

TABLE

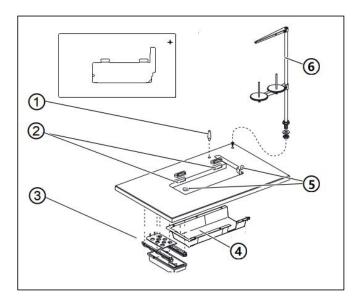
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1. **SPECIFICATIONS**

No.	Item	Application		
1	Model	867-1XXXXX	867-2XXXXX	
2	name	1-needle, unison-feed, lockstitch machine	2-needle, unison-feed, lockstitch machine	
3	Application	Medium- to heavy-weight materials, car seat, furniture		
4	4 Sewing speed 3,000 sti/min 2,500 sti.		2,500 sti/min	
5	Needle	137x17		
6	Size of thread	#30 to #5		
7	Stitch length	MAX 9 mm		
8	Foot lift	20 mm		
10	Sewing foot.stroke	1mm \sim 9 mm		
11	Hook	32mm/26mm		
12	Work space	335mm × 125 mm		
13	Basic function	Auto thread trimmer, Auto back tacking, pneumatic presser foot lifter		
14	Expand function	Double Sewing foot.stroke,double Stitch length,addition thread tension		
15	Machine head weight	68kg	70kg	

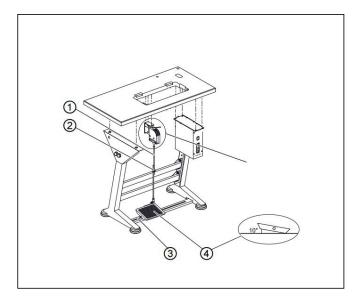
2. INSTALLATION

2-1. Tabletop Installation



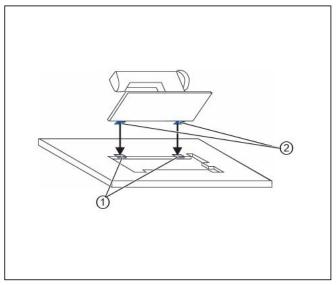
Tabletop Installation

- 1) Install the oil pan (4) and the drawer (3) under the tabletop.
- 2) Install the reel stand(6)into the hole Assemble the reel stand(6)with nut and washer.
- 3) Install the head support post (1) into the hole.
- 4) Install and fasten the lower hinge parts in the hinge slots(2).
- 5) Install the rubber corners into the corner slots(5).



Pedal and control installation

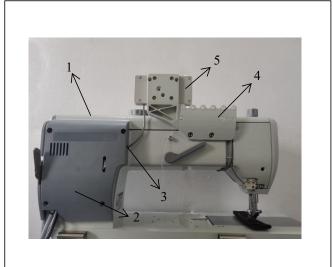
- 1) Install the pedal (4) in the appropriate position of the crossbar (3).
- 2) Install the pedal control (6) in place on the tabletop.
- 3) Unscrew screw (2).
- 4) Connect the pedal control (6) and the pedal with rod (1), adjust to the appropriate length and tighten the screw (2).
- 5) Install the controller (7) in place for the tabletop.



Installation of the machine head

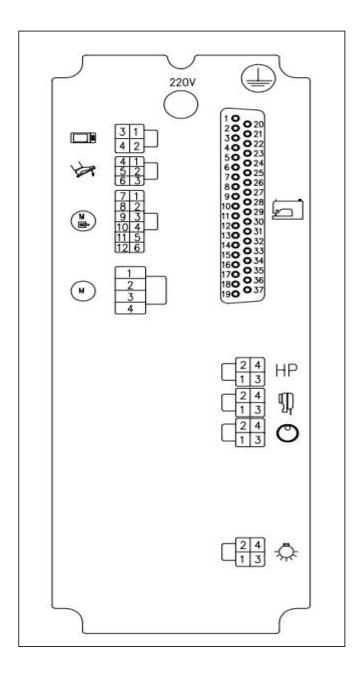
- 1) Tighten the hinges(2) to the machine head.
- 2) Insert the machine head from above at an angle of 45°.
- 3) Insert the hinges(2) into the hinge slots(1).
- 4) Fold down the machine head and insert it fully into the tabletop cutout.

2-2. Electrical Installation

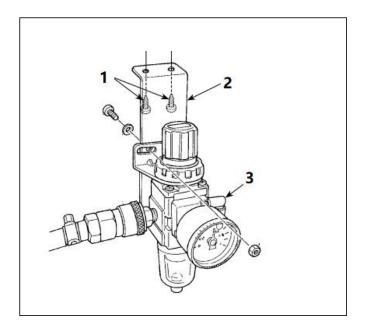


Installation of the control panel

- 1) Unscrew the machine cover(1)(2).
- 2) Tighten the control panel(5) on the control panel bracket(4).
- 3) Feed the connecting cable(6)alone with the other cables through the hole (3) in the tabletop.
- 4) Insert the all cable into the socket of the control.
- 5) Screw the machine cover(1)(2).

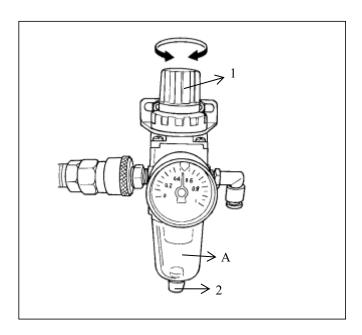


2-3. Pneumatic Installation



Pneumatic Installation

- 1) Attach mounting plate(2)on the undersurface of the table with accessory screws (1) supplied with the plate.
- 2) Connect ø6 air tube coming from the sewing machine to coupling (3).

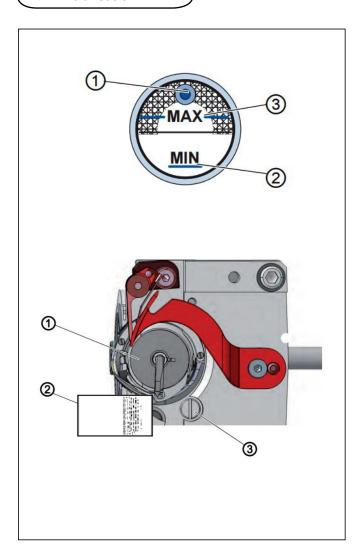


Adjusting the air pressure

- 1) The operating air pressure is 0.5 to 0.55 MPa. Adjust the air pressure using air pressure regulating knob (1) of the filter regulator.
- 2) In the case fluid accumulation is observed in A section of the filter regulator, turn drain cock (2) to drain the fluid.

3. PREPARATION OF THE SEWING MACHINE

3-1. Lubrication



Lubrication

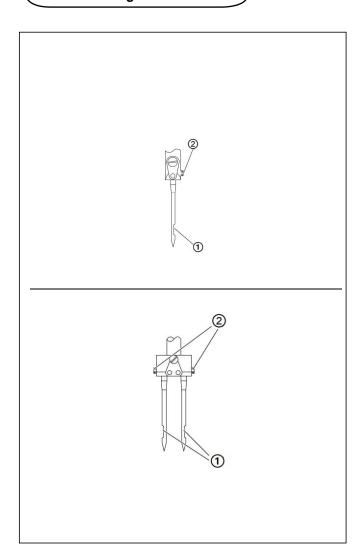
- 1) Pour oil through the refill opening(1)up to no more than 2mm blew the maximum level marking(3).
- 2) The oil level must be above the minimum level marking(2) and just below the maximum level marking(3).

the hook Lubrication

- 1) Turn the screw(3). Counterclockwise more oil is released. Clockwise less oil is released.
- 2) After the equipment runs at high speed for 10S, put the paper (2) near the periphery of the hook(1) for about 5 seconds. If there is an oil trace as in the left picture, it is the right amount.

When using a new sewing machine or a sewing machine that has not been used for a long time, please use a speed below 1,000 stitch / min, and confirm the amount of shuttle oil before use. When the spindle oil does not come, please turn the left to adjust the screw to let the spindle oil volume It does flow out. Then, please adjust to the right amount of oil.

3-2. Attaching the needle

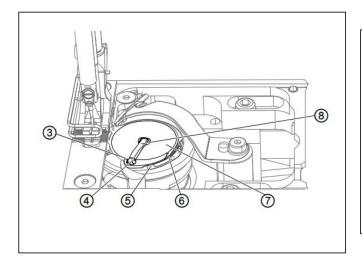


Attaching the needle

- 1) Turn the handwheel until the needle bar reaches the upper end position.
- 2) Loosen the screw(2).
- 3) Pull the needle out toward the bottom.
- 4) Insert the new needle.

After replacing the needle, confirm the gap between the needle and the blade point of hook. If there is no gap, the needle and the hook will be damaged.

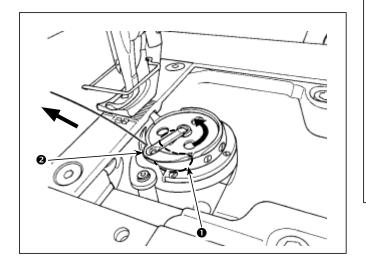
3-3. Attaching and removing the bobbin



Attaching and removing the bobbin

- 1) Pull up the bobbin case retainer(8).
- 2) Remove the empty bobbin(7).
- 3) Insert the fully bobbin.

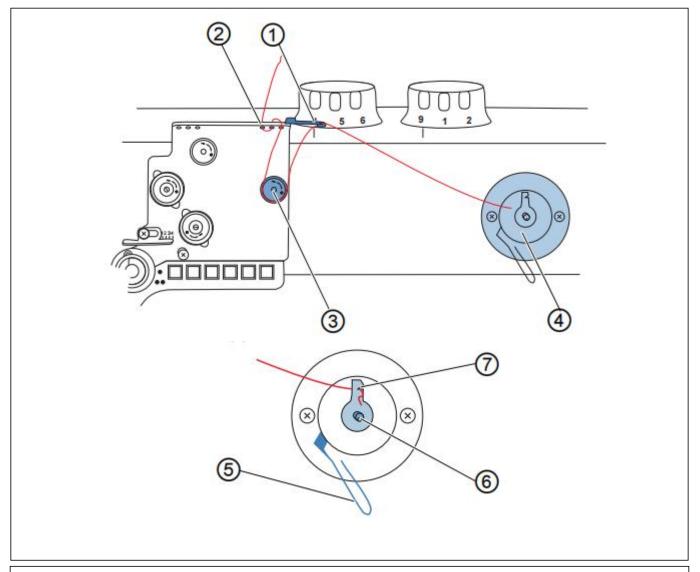
3-4. Threading the hook



Threading the hook

- 1) Pass the thread through thread path (1)in the inner hook and thread hole(2)in the lever, and slowly draw the thread. Now, the thread passes under the tension spring.
- 2) Make sure that the bobbin revolves in the direction of the arrow when you draw the thread.

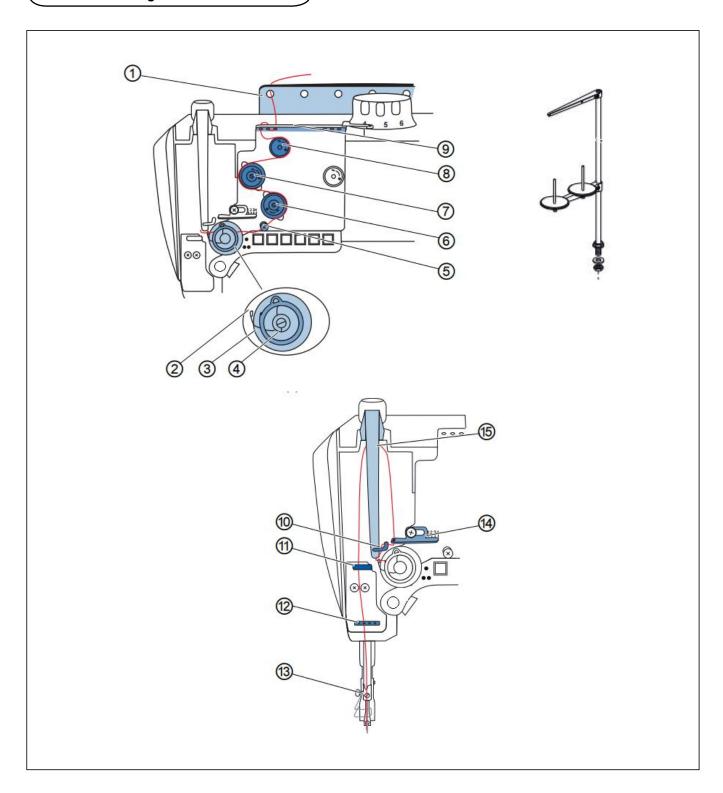
3-5. Winding a bobbin



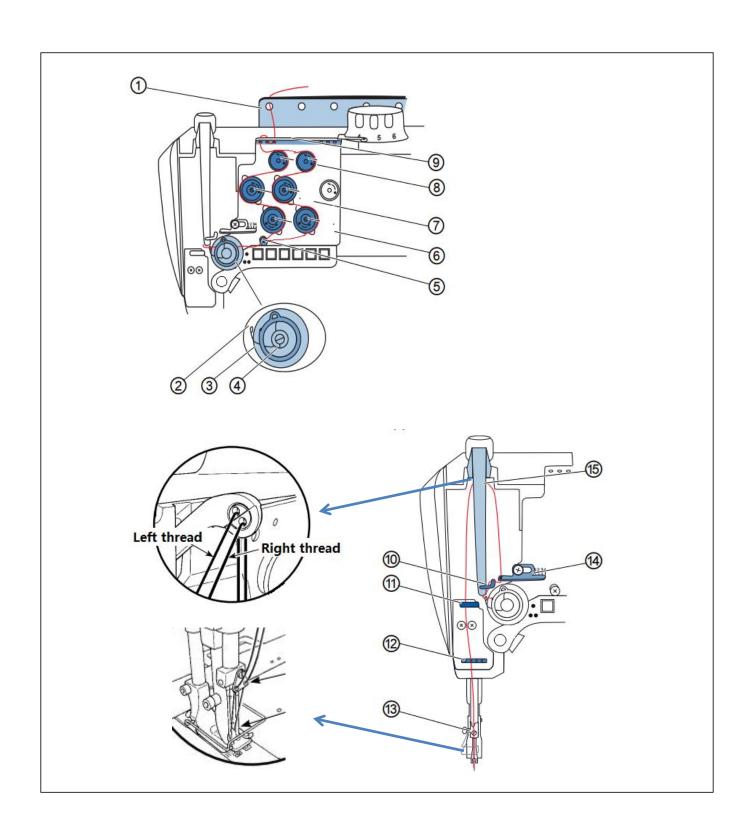
Winding a bobbin

- 1) Insert the hook thread through the 3 right holes of the thread guide(2).
- 2) Guide the hook thread counterclockwise around the tension(1).
- 3) Insert the hook thread through the 2 holes of the thread guide(1).
- 4) Guide the hook thread to the winder(4).
- 5) Clamp the hook thread behind the cutter(7) and tear off the loose end behind it.
- 6) Insert the bobbin on the bobbin shaft(6).
- 7) Pull the bobbin level(5) up.
- 8) Start the machine.
- 9) When the bobbin is full, the machine stops winder. the bobbin level (5) will back down.
- 10) Remove the bobbin form the bobbin shaft(6).
- 11) Tear off the thread behind the cutter(7).

3-6. Threading the machine head



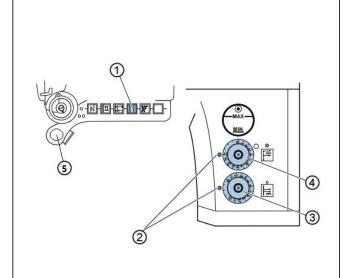
needle Threading the machine head Follow the red track as shown.

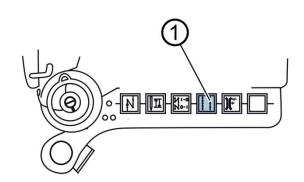


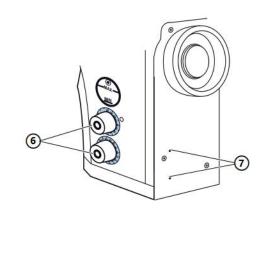
2 needle Threading the machine head1) Follow the red track as shown.

4. ADJUSTING THE SEWING MACHINE

4-1. Adjusting the stitch length







Adjusting the stitch length

1) Turn the adjusting wheel(3)(4),unit you reach the desired stitch length.

Manual bartack

1) The machine sews in reverse while the button(5) is pressed.

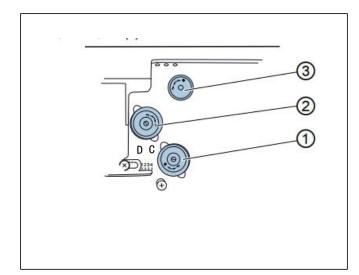
Stitch length switch

1) Press the button(1),switch the stitch length,when cur stitch length is long stitch the led on.

Blocking of the stitch length adjusting wheel

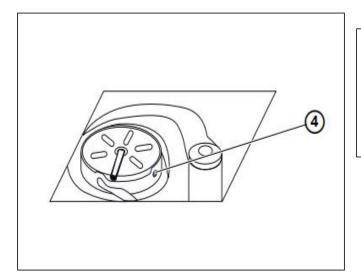
1) Insert a 3 mm hex key through the access holes(7) and adjust the blocking screws for the adjusting wheel.

4-2. Thread tension



Needle thread tension

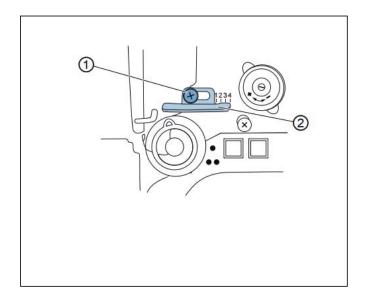
- 1) Turn the adjusting screw of the pre-tension(3) clockwise ,short initial thread length.
- 2) Turn the adjusting screw of the pre-tension(3) counterclockwise, longer the initial thread length.
- 3) Turn the adjusting screw of the add-tension(2) clockwise,increase addition thread tension.
- 4) Turn the adjusting screw of the add-tension(2) counterclockwise, reduce addition thread tension.
- 5) Turn the adjusting screw of the tension(1) clockwise,increase thread tension.
- 6) Turn the adjusting screw of the tension(1) counterclockwise, reduce thread tension.

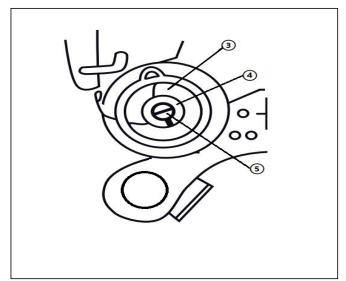


Hook thread tension

- 1) Turn the adjusting screw(4) clockwise to increase the hook thread tension.
- 2) Turn the adjusting screw(4) counterclockwise to reduce the hook thread tension.

4-3. Thread take-up spring





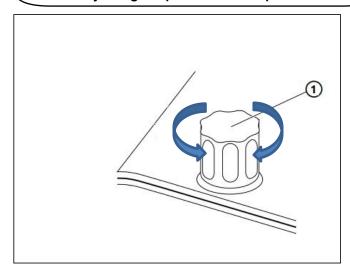
The needle thread regulator

- 1) Loosen the screw(1).
- 2) slide the needle thread regulator (2) to right to increase the tension.
- 3) slide the needle thread regulator(2) to left to increase the tension.

The needle thread regulator spring

- 1) Unscrew screw (5).
- 2) Rotate the block sheath (3).
- 3) Counterclockwise rotation, the spring travel becomes longer.
- 4) Clockwise rotation, and the spring travel becomes shorter.
- 5) Rotary tension wheel (4).
- 6) Counterclockwise rotation, the spring tension becomes greater.
- 7) Clockwise rotation, the spring tension becomes smaller.

4-4. Adjusting the pressure of the presser foot



Adjusting the pressure of the presser foot

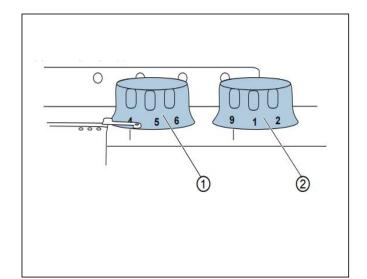
- 1) Turn the adjust wheel(1) clockwise to increase the pressure.
- 2) Turn the adjust wheel(1) counterclockwise to reduce the pressure.

Please adjusting the pressure of the presser foot to a appropriate value.

If pressure of the presser foot is too big, the cloth will tear.

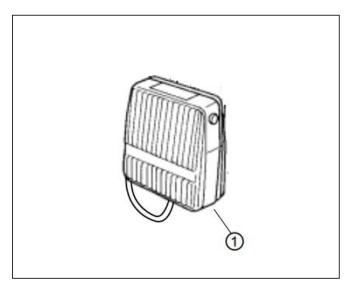
If pressure of the presser foot is too small, the cloth will slide.

4-5. Adjusting the sewing foot. stroke



Adjusting the sewing foot. stroke

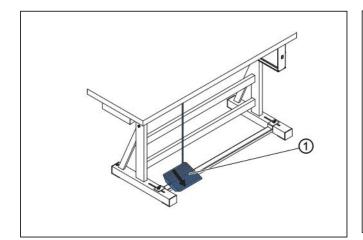
- 1) Turn the adjust wheel(1) clockwise to increase the sewing foot stroke.
- 2) Turn the adjust wheel(1) counterclockwise to Reduce the sewing foot stroke.
- 3) Turn the adjust wheel(2) clockwise to increase the second sewing foot stroke.
- 4) Turn the adjust wheel(2) counterclockwise to Reduce the second sewing foot stroke.



Switch the sewing foot stroke

1) Use the knee control switch (1) to open and close the second sewing foot stroke.

4-6. Sewing foot lift



- Foot lifting whit pedal

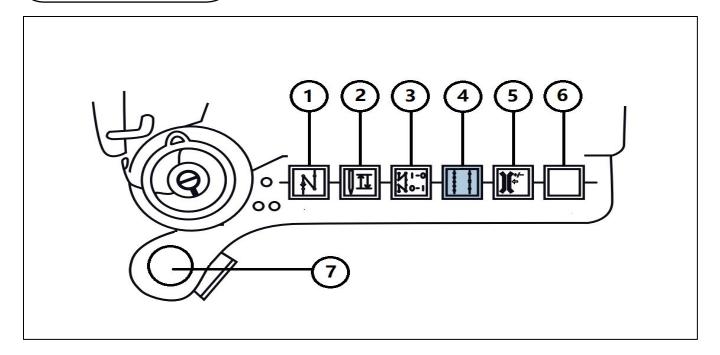
 1) Press the pedal(1) halfway back,the machine stops and foot lift.
- 2) Press the pedal(1) fully back,the machine cutting the thread,and foot lift.



- Locking the foot at top dead center

 1) Press the lever(1) down,the foot are locked at top dead center.
- 2) Press the lever(1) up,the foot lock is canceled.

4-7. Operation switches



(1)Manual sewing in reverse

The machine sews in reverse while the key is pressed.

(2)Needle up

When the key is pressed, the needle move to its upper-end position.

(3)Enable or off the start and end bartack

If the start/end bartacks are on, pressing the key, the next bartack will be off.

(4)Stitch length switch

When the key is pressed, switch cur stitch length.

(5)addition thread tension

When the key is pressed, addition thread tension is activated.

(6) threader (single-needle)

When the key is pressed, release thread tension.

(6)Seam middle guide(two-needle)

When the key is pressed, seam middle guide is activated.

(7)Convenient switch

The default is Manual sewing in reverse.

5. **TROUBLES**

Troubles	Causes	Corrective measures
1. Thread breakage (Thread frays or is worn out.)	 (1) Thread path, needle point, hook blade point or bobbin case resting groove on the throat plate has sharp edges or burrs. (2) Needle thread tension is too high. (3) Bobbin case opening lever provides an excessive clearance at the bobbin case. (4) Needle comes in contact with the blade point of hook. 	Remove the sharp edges or burrs on the blade point of hook using a fine emery paper. Buff up the bobbin case resting groove on the throat plate. Decrease the needle thread tension. Decrease the clearance provided between the bobbin case opening lever and the bobbin. Adjust the amount of oil in the hook properly. Increase the needle thread tension. Decrease the tension of the spring and increase the stroke of the spring.
2. Stitch skipping.	(2) Pressure of the presser foot is too low.	 Adjust time between the Needle and hook. Tighten the presser spring regulator. Check threading path. Replace the needle.
3. Loose stitches.	 (1) Needle thread and hook thread have not been threaded correctly. (2) Thread tension are not adjusted to the sewing material, the sewing material thickness or the thread used. (3) Bobbin fails to move smoothly. (4) Bobbin case opening lever provides too much clearance at the bobbin. 	 Thread the needle thread and hook thread correctly. Adjust the thread tension. Replace the bobbin or hook with a new one. Adjusting the bobbin case opening lever.

4.	Thread slips off the needle eyelet at the thread trimming end.	(1) Thread tension given by the pretension is too high.	0	Decrease the thread tension given by the pre-tension .
5.	Thread slips off the needle eyelet at seam beginning.	(1) Thread tension given by the pretension is too high.(2) Thread tension given by the main tension is too high.	0	Decrease the thread tension given by the pre-tension. Decrease the thread tension given by the main-tension.
6.	Thread is not cut sharply.	(1) The blades of moving knife and counter knife have been improperly adjusted.(2) The knives have blunt blades.(3) Bobbin thread tension is too low.	0 0	Adjusting the position of counter knife, knife pressure and clamp pressure. Replace the moving knife and counter knife with new ones, or correct the current ones. Increase the bobbin thread tension.

6. PARTS LISTS

