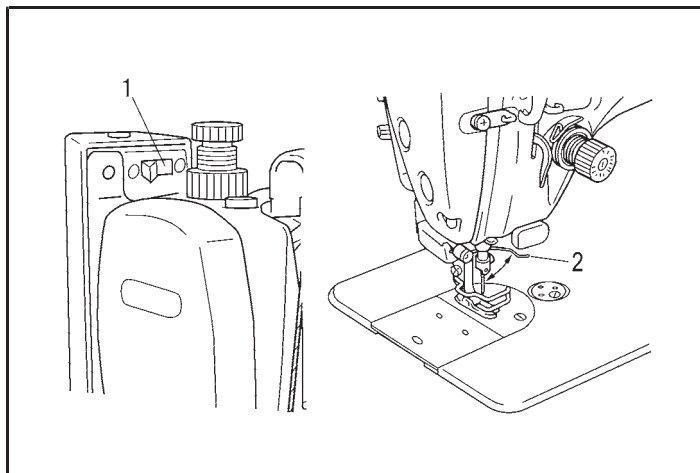
3-6 Adjusting the stitch length

1. Push the dial lock lever (1) up until it clicks to release the lock.
 2. Turn the stitch length dial (2) clockwise or counter clockwise so that the desired stitch length is at the upper most position on 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.)
 - When turning the stitch length dial (2) from a larger setting to a smaller setting, it will be easier to turn the dial if the reverse lever (3) is pushed to the halfway-down position.
3. Push the dial lock lever (1) down firmly to lock it.
- Check that the stitch length dial (2) does not rotate.



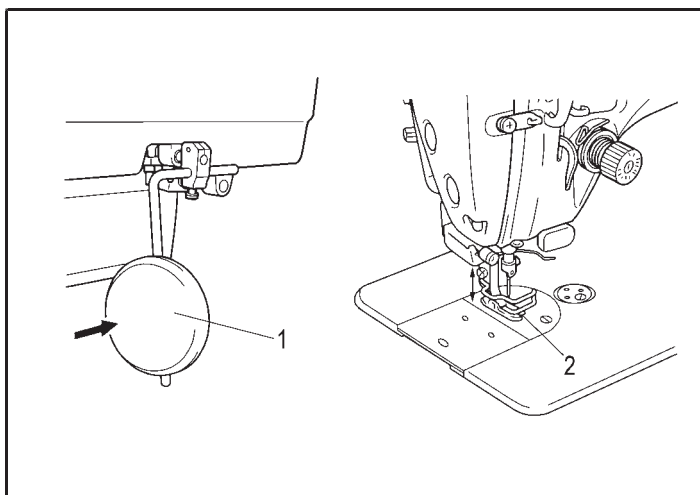
3-7 Using the thread wiper

Press the thread wiper switch (1) to the  side. If this is done, the thread wiper (2) will operate after the thread is trimmed.



3-8 Using the knee lifter

The presser foot (2) can be raised by pressing the knee lifter plate(1).



4. 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 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.



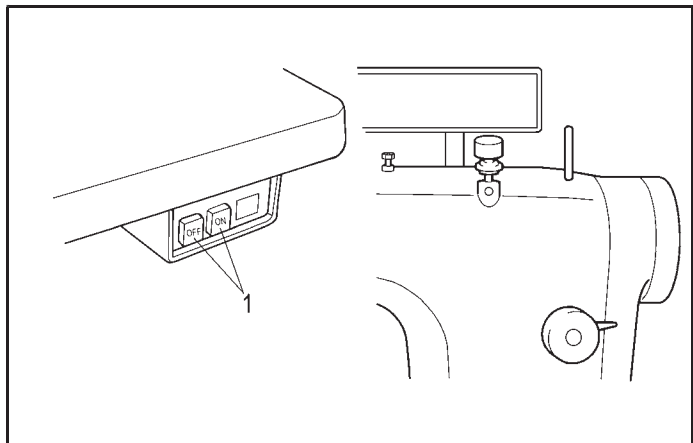
Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.



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.

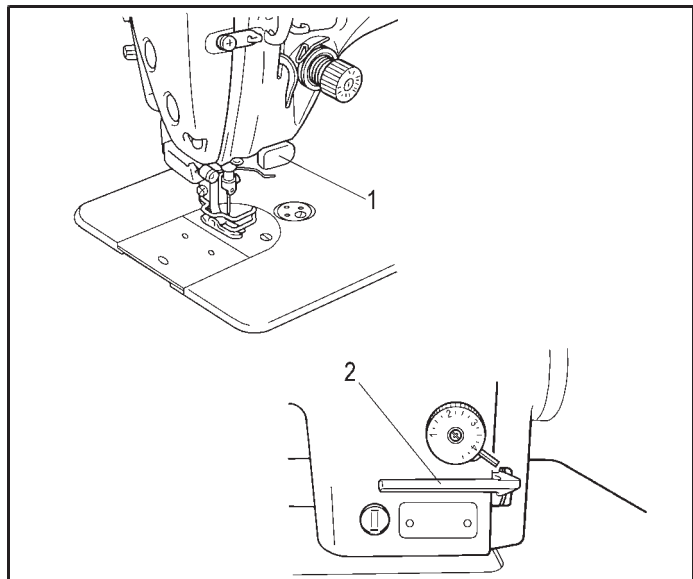
4-1. Sewing

1. press the ON power switch (1).
The power indicator (2) will illuminate.
2. Use the operating panel to carry out the programming which is necessary for sewing.
(Refer to the chapter on using the operating panel.)
3. Depress the treadle to start sewing.



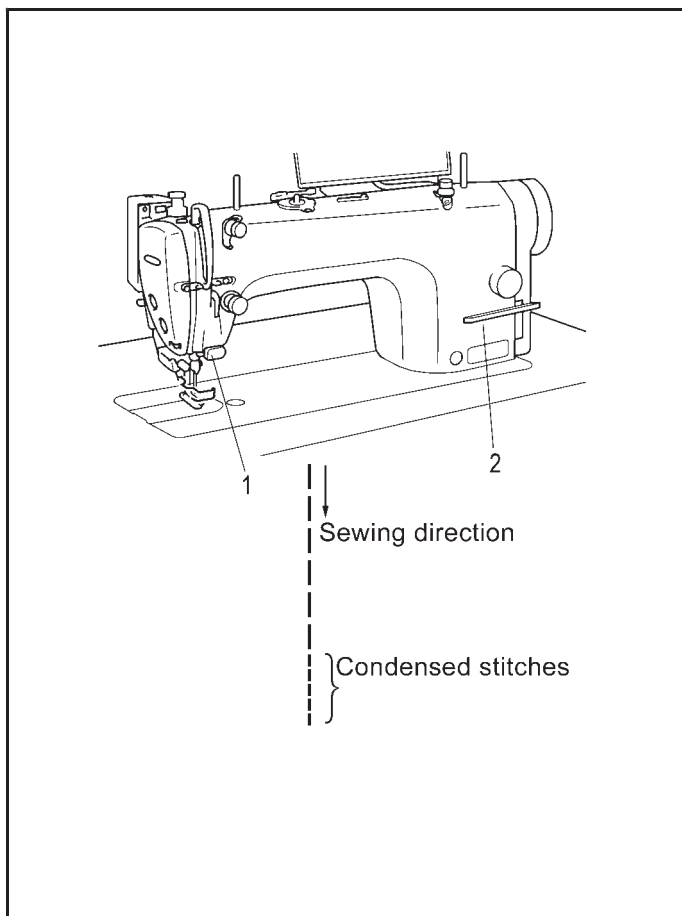
4-2. Backtacking

When the actuator (1) or the reverse lever (2) is pressed during sewing, the feed direction will be reversed. When it is released, the feed direction will return to normal.



4-3.Sewing condensed stitches

- When you press the reverse switch (1), the sewing stitches will be on the reverse direction; while pressing the reverse lever (2), you can get the small stitches (forward direction), namely, condensed stitches.



< Setting for Condensed Stitch >

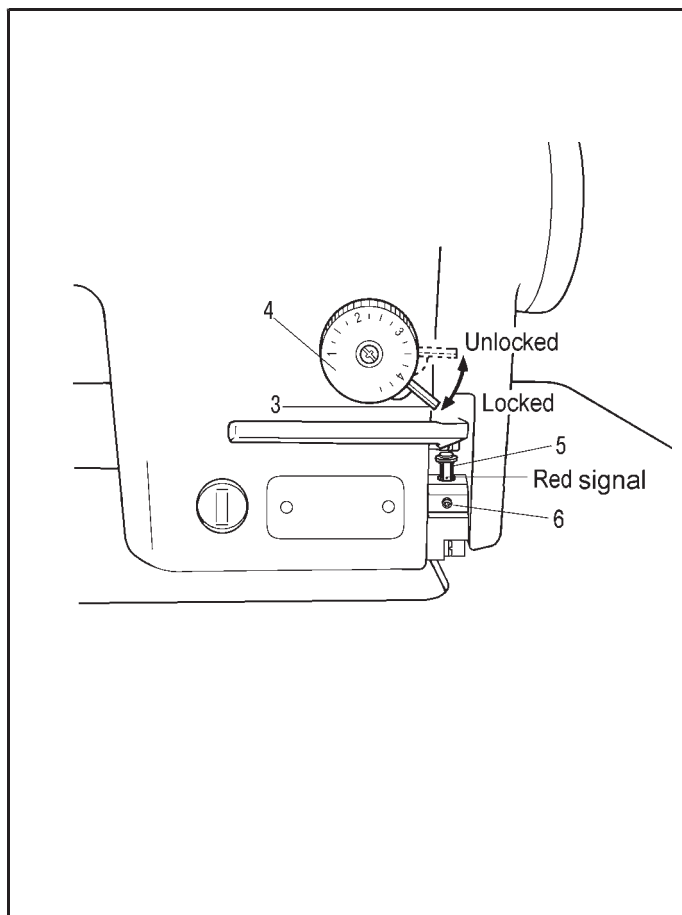
1. Loosen the screw (6).
2. Adjust the rod for condensed stitch (5) to the position with the red signal, and lock the screw (6), and then the stitch length is 2(See the drawing).
- 3 Should you need the more condensed stitches, please readjust the rod for condensed stitch to a lower position.
4. Should you need less condensed stitches, please readjust the rod for condensed stitch to a higher position.

< Sewing >

1. Adjust the stitch length dial (4) to the stitch length for normal sewing.
2. Push down the dial lock lever (3) to engage the lock .
3. Start sewing .
4. At the position where you would like to stark sewing condensed stitches,reverse stitches are sewn while the reverse switch (1) is being pressed .

Condensed stitches are sewn while the reverse lever (2) is being pressed .

* To stop sewing condensed stitches,loosen screw (6) , adjust the rod for condensed stitch (5) to lowest .



5. THREAD TENSION

5-1. Adjusting the thread tension



CAUTION



Turn off the power switch before removing or inserting the bobbin case.

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

Good even stitches.



← Upper thread

← Lower thread



Upper thread tension too weak
or lower thread tension too strong.

→ Increase the upper thread tension.
Decrease the lower thread tension.

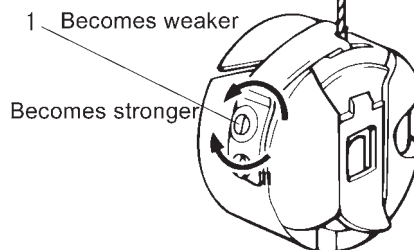


Upper thread tension too strong
or lower thread tension too weak.

→ Decrease the upper thread tension.
Increase the lower thread tension.

< Lower thread tension >

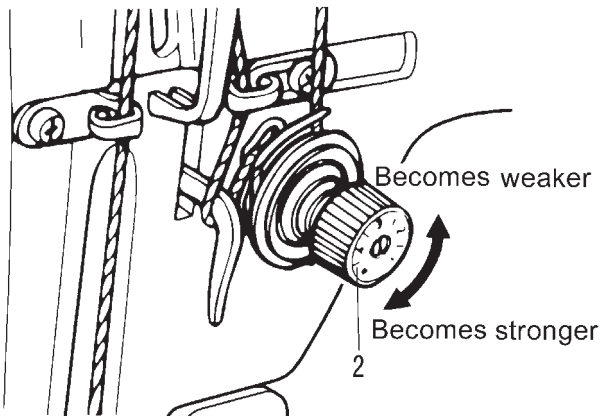
Adjust by turning the adjustment screw (1) until the bobbin case drops gently by its own weight while the thread end coming out of the bobbin case is held.



<Upper thread tension>

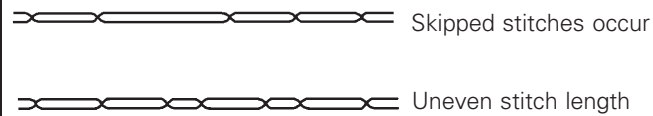
After the lower thread tension has adjusted, adjust the upper thread tension so that a good, even stitch is obtained.

1. Lower the presser foot,
2. Adjust by turning the tension nut(2).

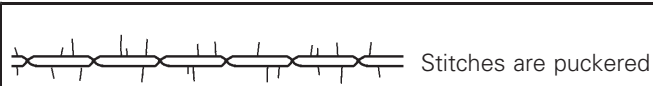


5-2. Adjusting the presser foot pressure

Correct stitches



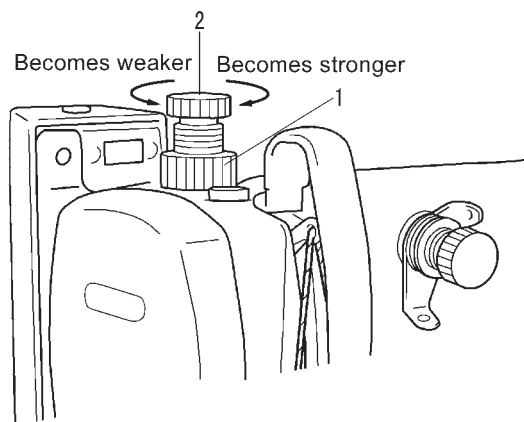
→ Increase the pressure.



→ Decrease the pressure.

The presser foot pressure should be as weak as possible, but strong enough so that the material does not slip.

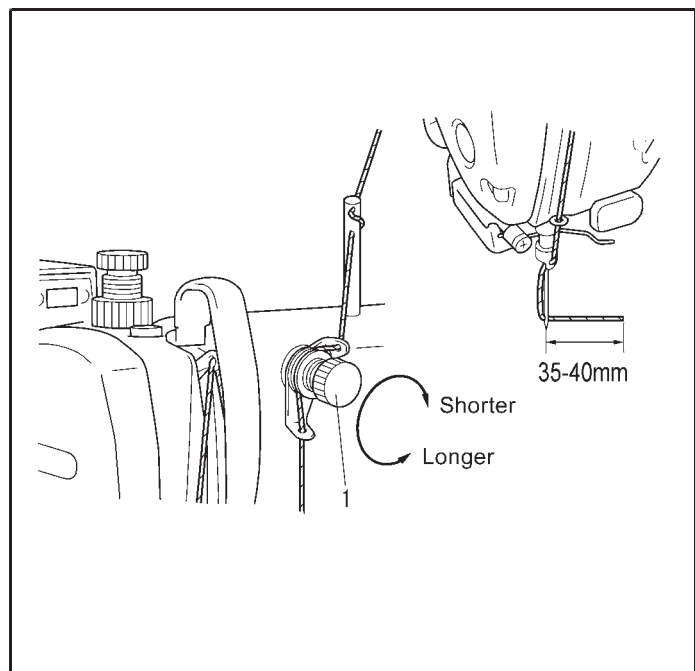
1. Loosen the adjusting nut (1).
2. Turn the presser adjusting screw (2) to adjust the presser foot pressure.
3. Tighten the adjusting nut (1).



5-3. Adjusting the trailing length after thread trimming

- At the time of thread trimming, the thread tension is loosened and tension is applied by the pretension (1) only.
- The standard trailing length for the upper thread is 35–40 mm.
- If the tension of the pretension (1) is increased, the lengths of the threads trailing from the needle tips will be reduced; if the tension is reduced, the lengths will be increased.

Adjust by turning the pretension (1).



6.CLEANING



CAUTION



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.



Be sure to wear protective goggles and gloves when handling the lubrication 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.

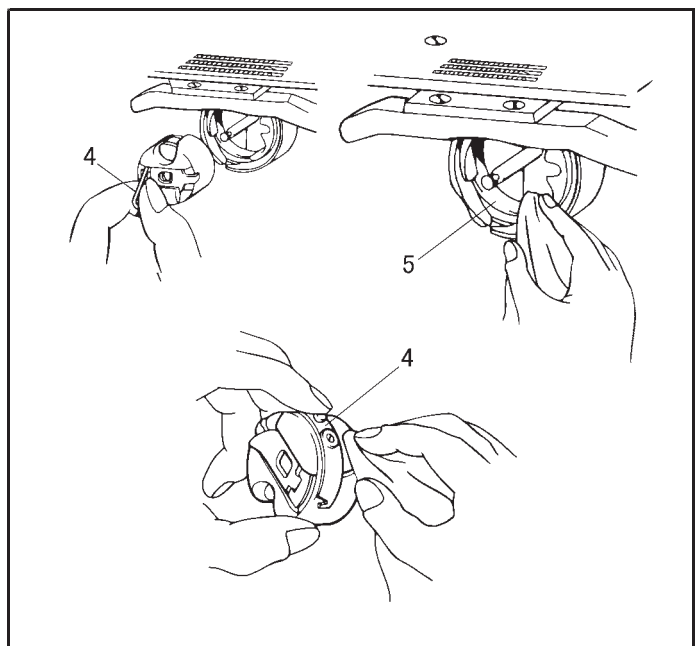
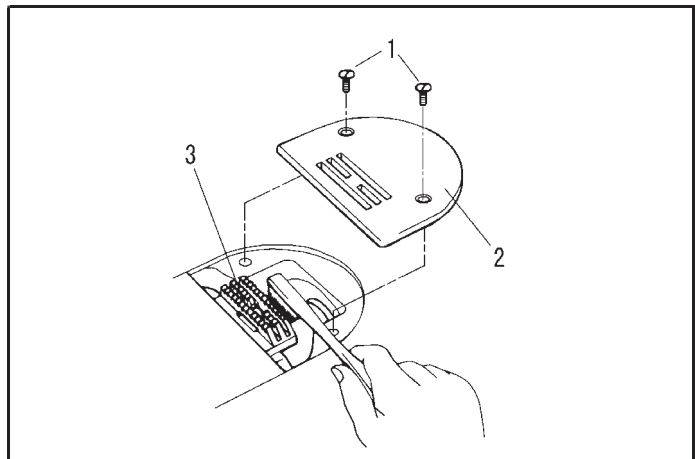
6-1.Daily cleaning procedures

the following cleaning operations should be carried out each day in order to maintain the performance of this machine and to ensure a long service life.

Furthermore, if the sewing machine has not been used for a long period of time, carry out the following cleaning procedures before using it again.

1. Cleaning

1. Raise the presser foot.
2. Remove the two screws (1), and then remove the needle plate(2).
3. Use a soft wire brush to clean any dust from the feed dog (3).
4. Install the needle plate(2) with the two screws (1).
5. Tilt back the machine head.
6. Remove the bobbin case (4).
7. Wipe off any dust from the rotary hook (5) with a soft cloth, and check that there is no damage to the rotary hook (5).
8. Remove the bobbin from the bobbin case (4) and clean the bobbin case (4) with a cloth.
9. Insert the bobbin into the bobbin case (4) and then place the bobbin case (4) back into the machine.



2. Lubrication

A. Gearbox oil quantity

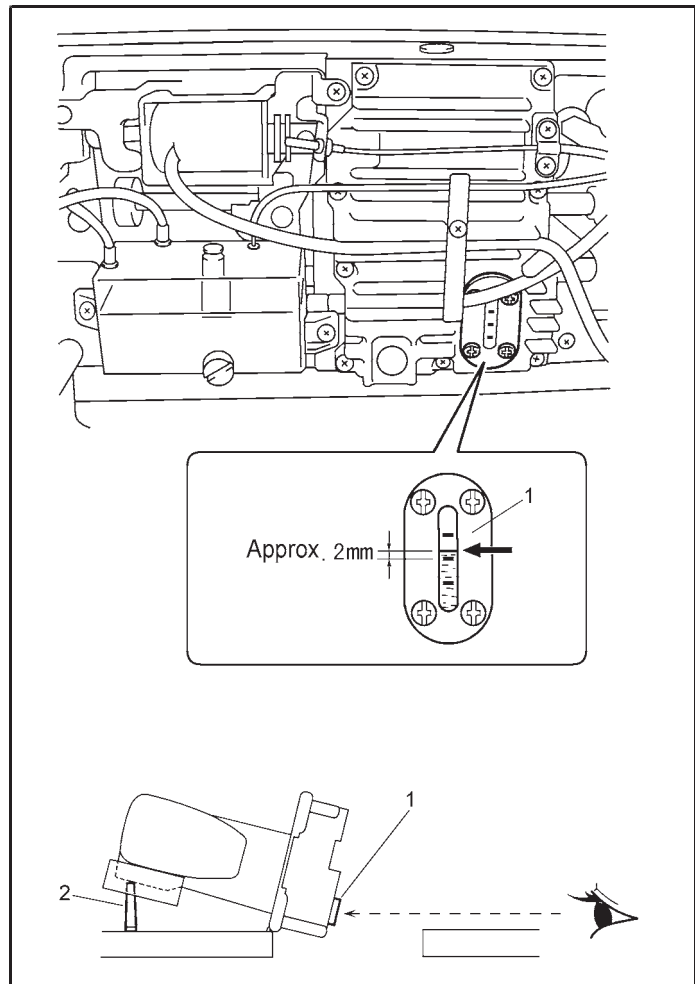
NOTE:

•Check the quantity of oil in the gearbox immediately after tilting back the machine head.

When the machine head is left for long periods in the tilted-back position, the amount of oil in the felt inside the gearbox drops and the oil level seen from the oil windows (1) rises, so that it becomes impossible to measure the actual oil level accurately.

•The position of the oil level in the oil window (1) will vary depending on the angle of the machine head.

Tilt back the machine head while the head rest (2) is installed in the correct position as shown in the table processing diagram.



<Checking the oil quantity>

The oil level should normally be approximately 2 mm above the center reference line in the oil window (1). (70 ml of lubricating oil is added to the gearbox at the time of shipment from the factory.)

1. Look at the oil window (1) from directly in front.
2. If the oil level is below the normal level, add more lubricating oil as described in the following procedure.

<Lubrication>

Use only the lubricating oil specified by our company.

1. Remove the rubber cap (3).
2. Add lubricating oil until the oil level is approximately 2 mm above the center reference line in the oil window (1).
Do not pour all of the lubricating oil in at once at this time.
Pour the lubricating oil 10 ml at a time while checking the oil window (1).

NOTE:

Do not pour too much lubricating oil into the specified location.

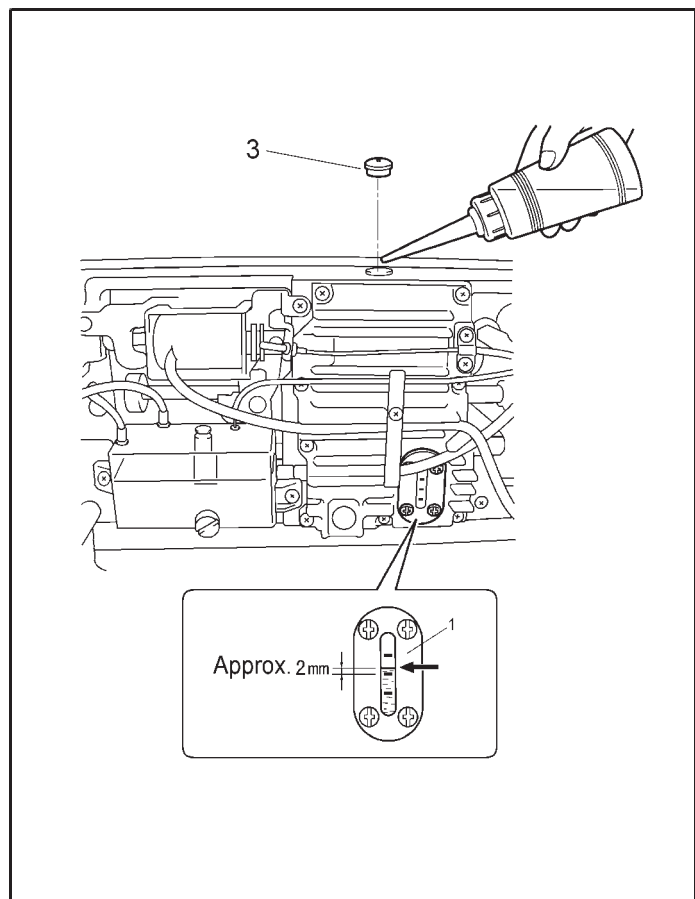
If too much oil is added oil leaks may result.

3. Insert the rubber cap (3) securely.
4. Return the machine head to its original position.

NOTE:

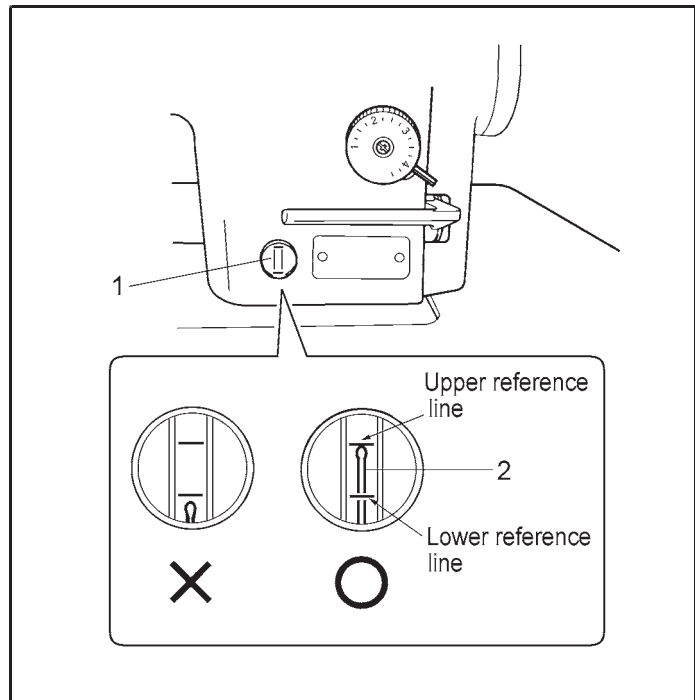
The rubber cap (3) has a hole in it for adjusting the air pressure.

When replacing the rubber cap (3) use only the replacement part specified by our company.



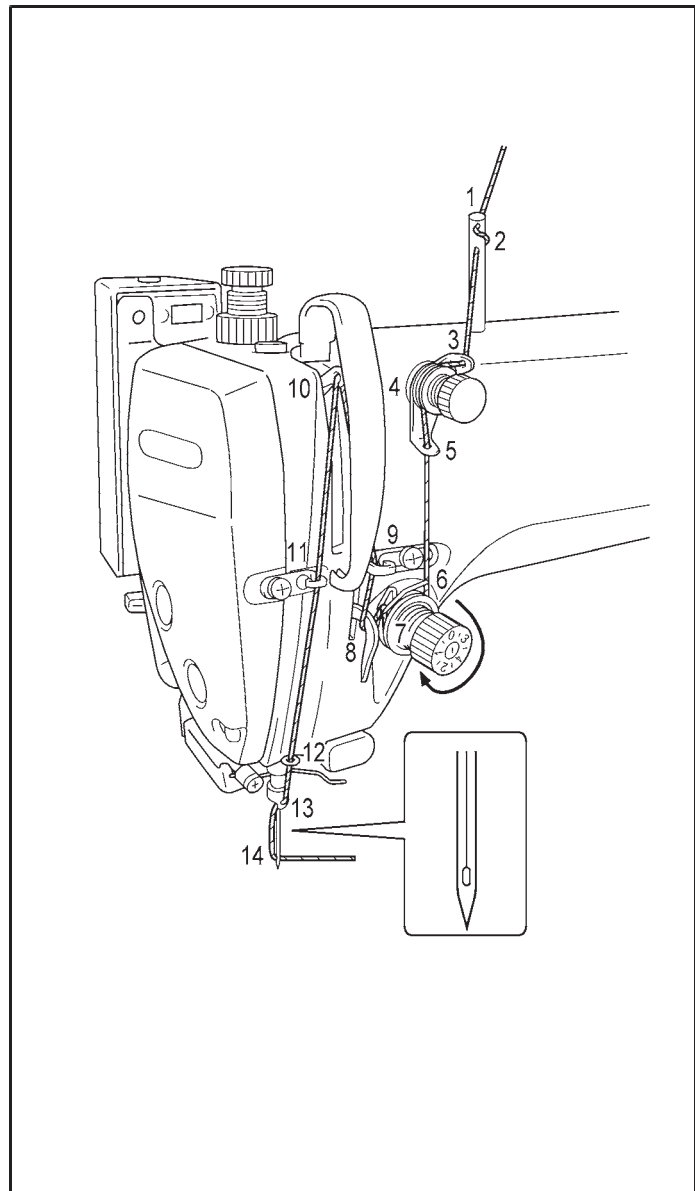
B. Oil tank oil quantity.

Check the oil gauge window (1), and add more oil if the oil gauge (2) is below the lower reference line.



3. Checking

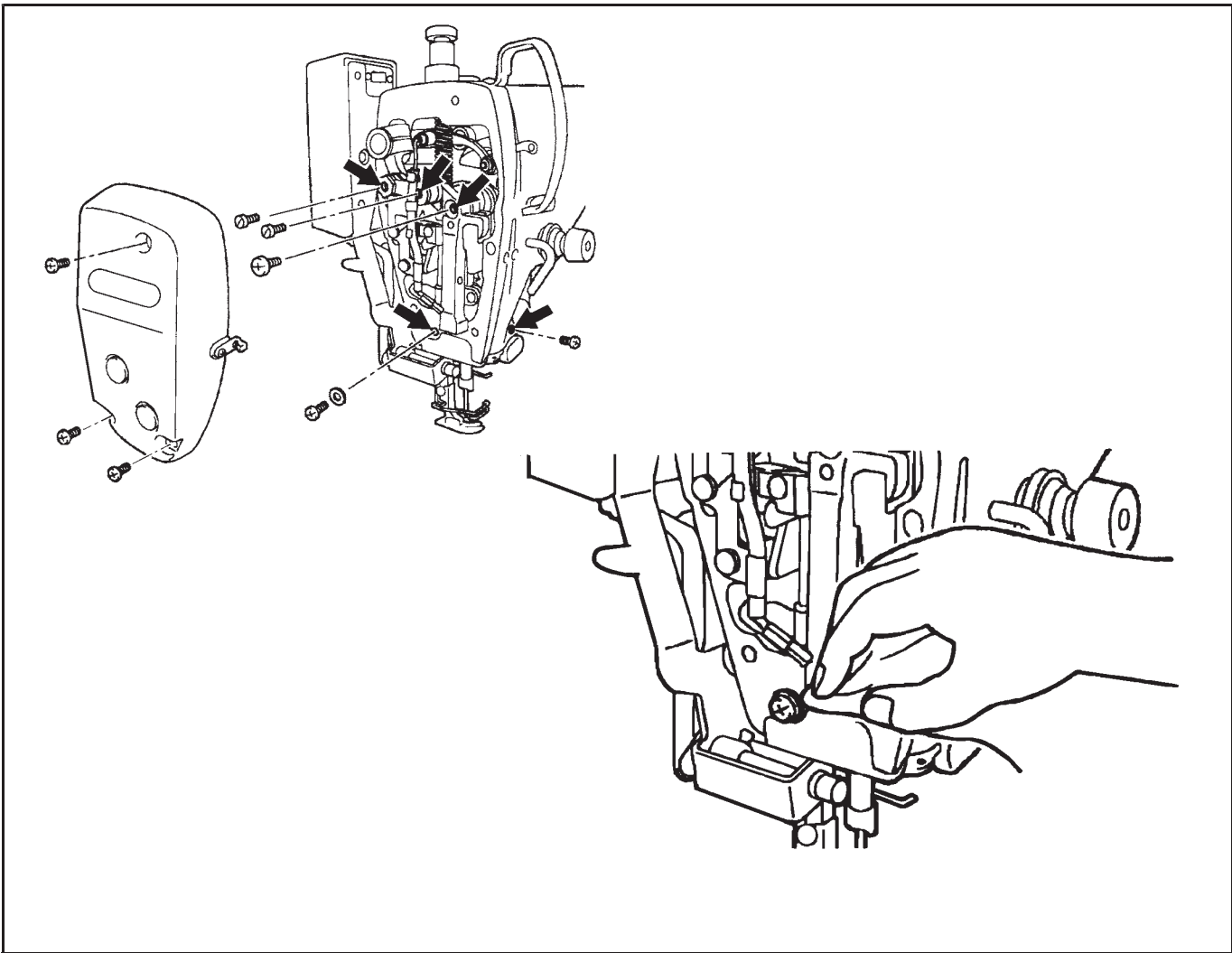
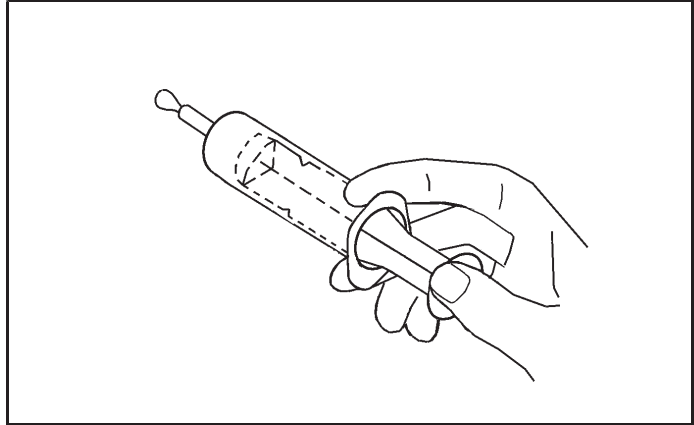
1. Replace the needle if it is bent or if the tip is broken.
2. Check that the upper threads have been threaded correctly.



6-2. Applying grease

<Applying grease>

Use our company specified grease.



1. Turn the power switch to "OFF"
2. Remove the screws and the set screws.
3. Apply grease to each of the holes until the grease overflows slightly.
4. Tighten the screws and the set screws in order to push the grease in.
5. Turn the machine pulley by hand to move the needle bar up and down several times in order to disperse the grease.
6. Use a cloth to wipe away any excess grease from around the screws and set screws and from underneath needle bar bush D.
7. Carry out the reset procedure given below.

7. ADJUSTING THE ROTARY HOOK LUBRICATION AMOUNT



CAUTION



Be careful not to touch your fingers or the lubrication amount check sheet against moving parts such as the rotary hook or the feed mechanism when checking the amount of oil supplied to the rotary hook, otherwise injury may result.

Use the following procedure to check the amount of oil being supplied to the rotary hook when replacing the rotary hook or when changing the sewing speed.

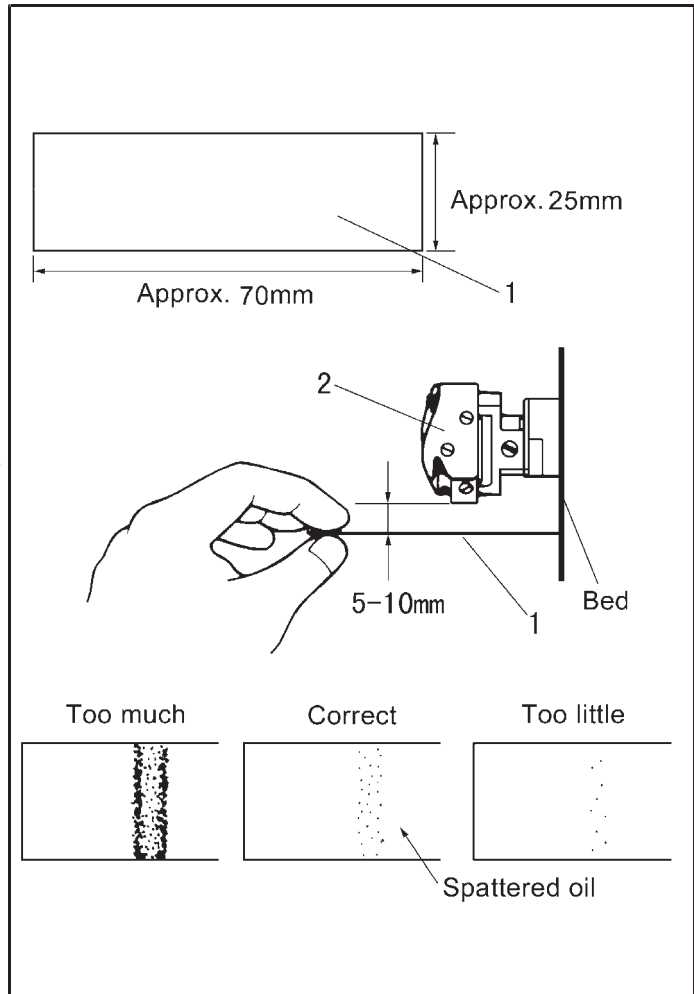
<Checking the lubrication amount>

1. Remove the thread from all points from the thread take-up to the needle.
2. Use the lifting lever to lift the presser foot.
3. Run the machine at the normal sewing speed for approximately 1 minute without sewing any material (following the same start/stop pattern as when actually sewing).
4. Place the lubrication amount check sheet (1) underneath the rotary hook (2) and hold it there. Then run the sewing machine at the normal sewing speed for 8 seconds. (Any type of paper can be used as the lubrication amount check sheet (1).)
5. Check the amount of oil which has spattered onto the sheet.

If adjustment is necessary, carry out the following operations in "Adjusting the lubrication amount".

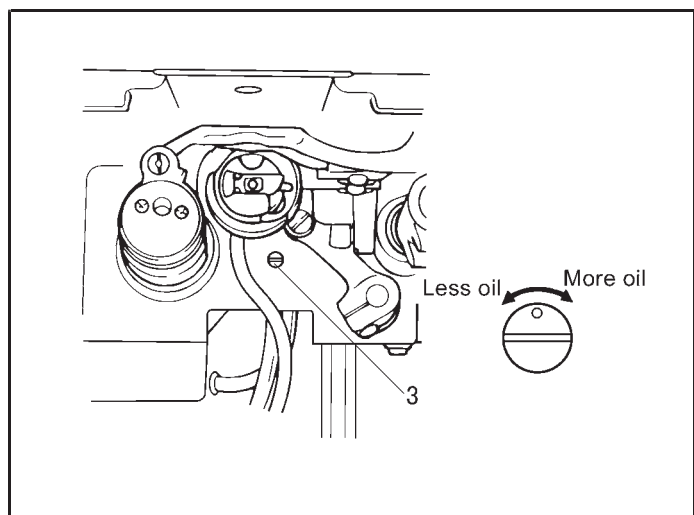
Note:

If the lubrication amount does not match the correct amount shown in the illustration at left (if the amount of spattered oil is too much or none at all), turn the adjusting screw (3) clockwise to fully tighten it, turn it back counter clockwise by 2 1/2 turns, and then carry out the following adjustment.




<Adjusting the lubrication amount>


1. Tilt back the machine head.
2. Turn the adjusting screw (3) to adjust the lubrication amount.
 - If the rotary hook adjusting screw (3) is turned clockwise, the lubrication amount becomes greater.
 - If the rotary hook adjusting screw (3) is turned counter clockwise, the lubrication amount becomes smaller.
3. Check the lubrication amount again according to the procedure given in "Checking the lubrication amount" above.
 - * Turn the adjusting screw (3) and check the lubrication amount repeatedly until the lubrication amount is correct.
4. Check the lubrication amount again after the sewing machine has been used for approximately two hours.





8. STANDARD ADJUSTMENTS

CAUTION

 Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.

 Ask your dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.

 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.

 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.



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 and knife



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

8-1. Adjusting the safety switch position

The safety switch (1) is normally installed as shown in figure [A].

However, if the processing method used for the table leaves too much space between the machine head and the table hole, it may adversely affect the operation of the safety switch (1)

<Adjustment method>

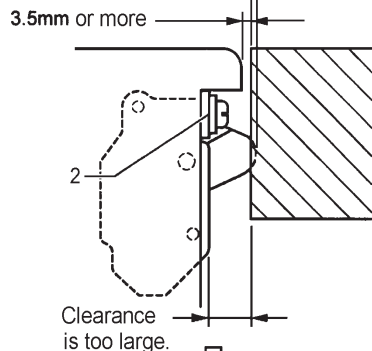
The standard amount of clearance between the machine head and the table hole is 1.5mm.

If the clearance is 3.5mm or more, install the safety switch (1) so that the washer (2) is on the machine head side as shown in Figure[B].

If the position cannot be satisfactorily adjusted in this way, add more washers of the same thickness.

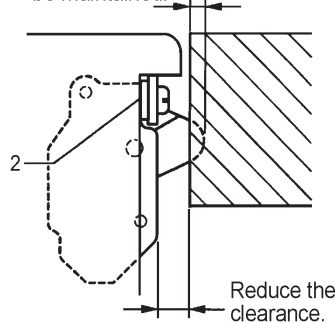
<Safety switch operation>

If the spring stroke is too small,
the safety switch will not operate.

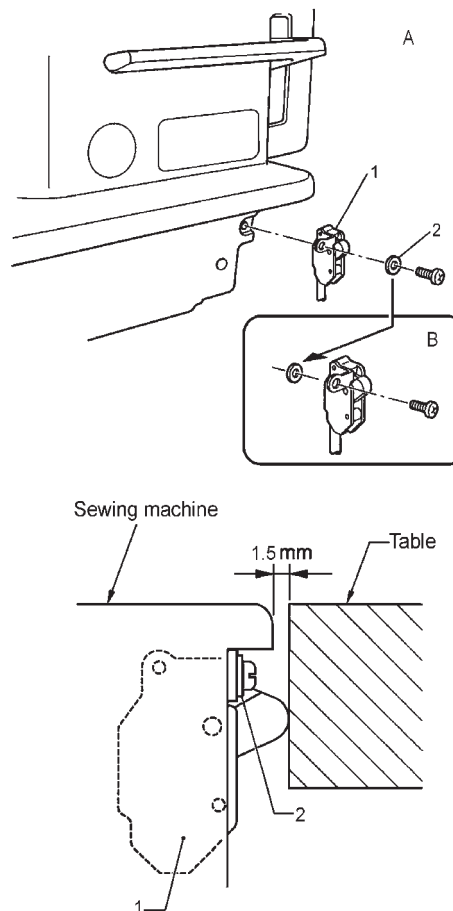


Clearance
is too large.

By changing the position of the safety
switch, the required spring stroke can
be maintained.



Reduce the
clearance.

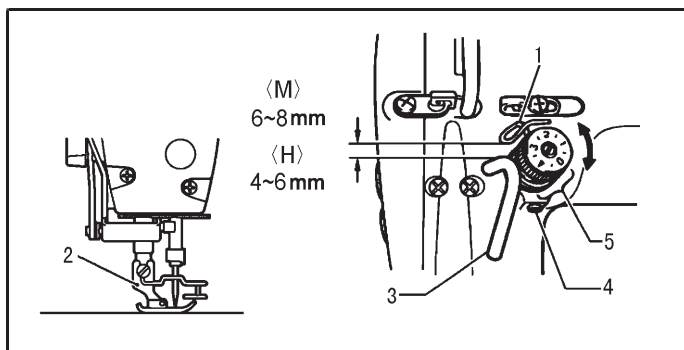


8-2. Adjusting the thread take-up spring

<Thread take-up spring position>

The standard position of the thread take-up spring (1) is 6~8mm[4~6mm for H specifications]above the surface of the thread guide(3)when the presser foot (2) is lowered.

1. Lower the presser foot (2).
2. Loosen the set screw (4).
3. Turn the thread tension bracket (5) to adjust the spring position.
4. Securely tighten the set screw (4).



<Thread take-up spring tension>

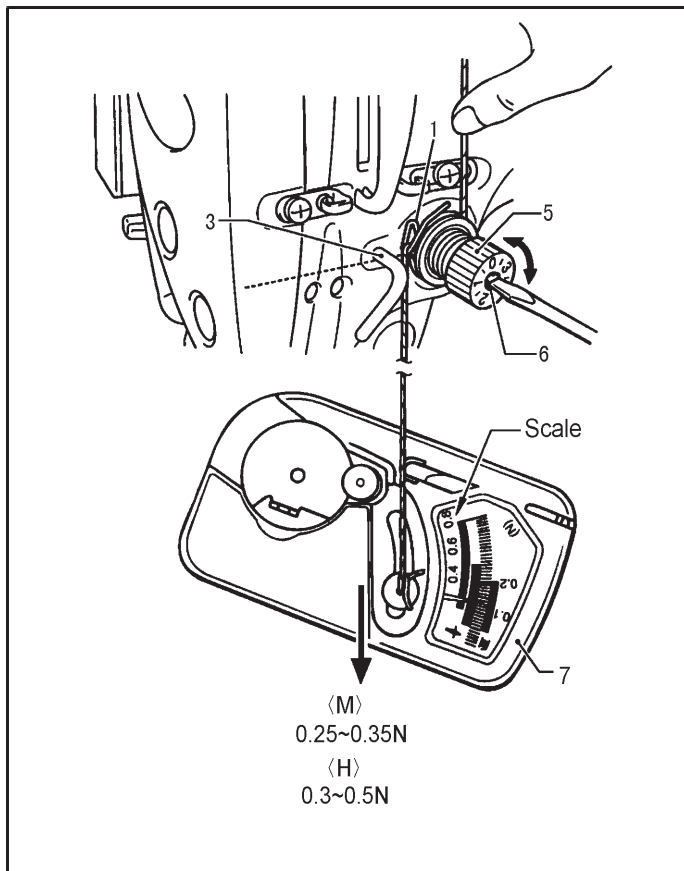
The standard tension of the thread take-up spring (1) varies in accordance with the machine specifications as shown in the table.

M	0.25~0.35N
H	0.30~0.5N

1. Push the needle thread with your finger until it is slightly higher than the thread tension bracket (5) and so that the upper thread is not pulled out.
2. Pull the upper thread down until the thread take-up spring (1) is at the same height as the base of the thread guide (3), and then measure the tension of the thread take-up spring (1).
3. Insert a screwdriver into the slot of the tension stud (6), and turn the screwdriver to adjust the tension of the thread take-up spring (1).

NOTE:

If using the tension gauge (7) (sold separately) to measure the tension, take the reading from the scale on the side of the red line.

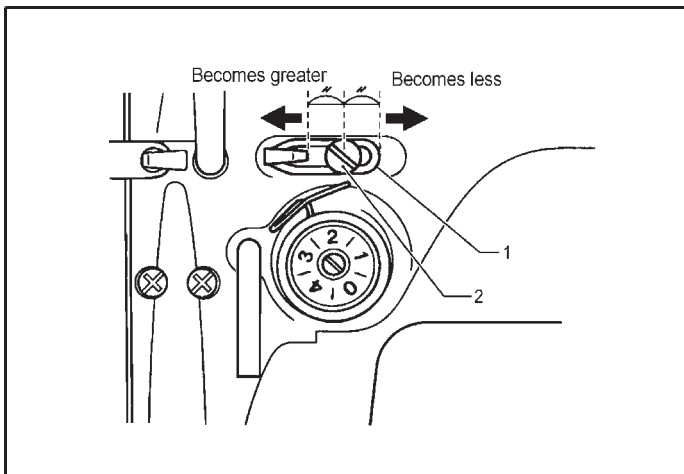


8-3. Adjusting arm thread guide R

The standard position of arm thread guide R (1) is the position where the screw (2) is in the center of the adjustable range for arm thread guide R(1).

To adjust the position, loosen the screw (2) and then move arm thread guide R(1).

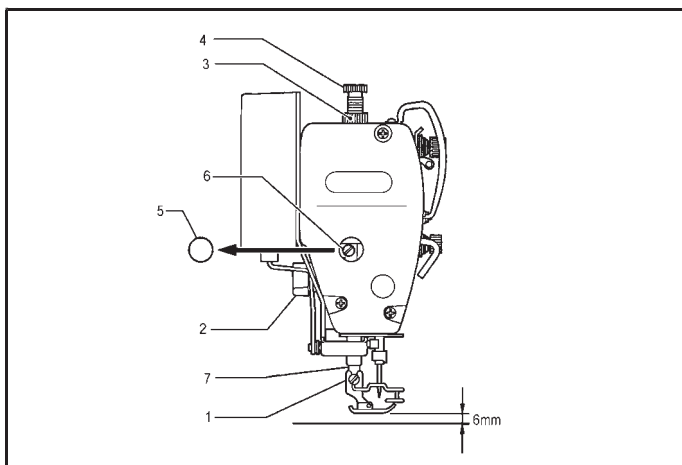
- When sewing thick material, move arm thread guide R(1) to the left, (The thread take-up amount will become greater.)
- When sewing thin material, move arm thread guide R(1) to the right. (The thread take-up amount will become less.)



8-4. Adjusting the presser foot height

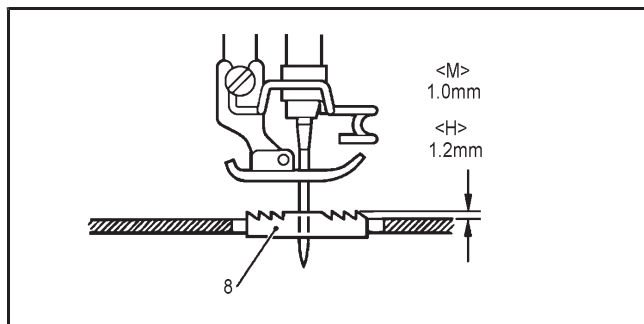
The standard height of the presser foot (1) is 6mm when the presser foot (1) is raised by means of the lifting lever (2).

1. Loosen the nut (3) of the adjustment screw (4), and then turn the adjustment screw (4) so that there is no pressure applied to the presser foot.
2. Raise the lifting lever (2). The presser foot (1) will also rise.
3. Remove the oil cap (5).
4. Loosen the bolt (6) and then move the presser bar (7) up or down until the presser foot (1) is at the standard height of 6 mm.
5. Tighten the bolt (6).
6. Replace the oil cap (5).
7. Adjust the presser foot pressure using the adjustment screw (4), and then tighten the nut (3).



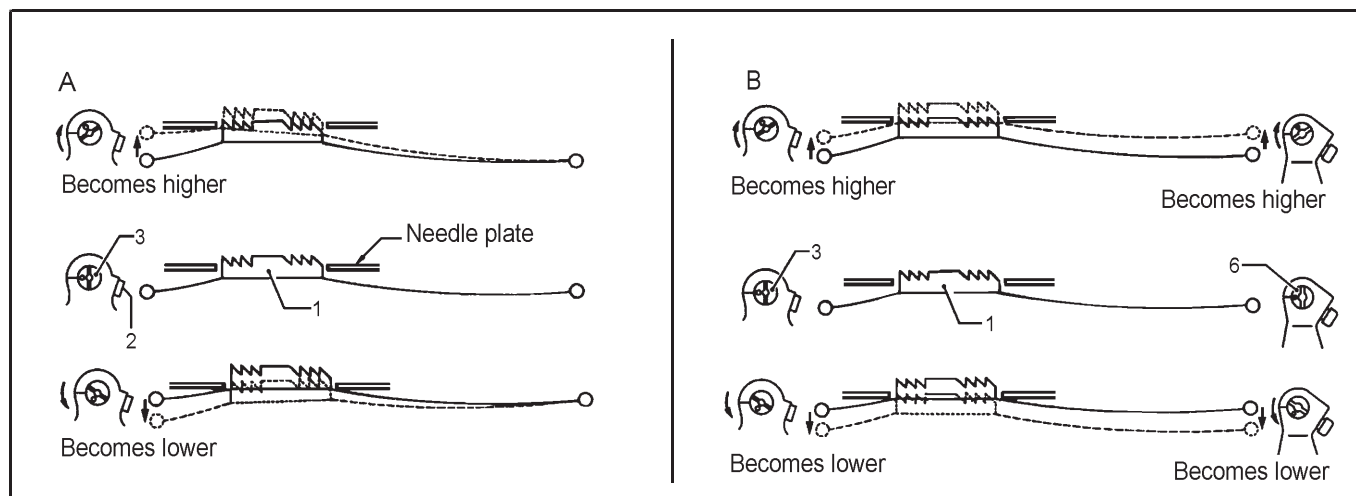
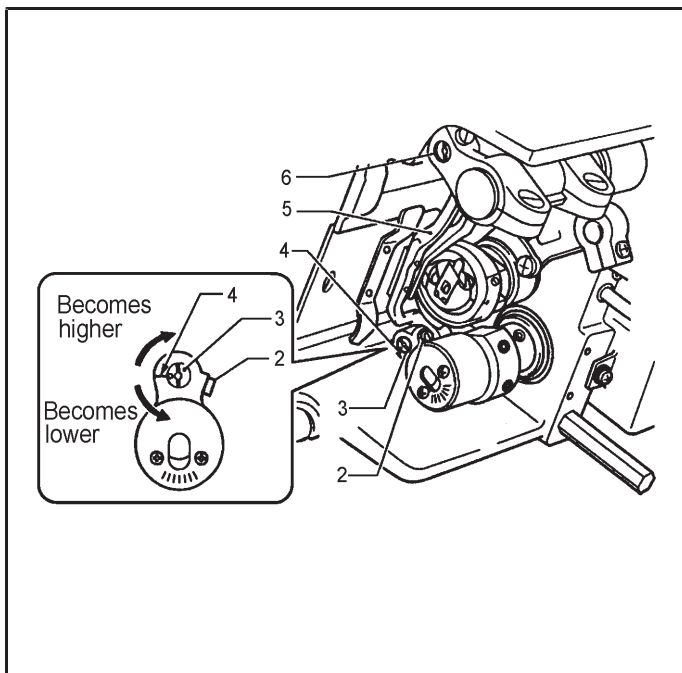
8-5 . Adjusting of the feed dog height

The standard height of the feed dog (1) when it is at its maximum height above the top of the needle plate is 1.0 mm for M specifications, and 1.2mm for H specifications.



1. Turn the pulley until the feed dog (1) rises to the highest position.
2. Tilt back the machine head.
3. Loosen the screw (2).
4. Turn the feed lifting rock bracket stud (3) within a range of 90° from the reference line (4) to adjust the vertical height of the feed bar (5) (Fig. [A]).
5. Tighten the screw (2).

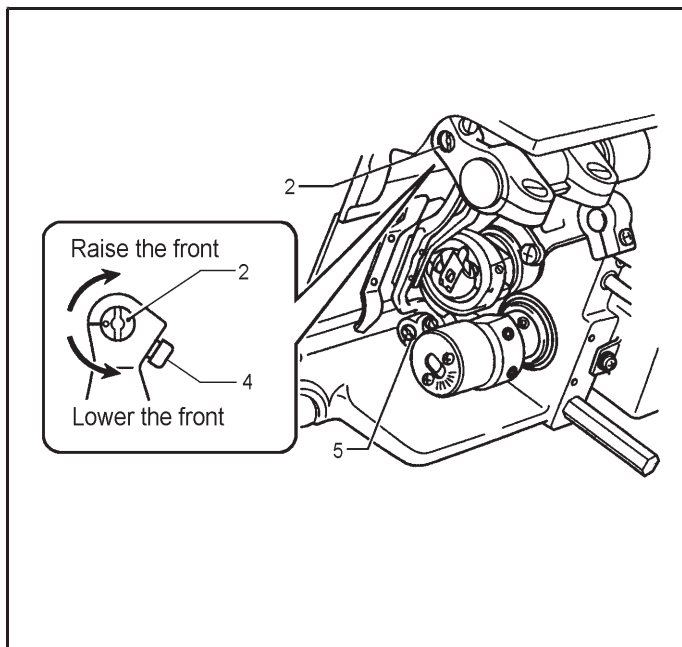
If you are worried about the angle of the feed dog (1), turn the shaft (6) while carrying out the above adjustment, (Fig. [B]).



8-6 .Adjusting the feed dog angle

The standard angle is for the feed dog (1) to be parallel to the needle plate when the machine pulley is turned forward to raise the feed dog (1) from its lowest position until it is flush with the top of the needle plate.

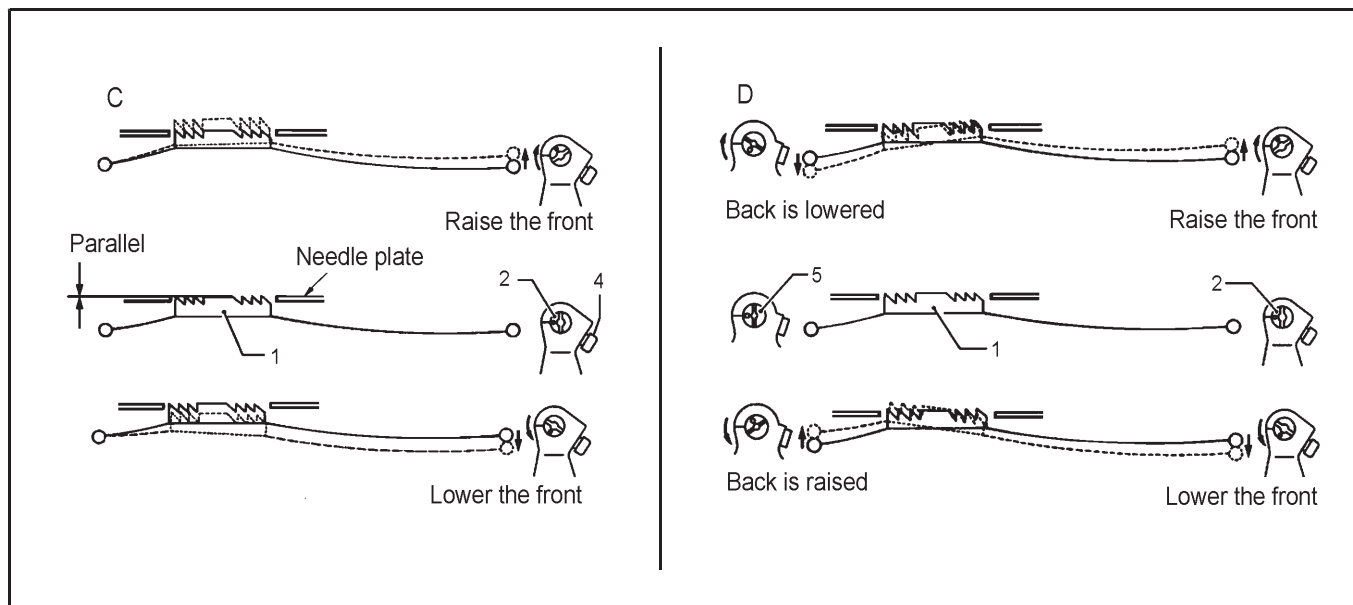
1. Turn the machine pulley forward to raise the feed dog (1) from its lowest position until it is flush with the top of the needle plate ,and stop turning the pulley at that point .
2. Tilt back the machine head .
3. Loosen the two set screws(4).
4. Turn the shaft (2) in the direction of the arrow within a range of 90°with respect to the standard position . (Fig.[C])
- In order to prevent puckering ,lower the front of the feed dog (1)
- In order to prevent the material from slipping,raise the front of the feed dog (1)
5. Securely tighten the set screws (4).



If you would like to tilt the feed dog (1) further. turn the feed lifting rock bracket stud (5) while carrying out the above adjustment (Fig [D])

(Refer to "8-5 Adjusting the feed dog height" on the previous page for details of this operation.)

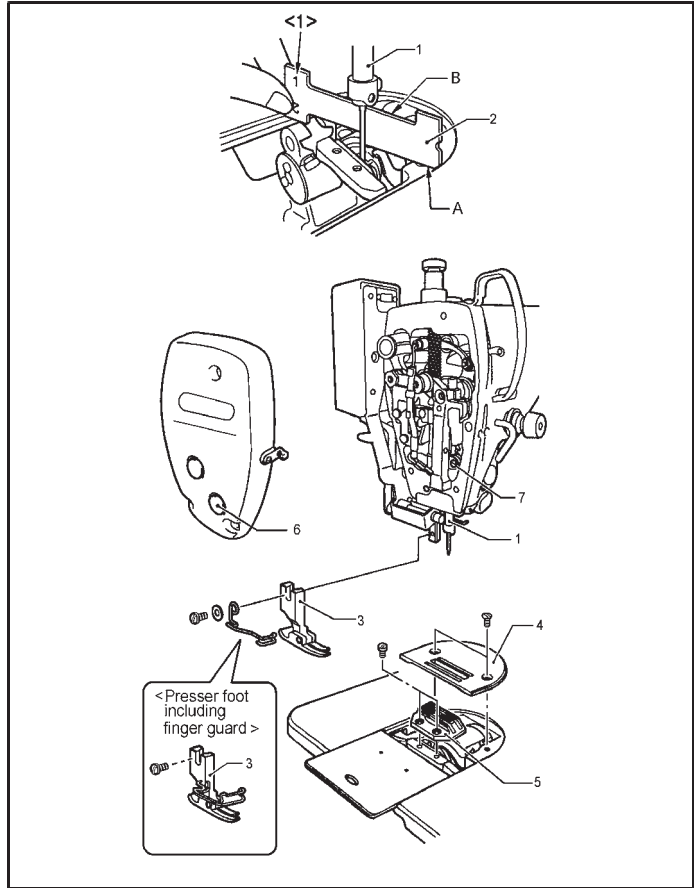
The height of the feed dog (1) will change after the angle has been adjusted ,so it will be necessary to re-adjust the height of the feed dog (1).



8-7. Adjusting the needle bar height

Adjust so that the distance from needle plate mounting surface A to the bottom edge of the needle bar (1) is the same as the height of surface B on the <1> side of the accessory timing gauge (2) when the needle bar (1) is at its lowest position as shown in the illustration .

1. Remove the presser foot (3), the needle plate (4) and the feed dog (5).
2. Turn the machine pulley to set the needle bar (1) to its lowest position.
3. Remove the rubber cap (6) from the face plate .
4. Loosen the screw (7).
5. Move the needle bar (1) up or down to adjust so that the distance from needle plate mounting surface A to the bottom edge of the needle bar (1) is the same as the height of surface B on the <1> side of the accessory timing gauge (2).
6. Securely tighten the screw (7).
7. Install the rubber cap (6).
8. Install the feed dog (5), the needle plate (4) and the presser foot (3).



8-8. Adjusting the needle and feed mechanism timing

The standard timing is for the tip of the needle to be in the position given below when the machine pulley is turned forward to raise the feed dog (1) from its lowest position until it is flush with the top of the needle plate (2).

(At this time ,the “-” mark on the lower shaft will be aligned with the center of the scale (4) (“O” mark) on the vertical cam (3).)

<M> There is a gap of approximately 2 mm between the tip of the needle and the top of the needle plate (2).

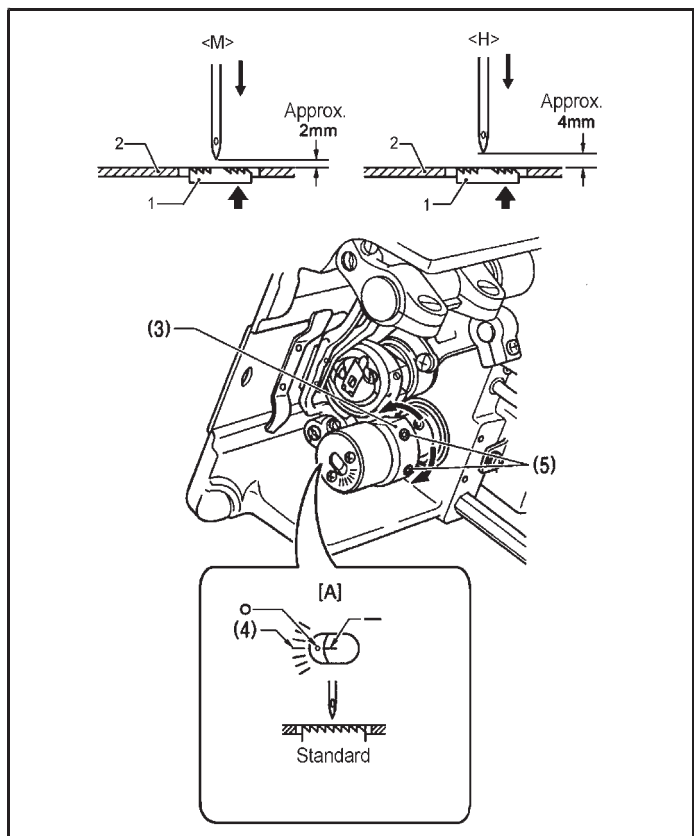
<H> There is a gap of approximately 4mm between the tip of the needle and the top of the needle plate (2).

1. Set the stitch length dial to the maximum setting .
2. Tilt back the machine head .
3. Loosen the two set screws (5), and then turn the vertical cam (3) slightly to adjust the timing .

NOTE: Use the standard needle and feed mechanism timing .

If the timing is changed ,broken needles may occur.

4. After adjustment is completed ,securely tighten the two screws (5).

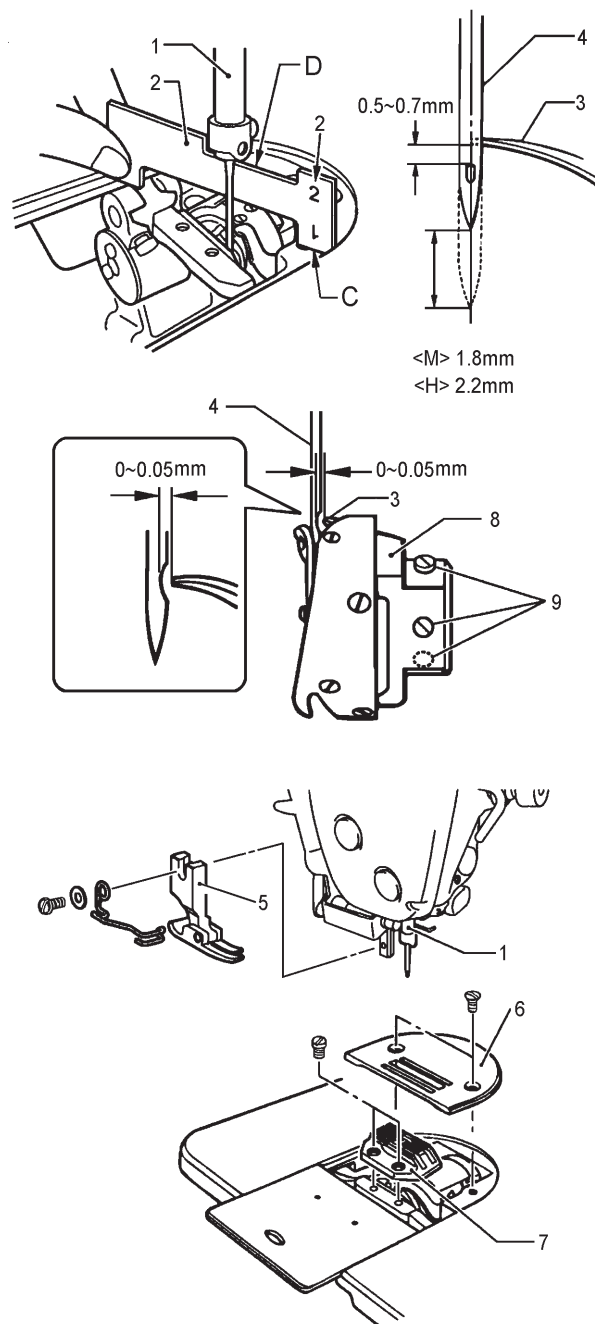


8-9 .Adjusting the needle and rotary hook timing

When the machine pulley is turned forward to raise the needle bar (1) 1.8mm (2.2mm for H specifications) from its lowest position ,the rotary hook tip (3) should be aligned with the center of the needle (4) as shown in the illustration when the distance from needle plate mounting surface C to the bottom edge of the needle bar (1) is the same as the height of surface D on the <2>side of the accessory timing gauge (2).

(At this time ,the gap between the upper edge of the needle hole and the rotary hook tip (3) will be 0.5-0.7mm.)

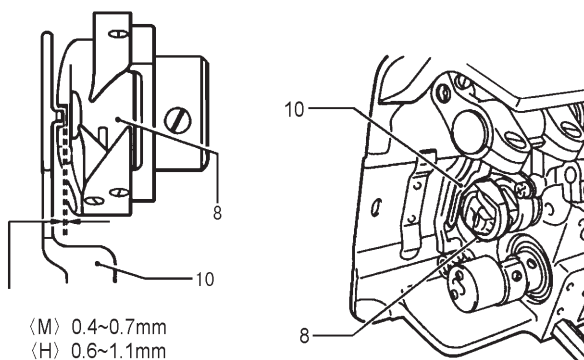
1. Remove the presser foot (5).needle plate (6) and feed dog (7).
2. Set the stitch length dial as follows.
<M>...Stitch length dial 0 setting.
<H>...Stitch length dial 3 setting.
3. Loosen two of the three set screws (9) which are securing the rotary hook (8).
4. Turn the machine pulley to raise the needle bar (1) from its lowest position until the distance from needle plate mounting surface C to the bottom edge of the needle bar (1) is the same as the height of surface D on the <2> side of the accessory timing gauge(2).
5. Loosen the remaining set screw (9) and align the rotary hook tip (3) with the center of the needle (4).There should be a gap of 0-0.5mm between the rotary hook tip (3) and the needle (4) at the time .
6. Securely tighten the three set screws (9).
7. Install the feed dog (7).needle plate (6) and presser foot (5).



<Checking the clearance between the rotary hook and bobbin case holder position bracket >

Check that the clearance between the rotary hook (8) and the bobbin case holder position bracket (10) is enough to allow the thread being used to pass through smoothly.

The clearance should be 0.4-0.7mm for M models , and 0.6-1.1 mm for H models.



8-10. Adjusting the treadle

<Forward depression sensitivity adjustment >

If the machine starts running at low speed when your foot is simply resting on the treadle, or if the treadle pressure is felt to be too weak, adjust the position (a to c) at which the treadle spring (1) is hooked onto the treadle lever (2).

a is the weakest position and it becomes gradually stronger at b and c respectively.

<Backward depression sensitivity adjustment >

1. Loosen the nut (3) and the bolt (4).

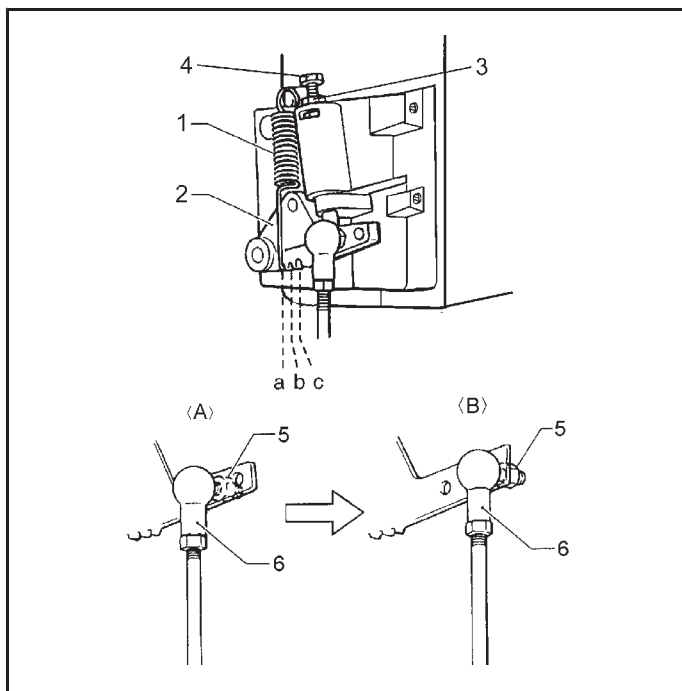
When the bolt (4) is tightened, the treadle operation becomes heavier, and when it is loosened, the operation becomes lighter.

2. Tighten the nut (3).

<Adjusting the treadle stroke>

Remove the nut (5), and then move the connecting rod joint (6) from the position in figure A to the position in figure B. The treadle stroke will then be increased by approximately 27%.

At this time, the treadle forward and backward depression sensitivity will change, so readjust if necessary.



8-11. Adjusting the presser foot floating amount (minute lifting amount)

When sewing stretch materials and materials with long pile, you can make minute adjustments to the floating amount for the presser foot (1) in accordance with the material.

1. Turn the sewing machine pulley by hand to move the feed dog (2) below the needle plate (3).

2. Use the lifting lever to lower the presser foot (1).

3. Loosen the nut (4).

4. Use a screwdriver to turn the adjustment screw (5) to adjust the floating amount.

● To raise the presser foot (1)

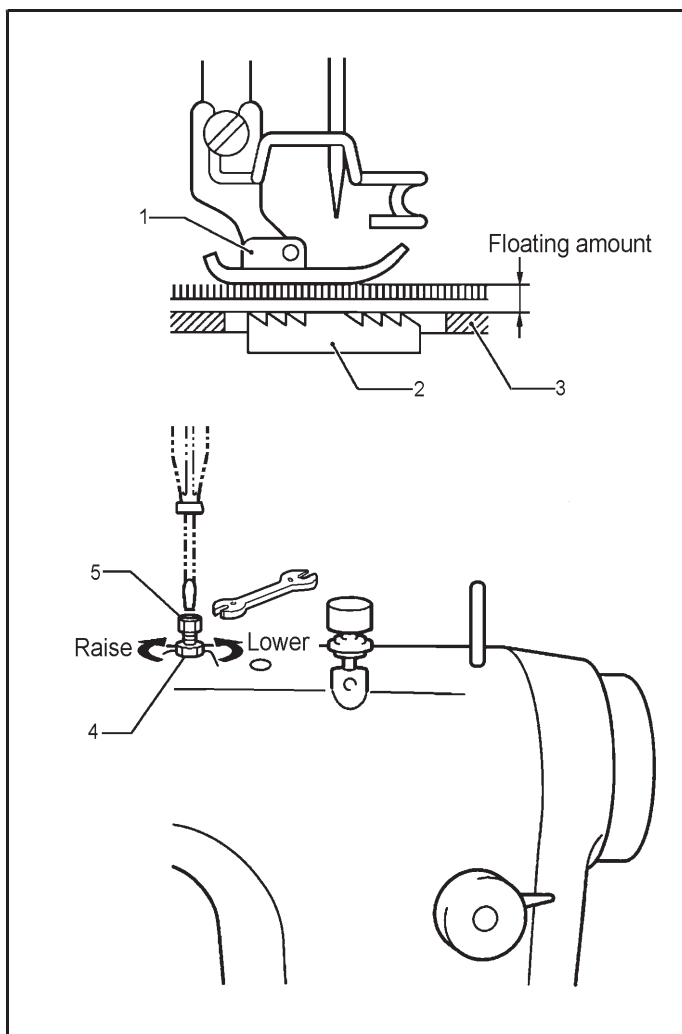
Turn the adjusting screw (5) clockwise.

● To lower the presser foot (1)

Turn the adjusting screw (5) counterclockwise.

5. Tighten the nut (4).

After making the adjustment, sew a piece of material to check the floating amount.

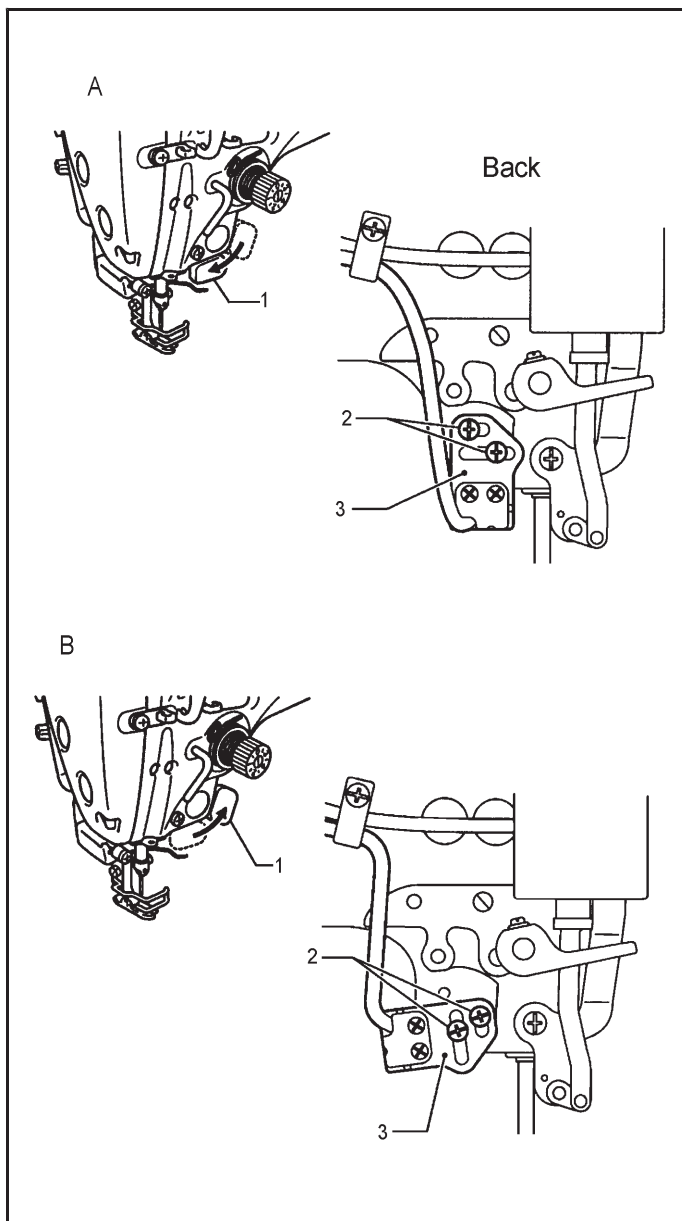


8-12. Adjusting the actuator position

The installation position for the actuator (1) can be adjusted to <A> or .

Adjust so that it is in a position where it is easy to operate.

1. Remove the two screws (2).
2. Move the switch setting base (3) to move the actuator (1) to the preferred position <A> or .
3. Tighten the two screws (2).



9. TROUBLESHOOTING

- Please check the following points before calling for repairs or service.
- If the following remedies do not fix the problem, turn off the power switch and consult a qualified technician or the place of purchase.



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.


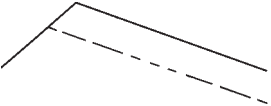

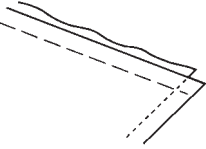


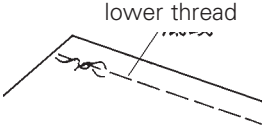

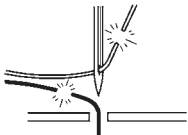
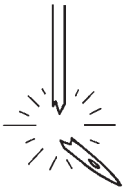
CAUTION

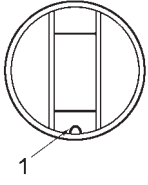


Turn off the power switch and disconnect the power cord before carrying out troubleshooting. The machine may operate if the treadle is depressed by mistake, which could result in injury.

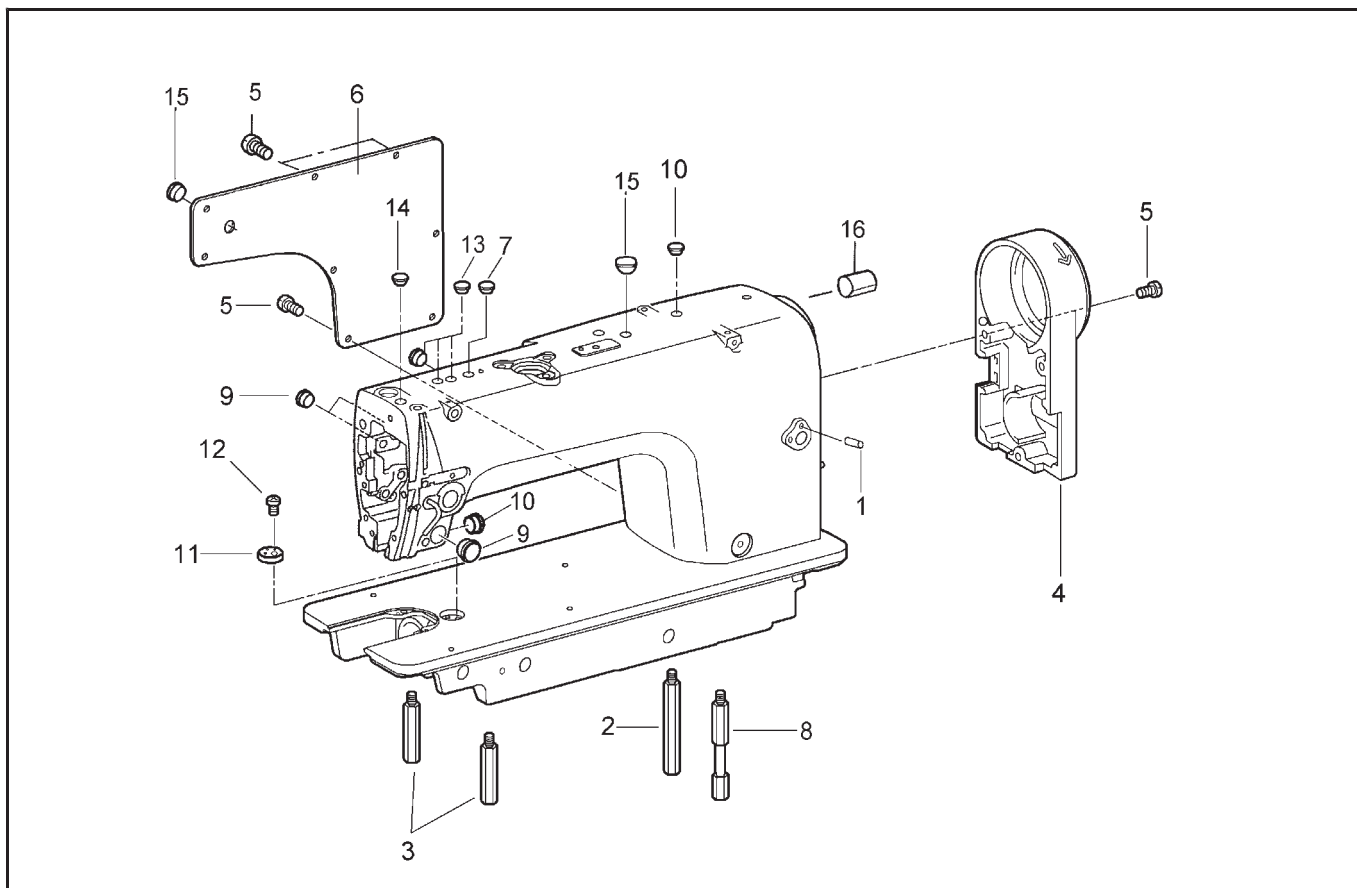
Problem	Possible cause
1.Upper thread is not tight. 	<ul style="list-style-type: none"> ● Is the upper thread tension too weak, or is the lower thread tension too strong? Adjust the upper thread tension or lower thread tension.
2.Lower thread is not tight. 	<ul style="list-style-type: none"> ● Is the lower thread tension too weak, or is the upper thread tension too strong? Adjust the lower thread tension or upper thread tension.
3.Loops appear in seam. 	<ul style="list-style-type: none"> ● Is the thread path not smooth enough? Use a file with a fine grain or sandpaper to polish smooth the thread path. ● Is the bobbin not turning smoothly? Pull out the lower thread to check that there is no slackness in the thread tension, or replace the bobbin or bobbin case.
4.Skipped stitches occur while sewing 	<ul style="list-style-type: none"> ● Is the needle tip bent? Is the needle tip blunt? If the needle tip is bent or broken, replace the needle. ● Is the needle properly installed? If it is incorrect, install the needle correctly. ● Is the machine properly threaded? If it is incorrect, thread the thread correctly. ● Is the presser foot pressure too weak? Adjust the presser foot pressure. ● Is the needle too thin? Replace the needle with a needle that is one rank thicker. ● Is the presser foot too high? Adjust the height of the presser foot. ● Is the thread take-up spring too weak? Adjust the tension of the thread take-up spring.

Problem	Possible cause
<p>5. Skipped stitches at sewing start Thread unravelling at sewing start</p> 	<ul style="list-style-type: none"> ● Is the thread take-up spring tension too strong? Reduce the tension of the thread take-up spring. ● Is the thread take-up spring operating range too large? Lower the position of the thread take-up spring. ● Are the trailing lengths of the upper threads too short after thread trimming? Adjust the pretension. ● Are the threads not being trimmed cleanly? Sharpen the fixed knives, or replace the fixed and movable knives if necessary. ● Is the needle too wide? Try using a needle with a count that is one lower than the current needle. ● Is the length of thread trailing out from the bobbin case after thread trimming too short? If the bobbin is spinning loosely, replace the anti-spin spring in the bobbin case. ● Is the sewing speed too fast at the sewing start? Use the slow start feature.
<p>6. Uneven seam</p> 	<ul style="list-style-type: none"> ● Is the presser foot pressure too weak? Adjust the presser foot pressure. ● Is the feed dog too low? Adjust the feed dog height. ● Is the bobbin scratched? If the bobbin is damaged, smooth it with an oiled grindstone or replace it.
<p>7. Large degree of puckering (excess tension)</p> 	<ul style="list-style-type: none"> ● Is the upper thread tension too strong? Make the upper thread tension as weak as possible. ● Is the lower thread tension too strong? Make the lower thread tension as weak as possible. ● Are the thread take-up spring tensions too strong? Make the thread take-up spring tension as weak as possible. ● Is the thread take-up spring operating range too large? Lower the position of the thread take-up spring to as low a position as possible. ● Is the presser foot pressure too strong? Adjust the presser foot pressure. ● Is the sewing speed too fast? Use the sewing speed control keys to gradually reduce the sewing speed.
<p>8. Material slippage</p> 	<ul style="list-style-type: none"> ● Is the presser foot pressure too strong? Adjust the presser foot pressure.

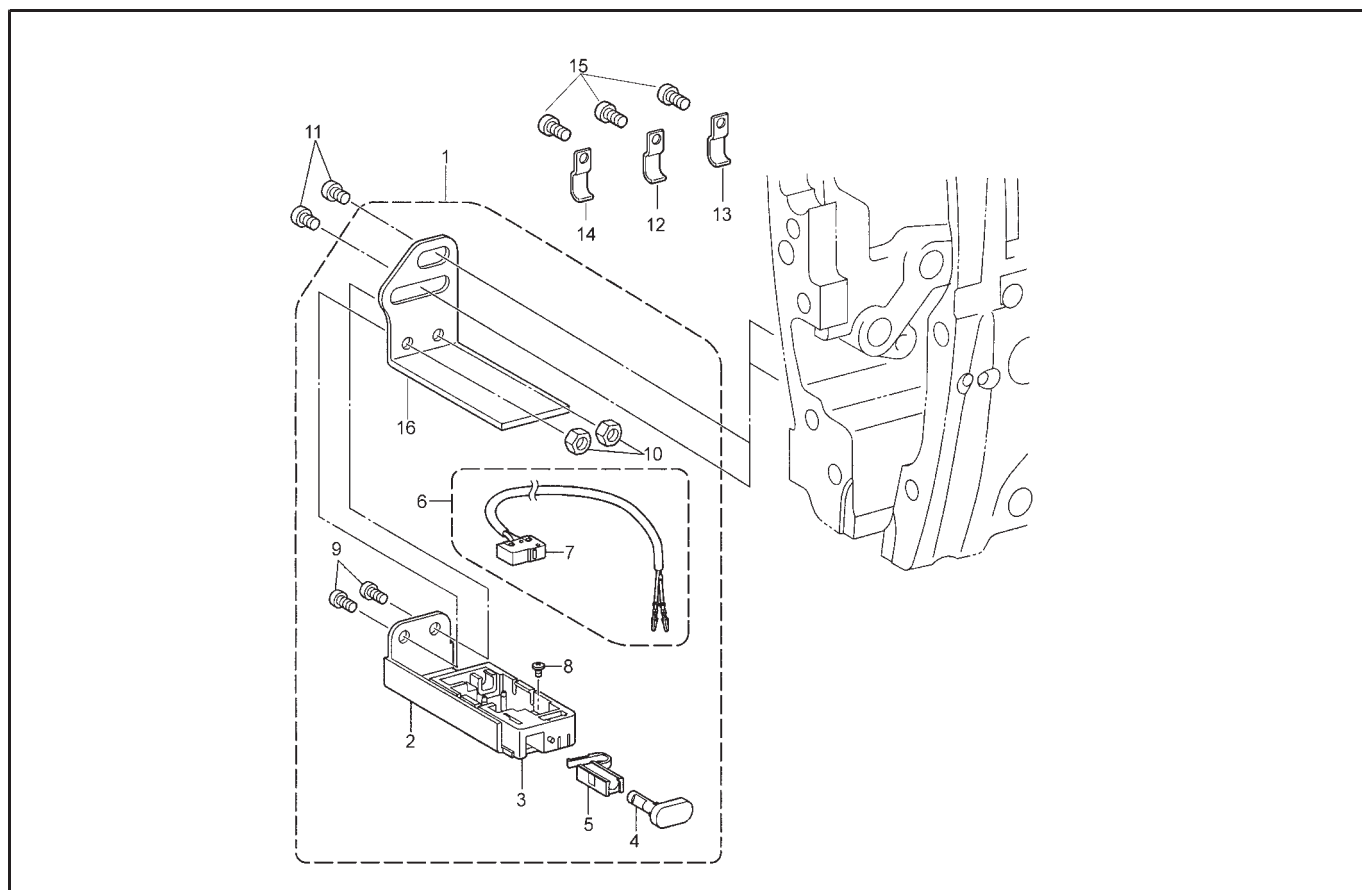
Problem	Possible cause
<p>9. Lower thread is tangled at the sewing start. Spinning of bobbin during thread trimming</p> 	<ul style="list-style-type: none"> ● Is the bobbin spinning direction correct when the lower thread is being pulled? Set the bobbin so that it turns in the opposite direction to the rotary hook. ● Is there too much thread wound onto the bobbin? The bobbin winding amount should not be more than 80%. ● Is the anti-spin spring attached? Attach the anti-spin spring. ● Is the bobbin turning smoothly? If the bobbin is not turning smoothly, replace the bobbin 
<p>10. Upper and lower threads are breaking.</p> 	<ul style="list-style-type: none"> ● Is the needle bent or is the needle tip broken? Replace the needle if it is bent or broken. ● Is the needle properly installed? If it is incorrect, install the needle correctly. ● Is the machine properly threaded? If it is incorrect, thread the thread correctly. ● Is the rotary hook sufficiently lubricated? If the oil gauge is down to the lower reference line in the oil gauge window, add more oil. ● Is the upper or lower thread tension too weak or too strong? Adjust the upper thread or lower thread tension. ● Is the upper thread may be loose because the thread take-up spring operating range is too small? Adjust the position of the thread take-up spring. ● Is the rotary hook, feed dog or other part damaged? If they are damaged, smooth them with an oiled grindstone or replace the damaged parts. ● Is the thread path damaged? If the thread path is damaged, smooth it with sandpaper or replace the damaged part.
<p>11. Incorrect thread trimming (Upper and lower threads are both not being trimmed)</p>	<ul style="list-style-type: none"> ● Is the fixed knife or movable knife damaged or worn? Replace the fixed knife or the movable knife.
<p>12. Incorrect thread trimming (upper thread or lower thread is not being trimmed)</p>	<ul style="list-style-type: none"> ● Is the needle properly installed? If it is incorrect, install the needle correctly. ● Is the fixed knife or movable knife blunt? Replace the fixed knife or the movable knife.
<p>13. Broken needles</p> 	<ul style="list-style-type: none"> ● Is the material being pushed or pulled with excessive force during sewing? ● Is the needle properly installed? If it is incorrect, install the needle correctly. ● Is the needle bent, is the needle tip broken, or is the needle hole blocked? Replace the needle. <p>Caution</p> <ul style="list-style-type: none"> • It is extremely dangerous to leave any pieces of broken needle sticking in the material If the needle breaks, search for all pieces until the whole of the needle is found again. • Furthermore, we recommend that through steps be taken to account for such needles to comply with product liability regulations.

Problem	Possible cause
<p>14.Oil gauge (1)is not risible in oil gauge win – dow.</p> 	<ul style="list-style-type: none"> ● Is the oil tank empty? Fill the oil tank with oil.
<p>15.Machine does not operate when power is turned on and treadle is pressed.</p>	<ul style="list-style-type: none"> ● Is the power supply connector disconnected from the control box? Insert the connector securely.
<p>16. Machine does not operate at high speed.</p>	<ul style="list-style-type: none"> ● Is the sewing speed setting or backtack speed setting incorrect? Use the sewing speed control keys to set the high speed.
<p>17. Machine stops during sewing</p>	<ul style="list-style-type: none"> ● Is the fixed stitch key turned on? Press the fixed stitch key so that the indicator turns off. ● Is the power supply voltage too low? Check the power supply. (If the power cord is too long or too many appliances are being run from a single outlet, this may cause voltage drops which will in turn cause the reset function to activate and stop the machine, even if the power supply itself is normal.)
<p>18 .Nothing appears on the operation panel display.</p>	<ul style="list-style-type: none"> ● Is the power supply connector disconnected from the control box? Insert the connector securely. ● Is the operation panel connector inside the control box disconnected? Insert the connector securely.

1.MACHINE BODY



2. QUICK REVERSE SWITCH MECHANISM



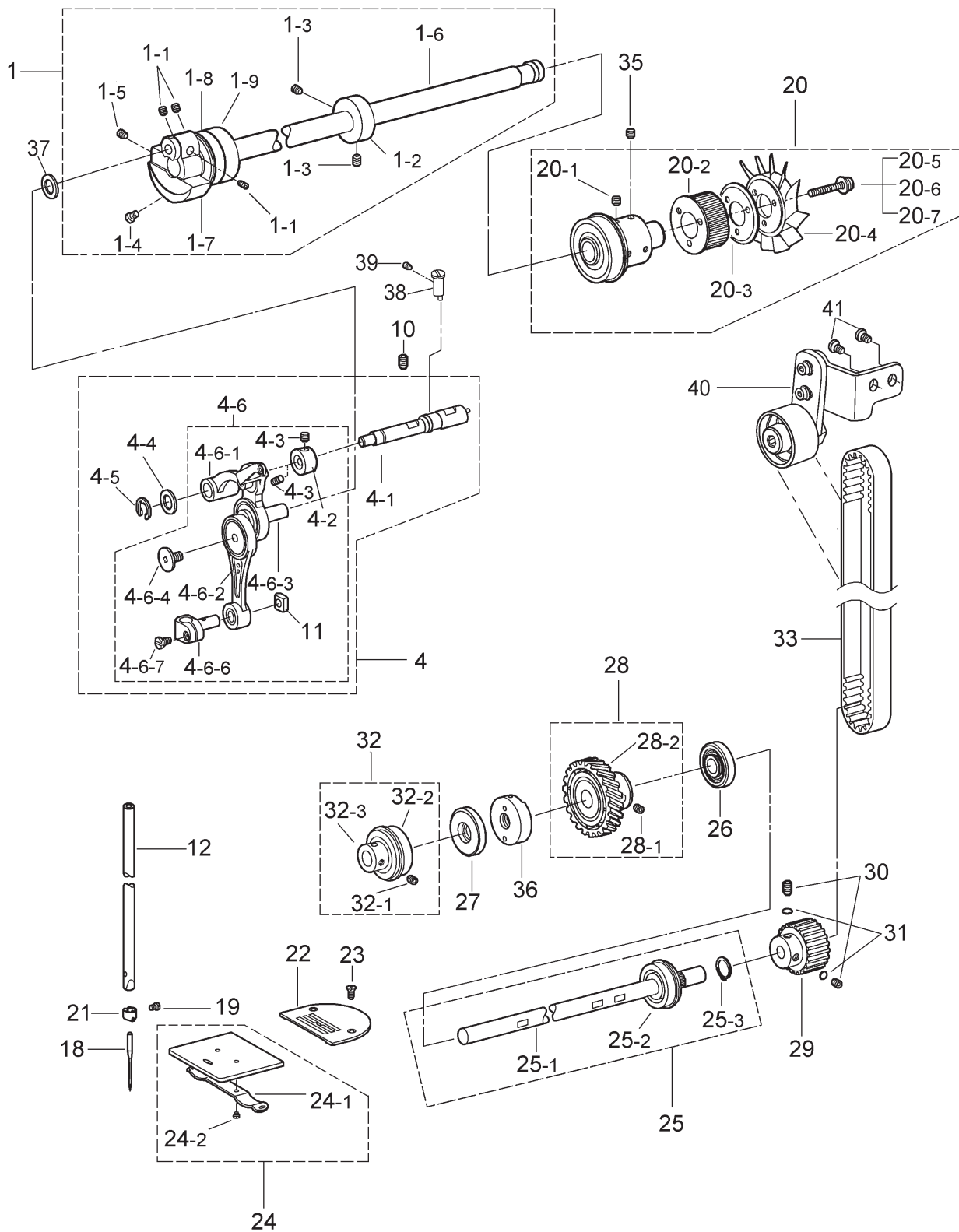
1. MACHINE BODY

No.	Ref.No.	Description	Qt	Note
1	217N00023	Stitch length dial pin	1	
2	BXF9904009	Stand,R	1	
3	BXF9903009	Stand,L	2	
4	BXF6851009	Motor cover	1	
5	B048509894	Screw M5x12	11	
6	BXF3774009	Side plate	1	
7	B048509894	Rubber cap 8.5	1	
8	BXF8930009	Stand,RF	1	
9	B906661009	Rubber cap 15.5	3	
10	B993174009	Rubber cap 9.4	2	
11	BX01489959	Ruler plate	1	
12	B048600494	Screw M4x6	2	
13	BX78847009	Rubber cap 8	3	
14	BX66090009	Rubber cap 11.5	1	
15	022130003-9	Rubber cap 19	2	
16	BXF3296009	Rubber cap 20	1	

2. QUICK REVERSE SWITCH MECHANISM

No.	Ref.No.	Description	Qt	Note
1	BXF3816009	Quick reverse switch assy	1	
2	BXF8830009	Reverse switch bracket	1	
3	BXF3815009	Reverse switch support	1	
4	BXF6012009	Actuator	1	
5	BXF6011009	Switch restoration spring	1	
6	BXF9710009	R-switch assy	1	
7	BX78103050	R-switch	1	
8	B040700404	Screw M3x6	1	
9	B048600294	Screw M4x8	2	
10	B089600704	Nut M4	2	
11	B048500494	Screw M5x6	2	
12	BXF9722909	Cord holder	1	
13	BXF9716909	Cord holder U3	2	
14	21700026	Cord holder	1	
15	B048500294	Screw M5x8	3	
16	BX76829000	Reverse switch bracket	1	

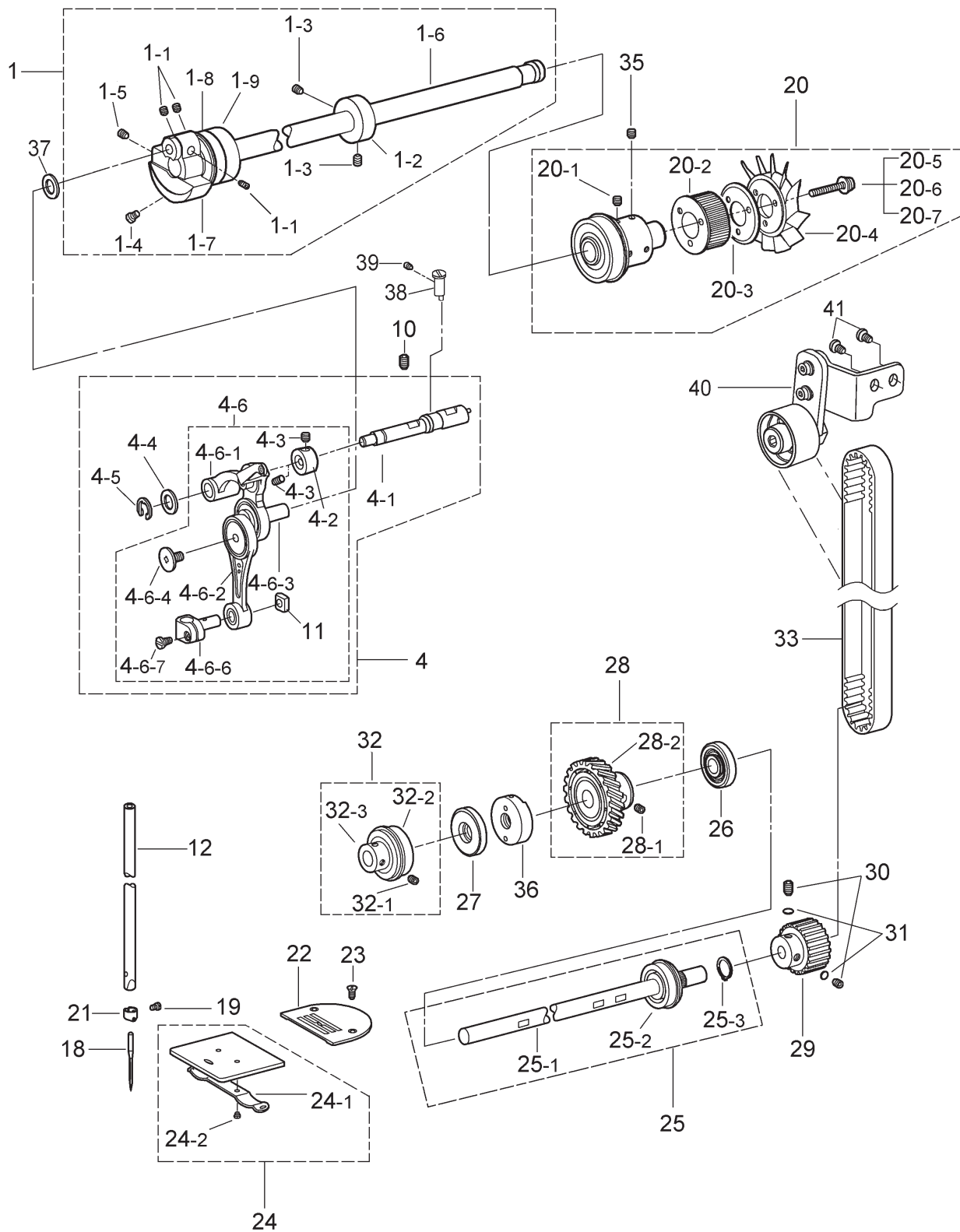
3.NEEDLE BAR AND THREAD TAKE-UP MECHANISM



3. NEEDLE BAR AND THREAD TAKE-UP MECHANISM

No.	Ref.No.	Description	Qt	Note
1	BXF3286009	Upper shaft assy	1	
1-1	BX87459009	Screw M6x6	3	
1-2	BXF9980009	Bobbin winder driving wheel	1	
1-3	BX87459009	Screw M6x6	2	
1-4	BX85875009	Screw M8	1	
1-5	BX85874009	Screw M6x10	1	
1-6	BXF3285009	Upper shaft	1	
1-7	217N00001	Needle bar crank	1	
1-8	S150866037	Bearing NSK 6004 2ZNR	1	
1-9	S150866013	Bearing NSK 6004 2Z	1	
4	BXF3759909	Needle bar connecting rod unit	1	For M
4	BXF3757909	Needle bar connecting rod unit	1	For H
4-1	217N00002	Thread take-up support shaft	1	
4-2	BXF9985009	Tighten ring	1	
4-3	B098600674	Screw M4x4	2	
4-4	BXF8949009	Washer	1	
4-5	B062040768	Retaining ring E6	1	
4-6	217N01000	Thread take-up lever assy	1	For M
4-6	217I01000	Thread take-up lever assy	1	For H
4-6-1	BXF9970009	Thread take-up small lever assy	1	For M
4-6-1	BXF9983009	Thread take-up small lever assy	1	For H
4-6-2	217N01100	Needle bar connecting rod set	1	
4-6-3	BXF3482009	Thread take-up crank	1	For M
4-6-3	BXF3484009	Thread take-up crank	1	For H
4-6-4	BXF8688009	Screw SM3.57-40x6L	1	
4-6-6	BXF3870009	Needle bar guide	1	
4-6-7	B960006009	Screw SM3.57-40x7	1	
10	B098049074	Screw M6x10	2	
11	BXF6766009	Needle bar guide slide block	1	
12	BXF9975009	Needle bar	1	For M
12	BXF3650009	Needle bar	1	For H
18	022200016	Needle	1	For M
18	048200005	Needle	1	For H
19	B960557908	Screw SM3.18	1	

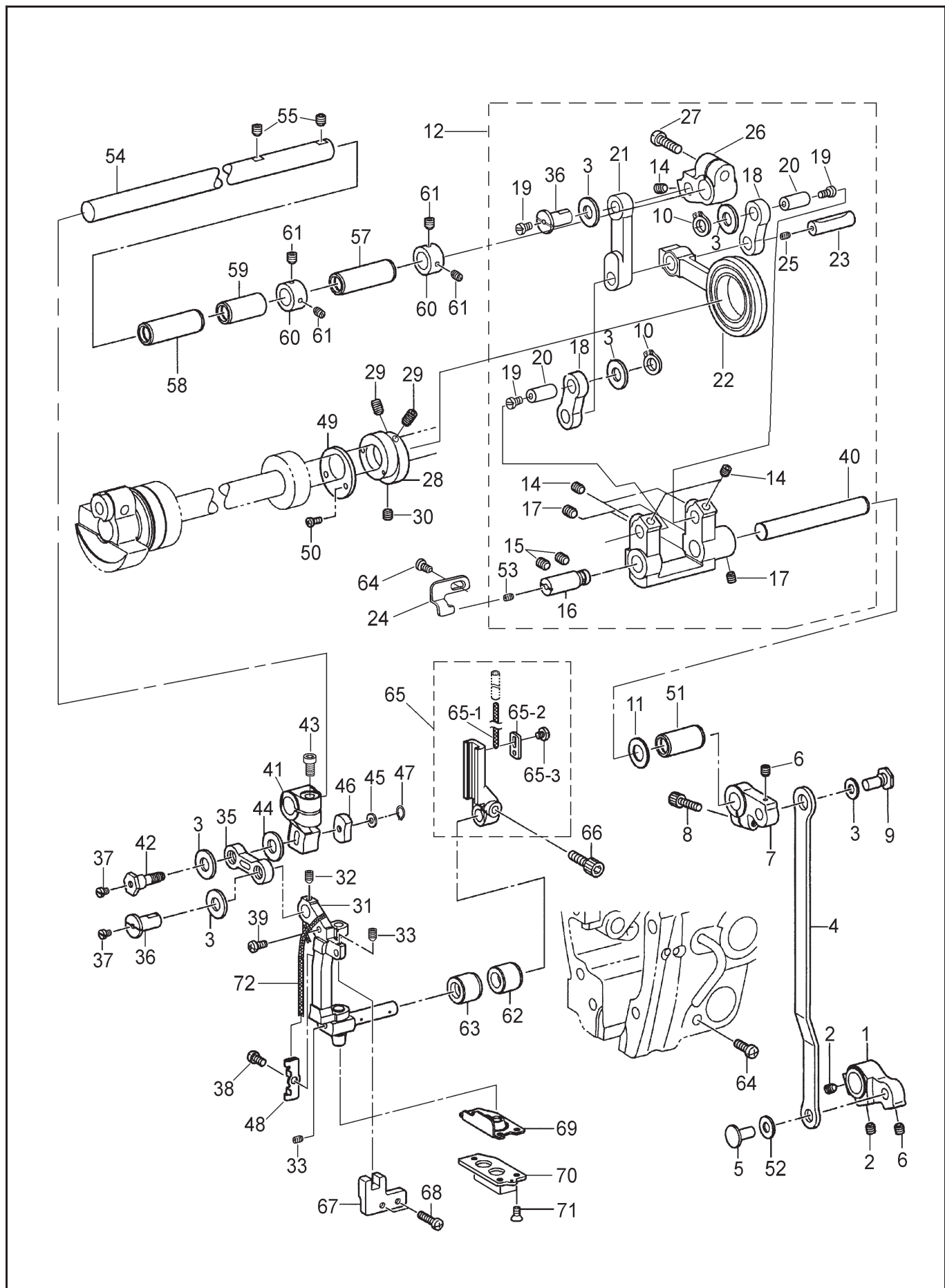
3.NEEDLE BAR AND THREAD TAKE-UP MECHANISM



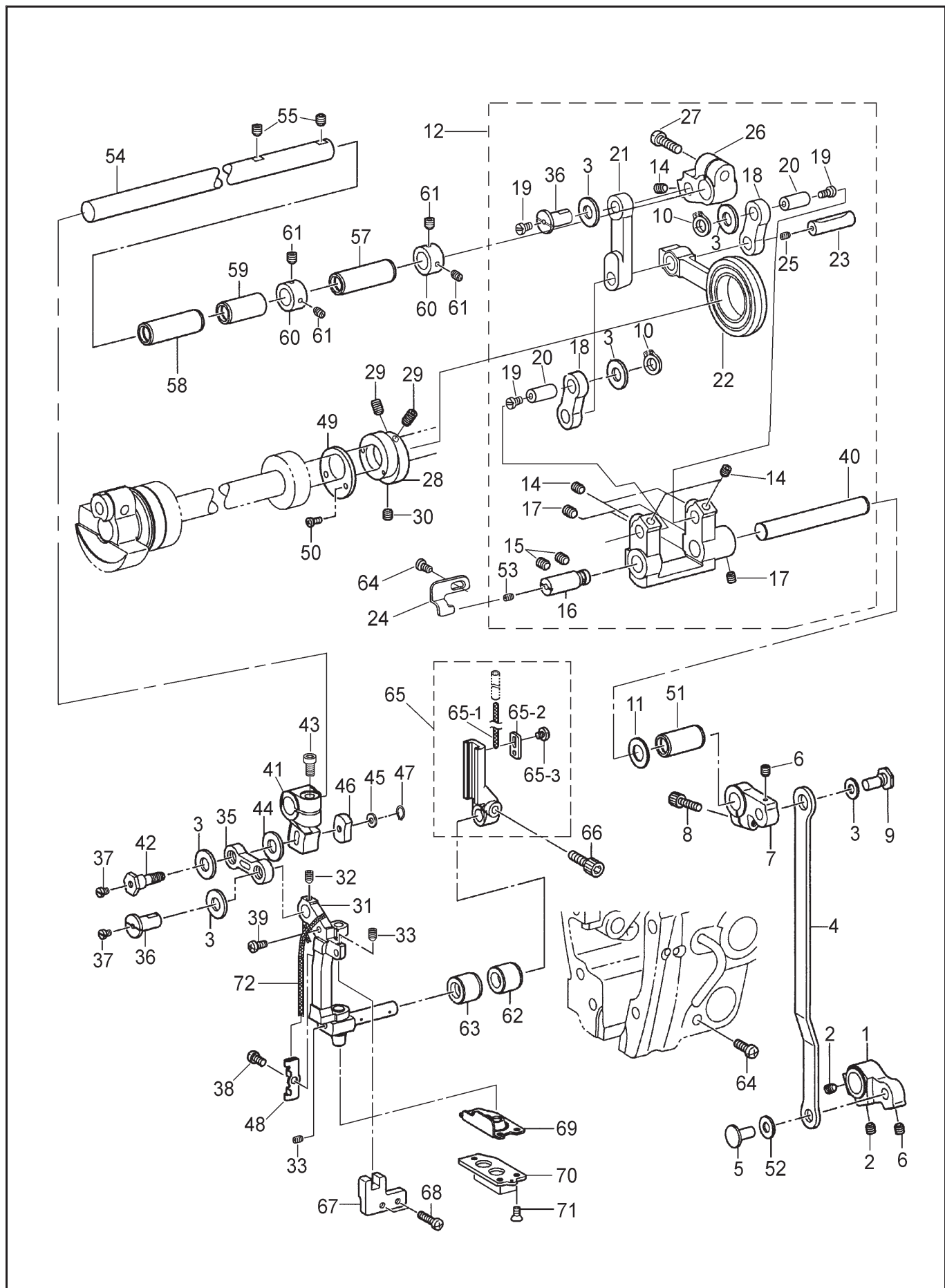
3. NEEDLE BAR AND THREAD TAKE-UP MECHANISM

No.	Ref.No.	Description	Qt	Note
20	BXF9960009	Joint unit	1	
20-1	BX87459009	Screw M6x6	2	
20-2	BXF8850009	Timing pulley,U	1	
20-3	BX72398009	Flange	1	
20-4	BX72397900	Fan	1	
20-5	B048607598	Screw M4x35	3	
20-6	S8A3103011	Spring washer 4	3	
20-7	B085060878	Washer M4	3	
21	B959516009	Needle bar thread guide	1	
22	027100004	Needle plate	1	
23	022100020	Screw SM4.37-40x8	2	
24	B920092959	Slide plate assy	1	
24-1	B996549059	Spring,plate	1	
24-2	B988339059	Screw SM2.38	2	
25	BXF5832009	Lower shaft assy	1	
25-1	BXF5831009	Lower shaft	1	
25-2	S150866057	Ball bearing,NSK 6301 2ZNR	1	
25-3	B062980968	Retaining ring C12	1	
26	BX85609900	Oil seal,NOK BC4907E	1	
27	BXF9793009	Oil seal,NOK XC0028E	1	
28	BXF9944009	Lower Shaft gear assy	1	
28-1	BX87459009	Screw M6x6	2	
28-2	BXF9943009	gear	1	
29	BXF8859009	timing pulley,D	1	
30	BX87459009	Screw M6x6	2	
31	BXF8732009	Washer 4.8	2	
32	BXF9950009	Bear bush assy	1	
32-1	BX87459009	Screw M6x6	2	
32-2	S150866037	Bearing NSK 6004 2ZNR	1	
32-3	BXF9959009	Bearing bush R	1	
33	BXF8858009	Timing belt 570-3G7-15	1	
35	BX87459009	Screw M6x6	2	
36	BXF8856909	Lower shaft bush	1	
37	B990743009	Washer 8	1	
38	BXF3871909	Positioning pin	1	
39	B098500574	Screw M5x5	1	
40	217N02000	Tension pulley assy	1	
41	S150220042	Screw	2	

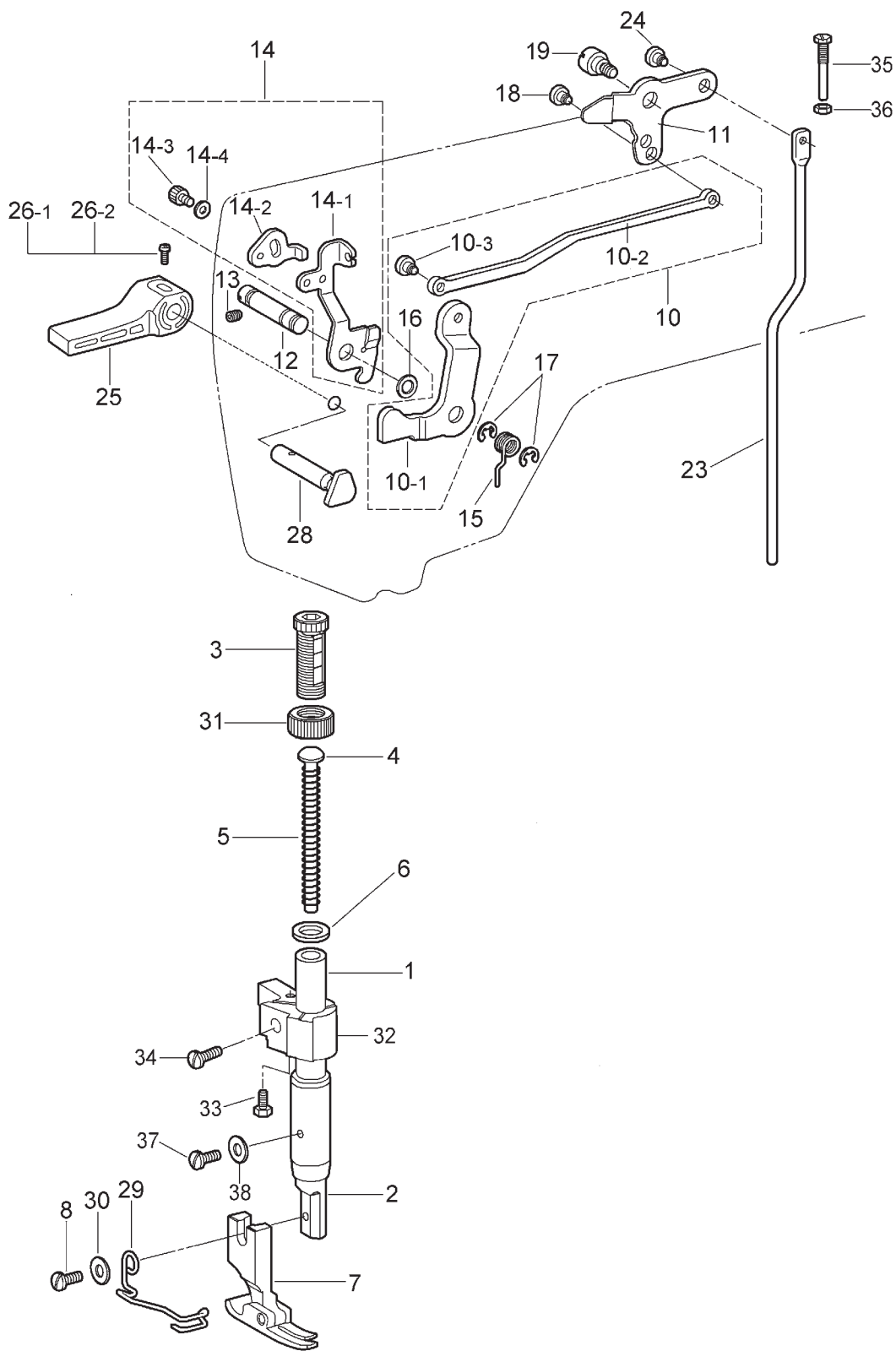
4.NEEDLE FEED MECHANISM



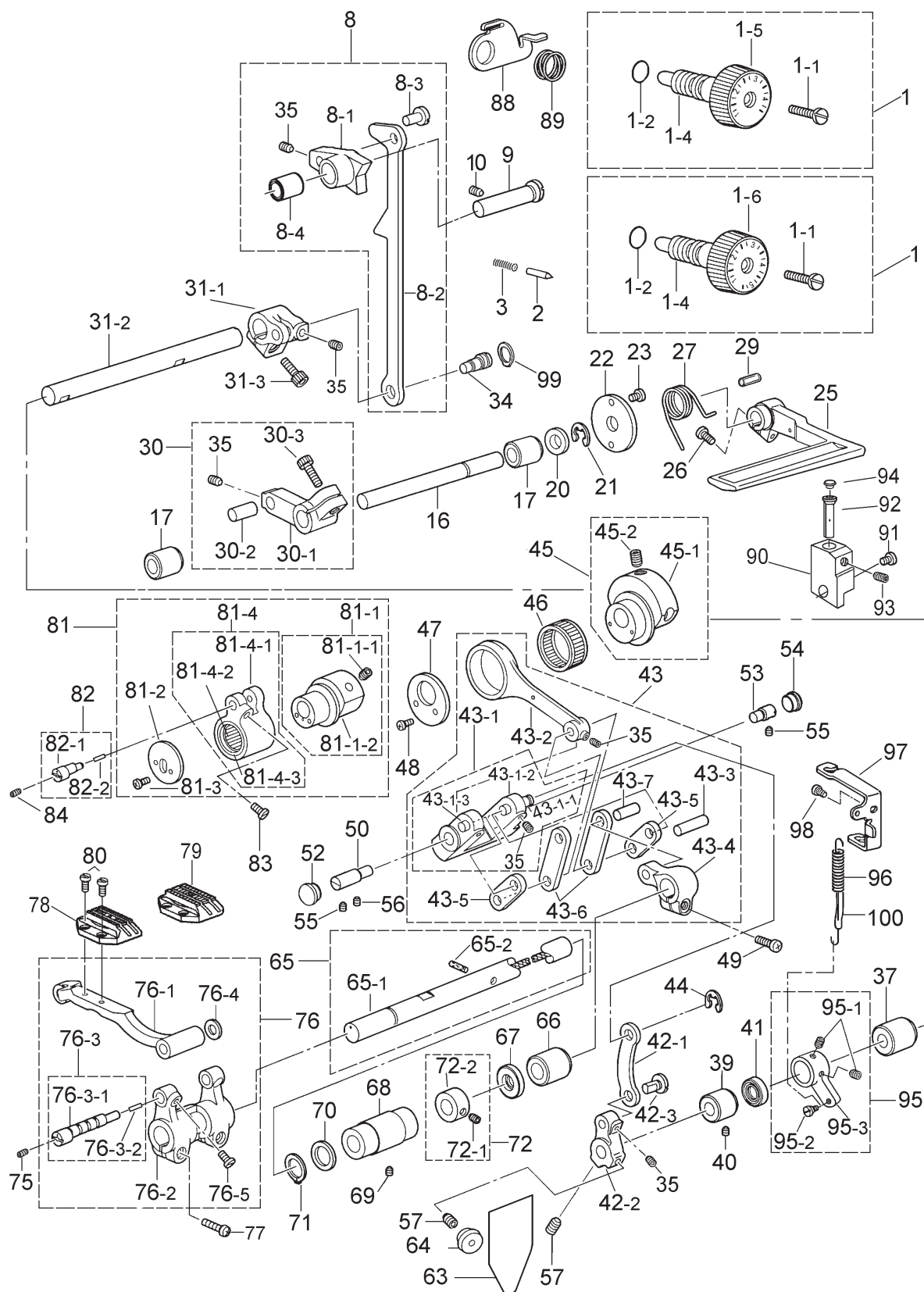
4.NEEDLE FEED MECHANISM



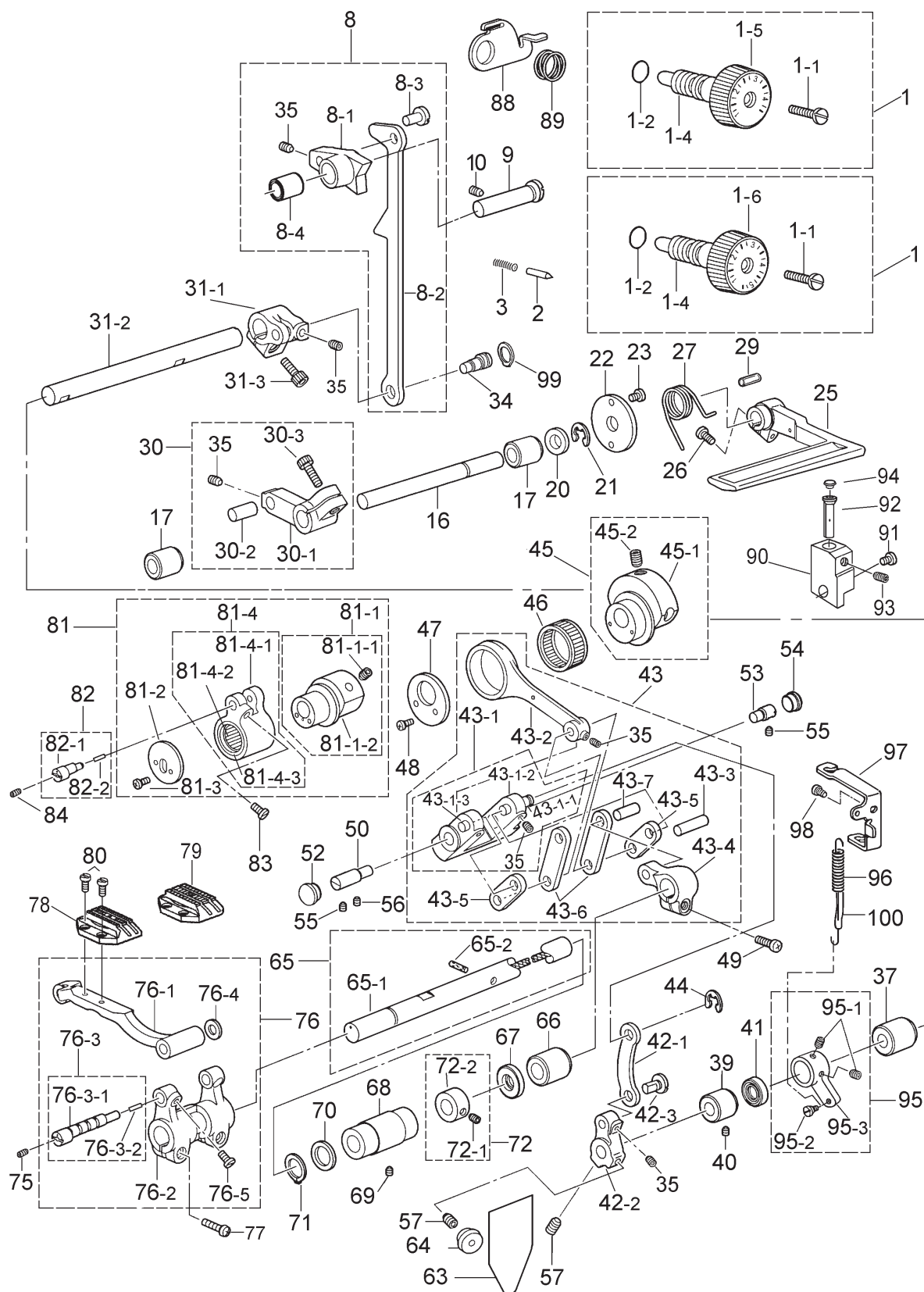
5.PRESSER FOOT MECHANISM



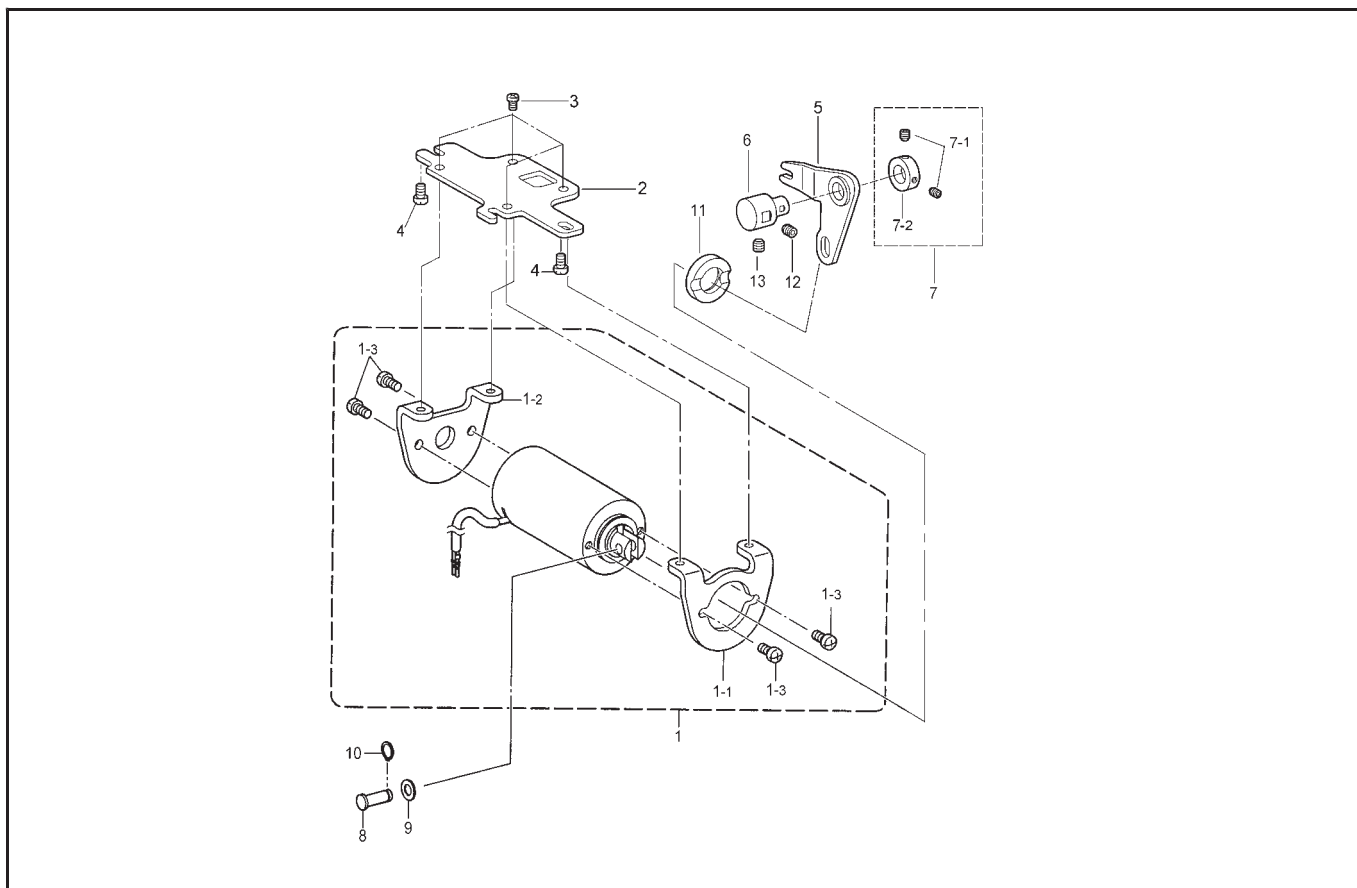
6. FEED MECHANISM



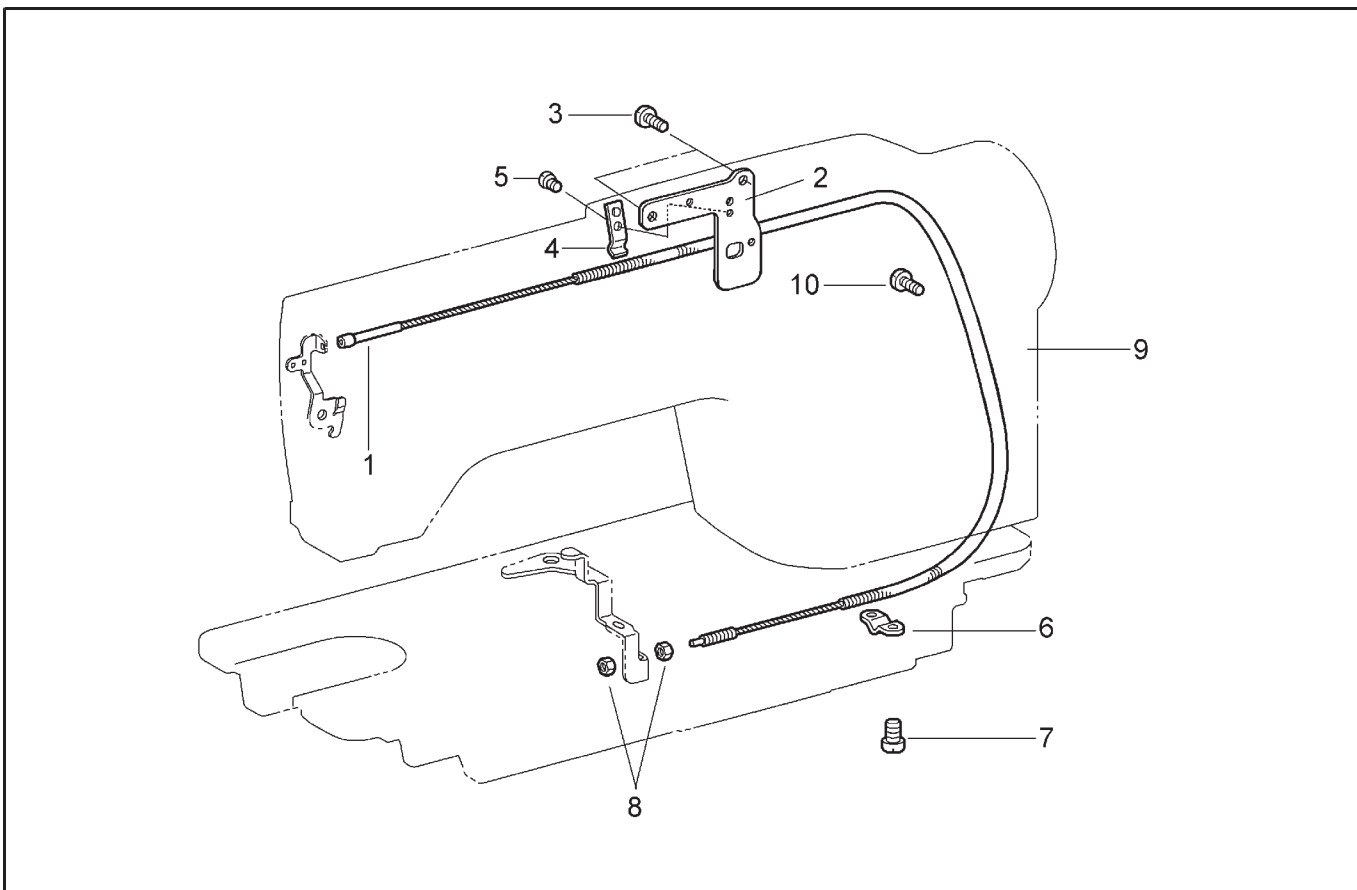
6. FEED MECHANISM



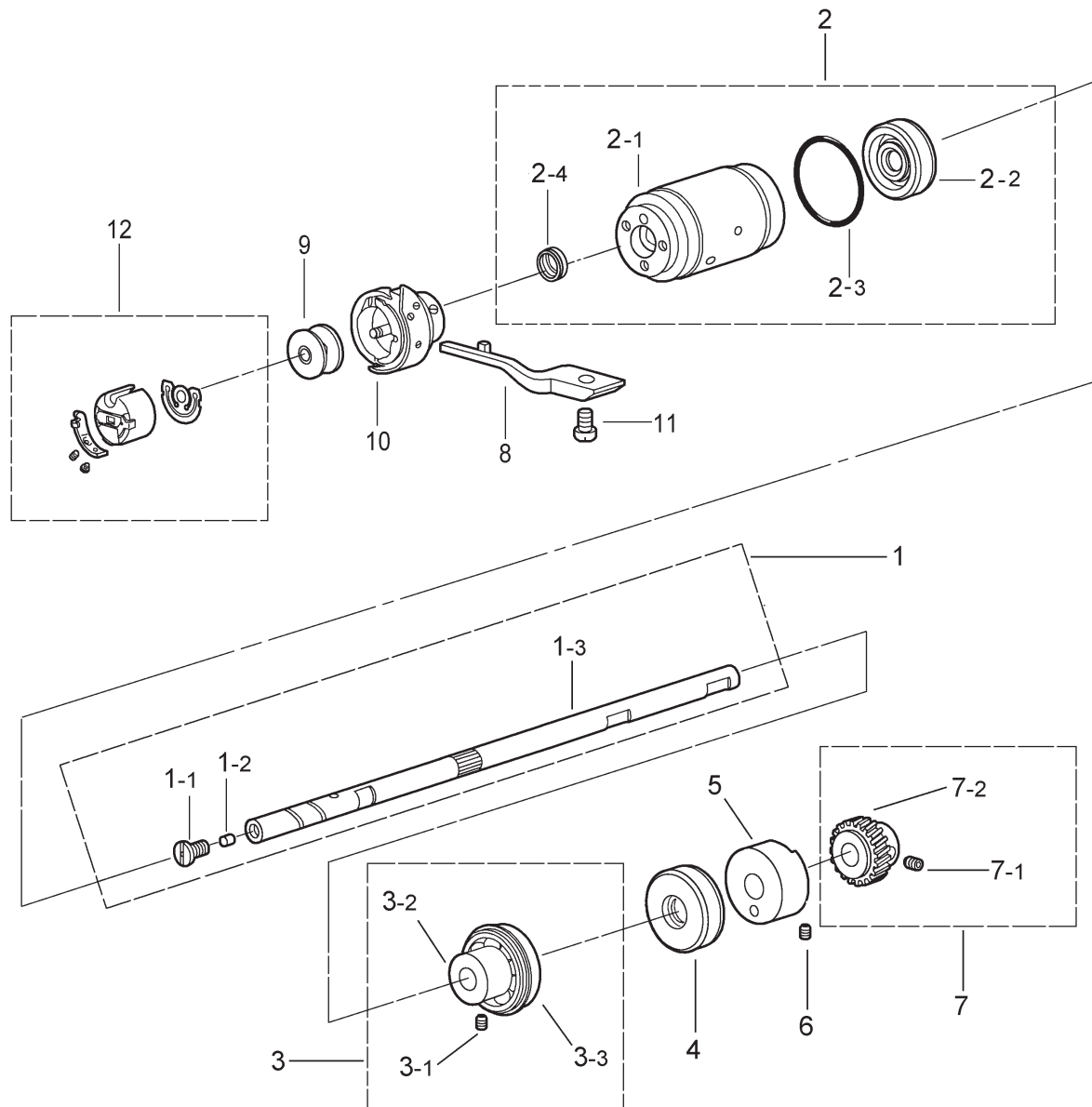
7. QUICK REVERSE MECHANISM



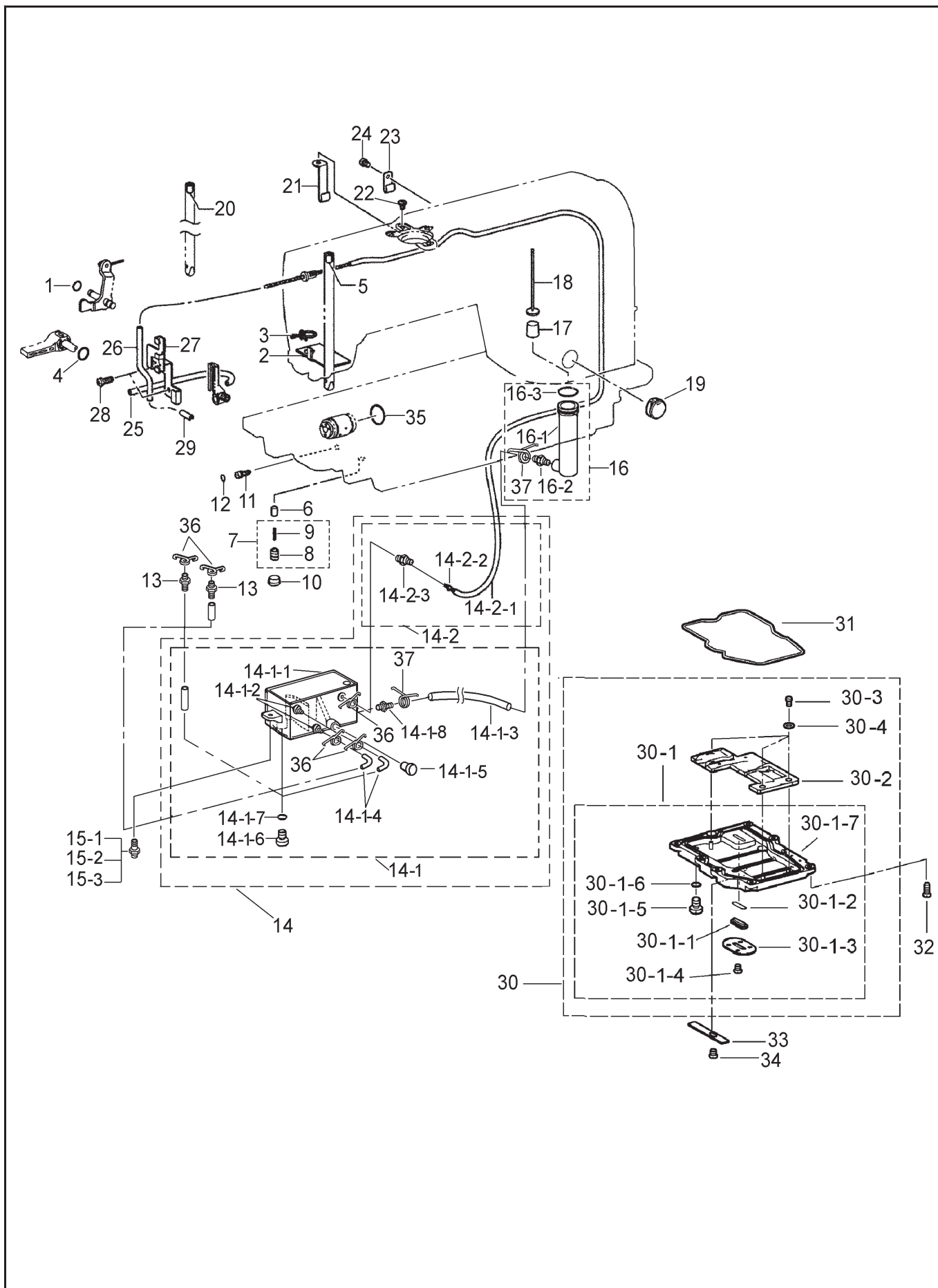
8. TENSION RELEASE MECHANISM



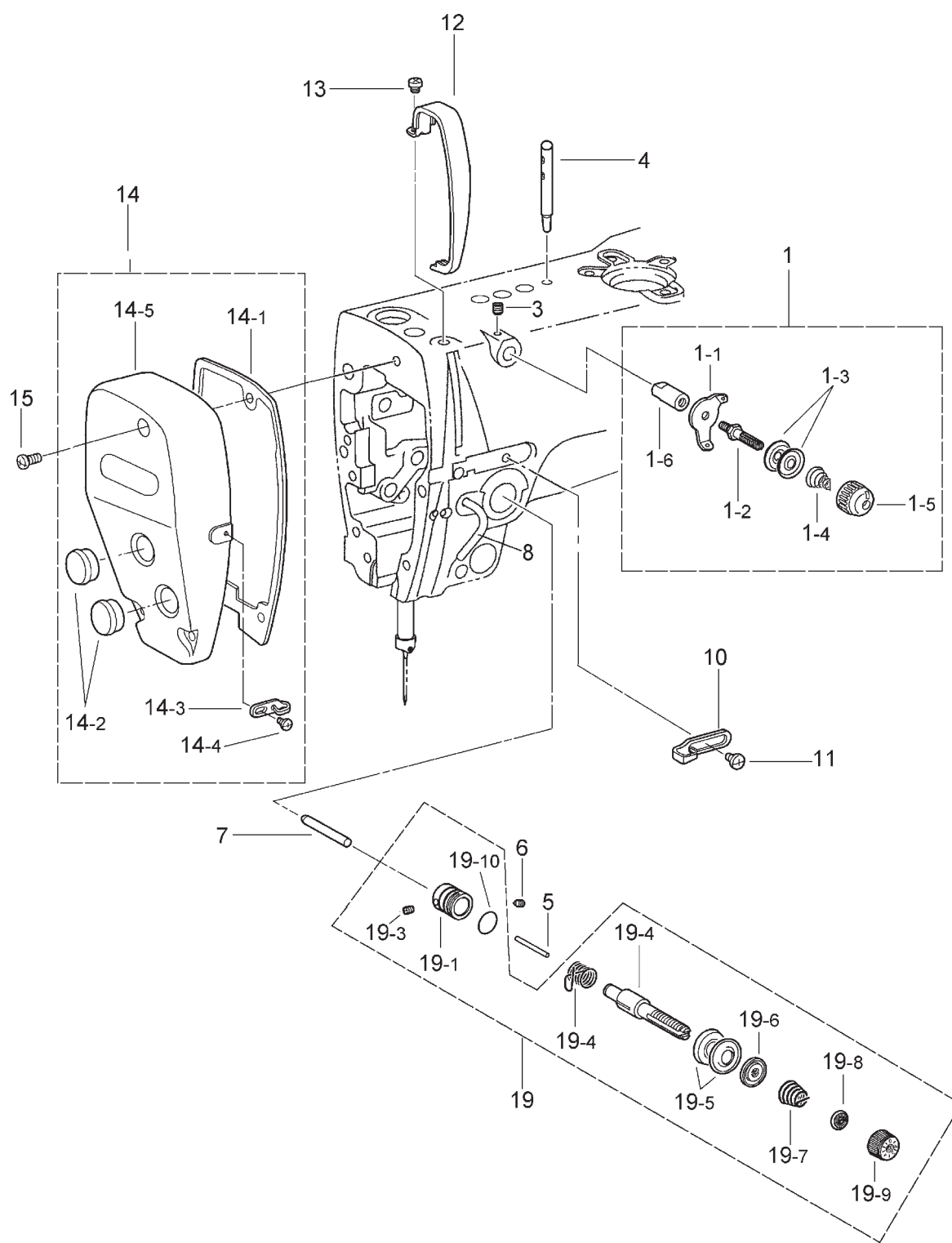
9. ROTARY HOOK MECHANISM



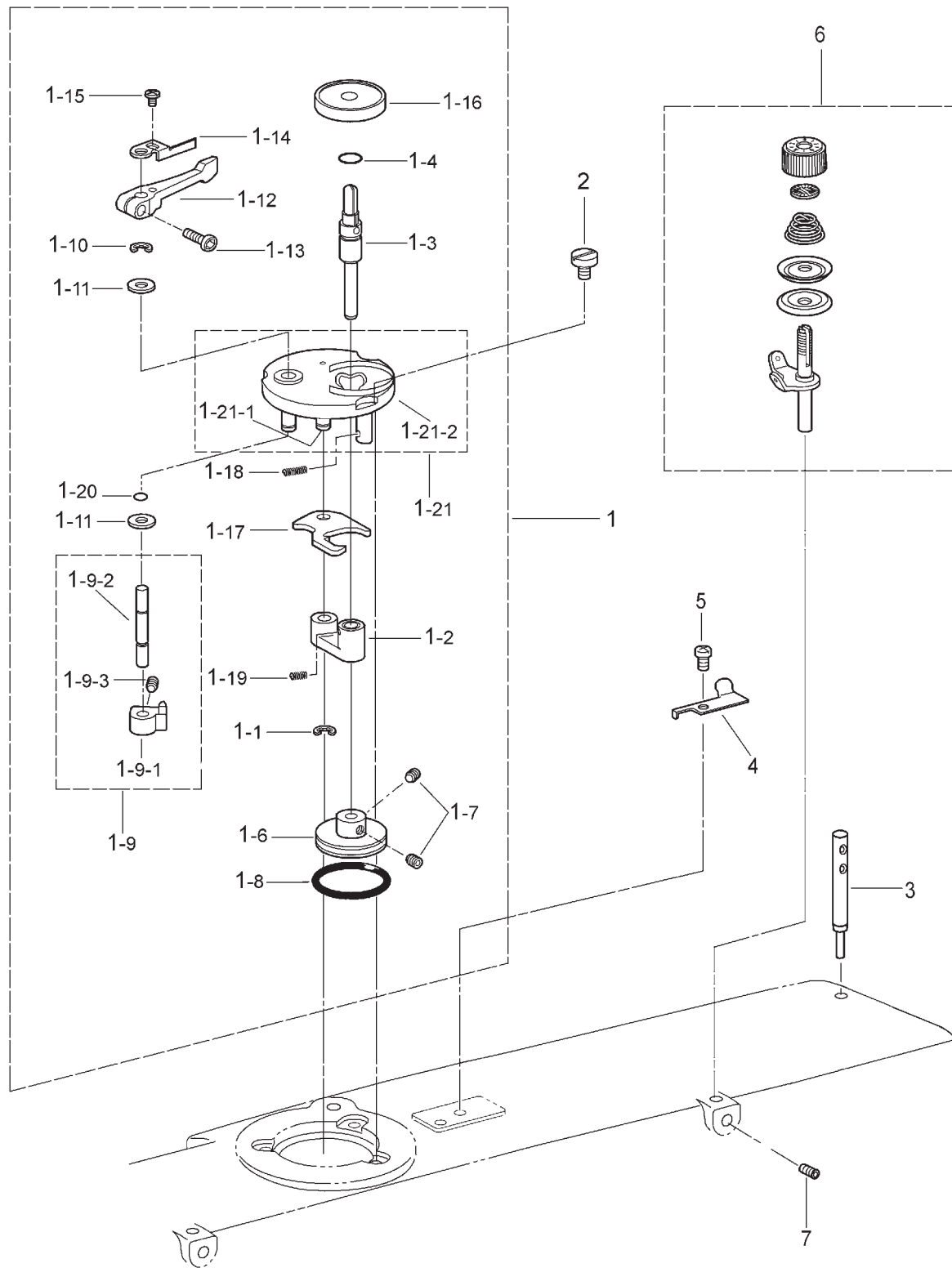
10. LUBRICATION MECHANISM



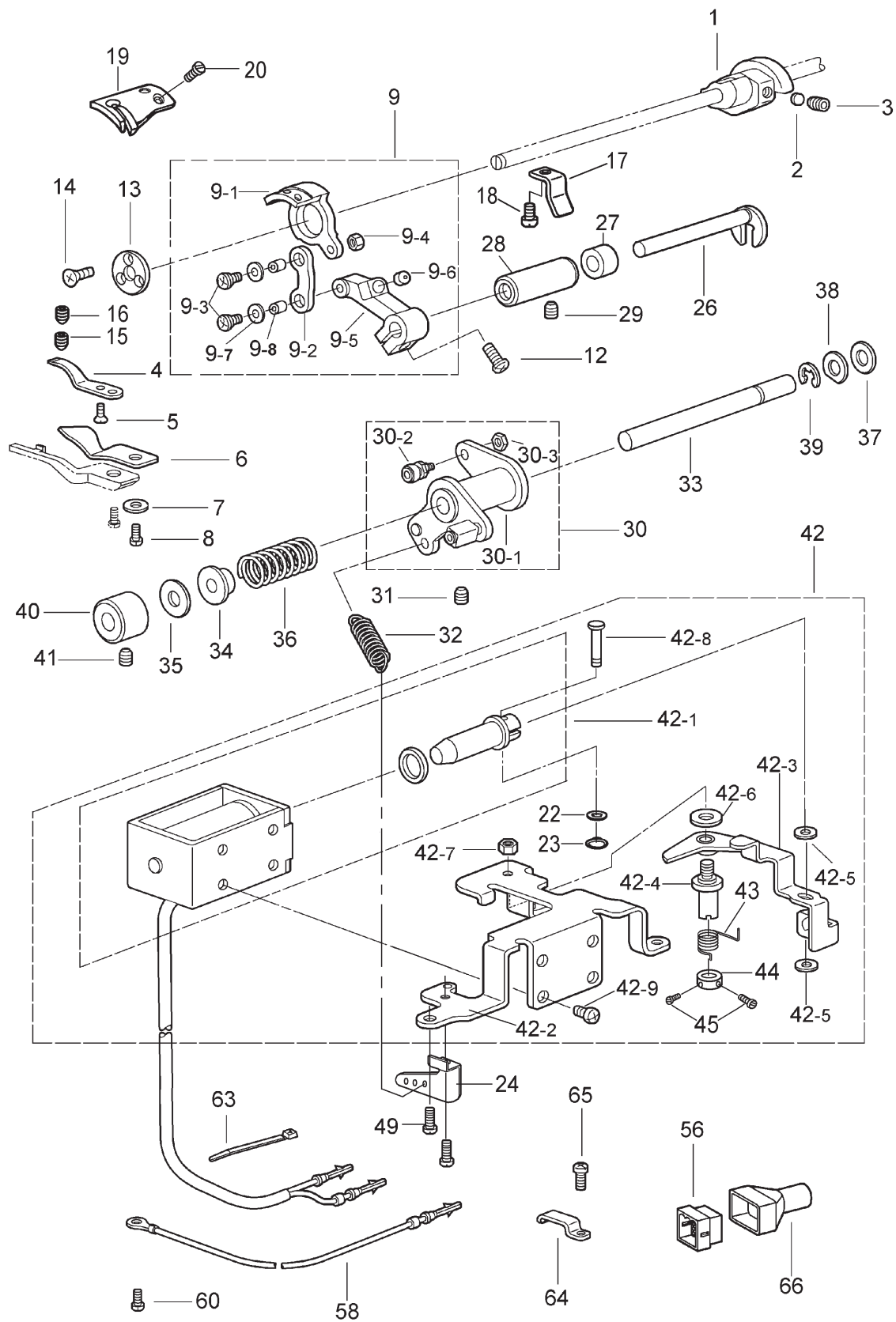
11.THREADING MECHANISM



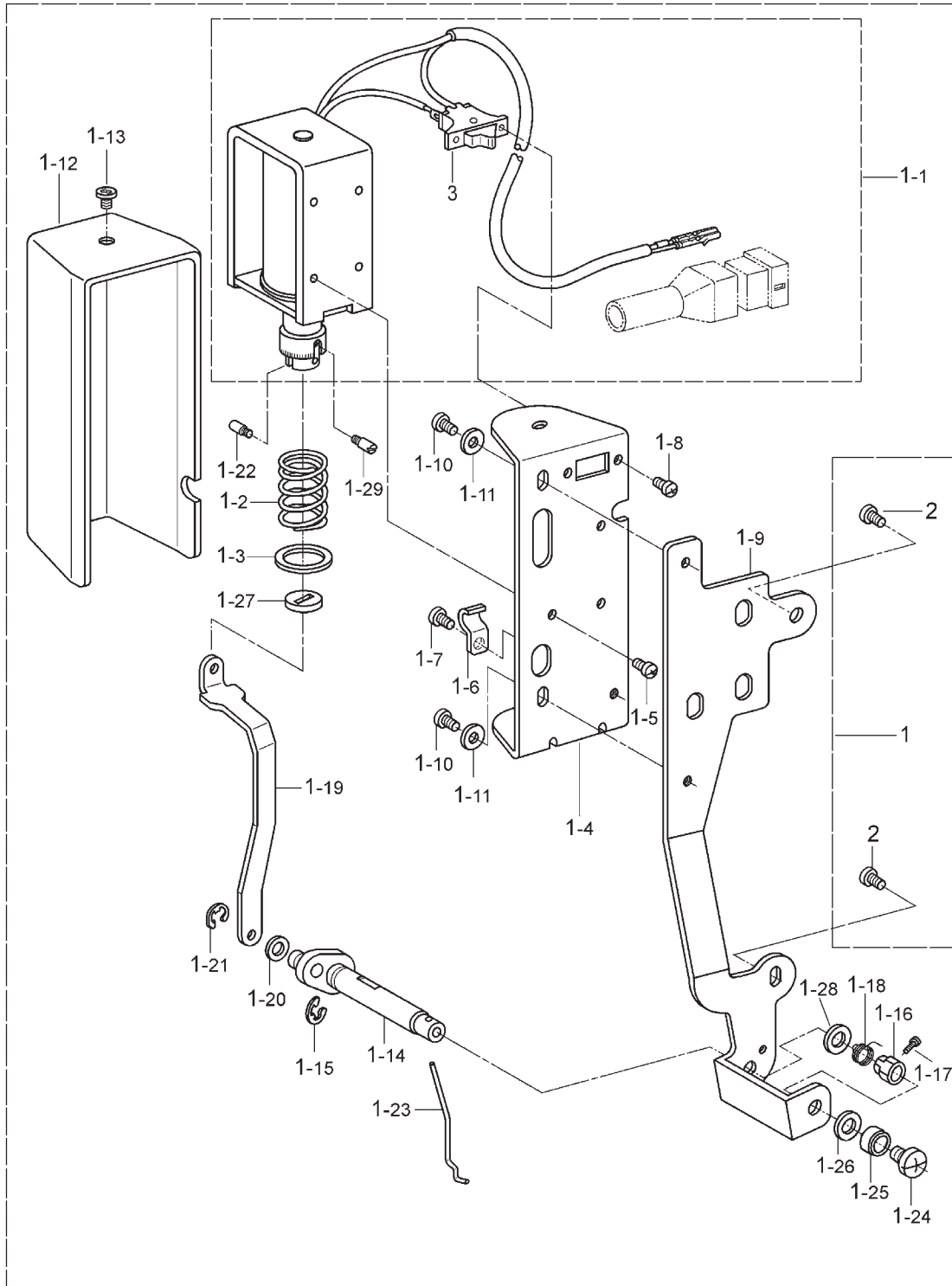
12. BOBBIN WINDER MECHANISM



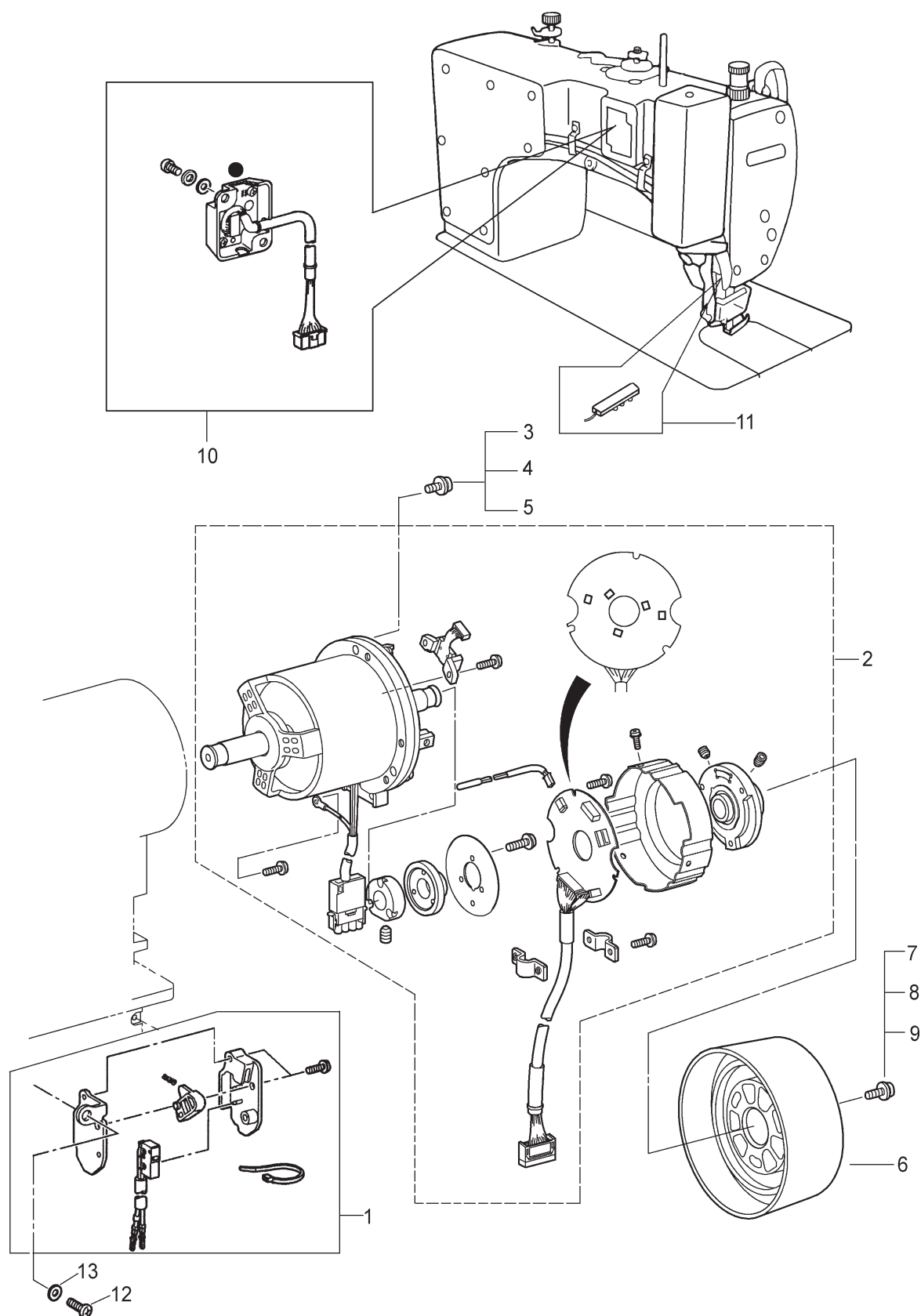
13. THREAD TRIMMER MECHANISM



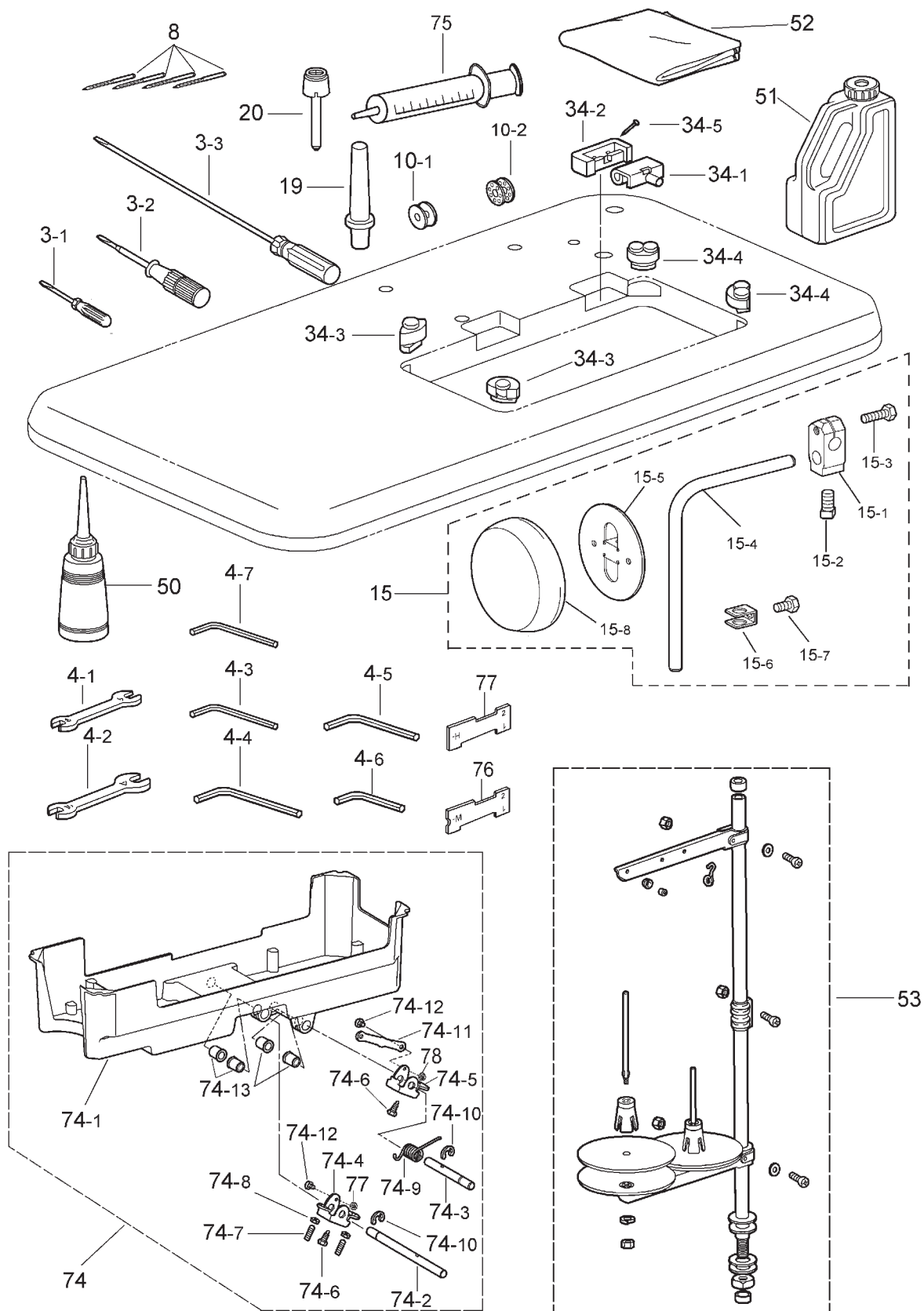
14. THREAD WIPER MECHANISM



15. CONTROL BOX AND MOTOR MECHANISM



16.ACCESSORIES 1





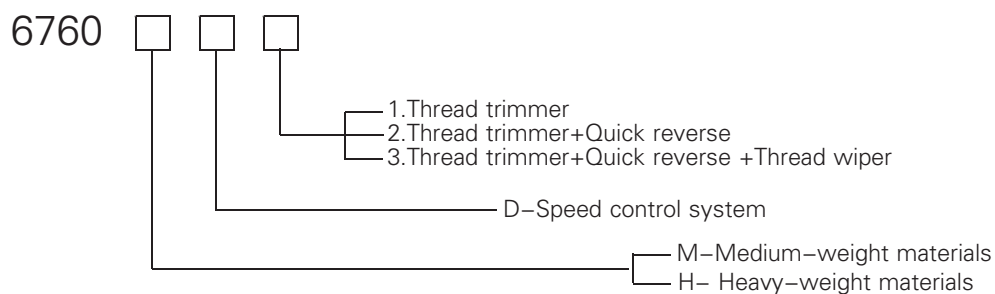
TYPICAL

GC6760 SERIES

SINGLE NEEDLE DIRECT DRIVE NEEDLE FEED
LOCK STITCHER WITH THREAD TRIMMER
INSTRUCTION BOOK
PARTS CATALOGUE

XI'AN TYPICAL INDUSTRIES CO., LTD.

Machine specifications



Machine's main technical data

		GC6760MD3	GC6760HD3
Max.sewing speed		4000rpm * 1	3500rpm * 2
Start backtacking and continuous backtacking speed		220-3000rpm	
End backtacking speed		1800rpm	
Max. stitch length		4.5mm	5.5mm
Presser foot height	Lifting lever	6mm	
	knee lifter	16mm	
Feed dog height		1mm	1.2mm
Needle		DBx1 #11-#18	DPx5 #19-#22

*1 When sewing at speeds of 3600 rpm or higher,set the stitch length to 3.5 mm or less.

*2 When sewing at speeds of 3000 rpm or higher,set the stitch length to 4.5 mm or less.

- Besides adjusting stitch, please laypeople don't debug or maintaine.
- Parts are subject to changes in design without prior notice.

XI' AN TYPICAL INDUSTRIES CO., LTD.

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E - mail: typical@chinatypical.com
Http: www.chinatypical.com
Http: www.globalsources.com

2008.06.24①

Machine's main technical data

When sewing at speeds of 4,000 rpm or higher, set the stitch length to 4.2mm or less.

30,	31,	32,	33,	34	,	35	,	36	,	37	,	38	,				
39	,	40	,	41	,	42	,	43	,	44	,	45	,	46	,	47	,
48	,	49	,	50	,	51	,	52	,	53	,	54	,	55	,	56	,
57	,	58	,	59	,	60	,	61	,	62	,	63	,	64	,	65	,
66	,	67	,	68	,	69	,	70	,	71	,						

Besides adjusting stitch, please laypeople don't debug or maintaine.

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Http: www.globalsources.com

2007. 11. 03

GC6760

LOCKSTITCH DIRECT-DRIVE FAST SEAMER
WITH DROP FEED AND NEEDLE FEED



This machine may only be operated by adequately trained operators
only after having completely read and understood the instruction manual.

Parts are subject to changes in design without prior notice.



Certificate of the
International ISO 9001



Certificate of the
ISO 14001



Certificate of the
International CE



Certificate for
Ecolabelling Product



Certificate for Energy
Conservation Product

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