

ZJ8800A

高速 平缝 机

HIGH-SPEED LOCKSTITCH SEWING MACHINE

使 用 说 明零 件 手 册

OPERATION MANUAL PARTS BOOK

中国·中捷缝纫机股份有限公司

INSTRUCTION MANUAL

To get the most out of the many functions of this machine and operate it in safety, it is necessary to use this machine correctly.

Please read this Instruction Manual carefully before use. We hope you will enjoy the use of your machine for a long time.

Please remember to keep this manual in a safe place.

- 1. Observe the basic safety measures, including, but not limited to the following ones, whenever you use the machine.
- Read all the instructions, including, but not limited to this Instruction Manual before you use the machine, In addition, keep this Instruction Manual so that you may read it at anytime when necessary.
- Use the machine after it has been ascertained that it conforms with safety rules/standards valid in your country.
- 4. All safety devices must be in position when the machine is ready for work or in operation. The operation without the specified safety devices is not allowed.
- 5. This machine shall be operated by appropriately-trained operators.
- 6. For your personal protection, we recommend that you wear safety glasses.
- For the following, turn off the power switch of disconnect the power plug of the machine from the receptacle.
 - 7-1 For threading needle (s) and replacing bobbin.
 - 7-2 For replacing part (s) of needle, presser foot, throat plate, feed dog, cloth guide etc.
 - 7-3 For repair work,
 - 7-4 When leaving the working place of when the working place is unattended.
- If you should allow oil, grease, etc. used with the machine and devices to come in contact with your eyes or skin or swallow any of such liquid by mistake, immediately wash the contacted areas and consult a medical doctor.
- Tampering with the live parts and devices. regardless of whether the machine is powered, is prohibited.
- 10. Repairing, remodeling and adjustment works must only be done by appropriately trained technicians or specially skilled personnel.
- 11. General maintenance and inspection works have to be done by appropriately trained personnel.
- 12. Repair and maintenance works of electrical components shall be conducted by qualified electric technicians or under the audit and guidance of specially skilled personnel.
- Whenever your find a failure of any of electrical components, immediately stop the machine.
- 13. Periodically clean the machine throughout the period of use.

- 14. Grounding the machine is always necessary fot the normal operation of the machine. The machine has to be operated in an enviorment that is free from strong noise sources such as high-frequency welder.
- 15. An appropriate power plug has to be attached to the machine by electric technicians, Power plug has to be connected to a grounded receptacle.
- 16. The machine is only allowed to be used for the purpose intended. Other used are not allowed.
- 17. Remodel or modify the machine in accordance with the safety rules/standards while taking all the effective safety measures. We assumes no responsibility for damage caused by remodeling or modification of the machine.
- 18. Warning hints are marked with the two shown symbols.



Danger of injury to operator or service staff



Items requiring special attention

FOR SAFE OPERATION



 To avoid electrical shock hazards, neither open the cover of the electrical box for the motor nor touch the components mounted inside the electrical box.



- To avoid personal injury, never operate the machine with any of the belt cover, finger guard of safety davices removed.
- To prevent possible personal injuries caused by being caught in the machine. keep your fingers, head and clothes away from the handwheel. V belt and the motor while the machine is in operation. In addition, place nothing around them.
- 3. To avoid personal injury, never put your hand under the needle when you turn "ON" the power switch or operate the machine.
- 4. To avoid personal injury, never put your fingers into the thread take-up cover while the machine is in operation.
- 5. The hook rotates at a high speed while the machine is in operation. To prevent possible injury to hands, be sure to keep your hands away from the vicinity of the hook during operation. In addition, be sure to turn OFF the power to the machine when replacing the bobbin.
- To avoid possible personal injuries, be careful not to allow your fingers in the machine when tiling/raising the machine head.
- 7. To avoid possible accidents because of abrupt start of the machine, turn OFF the power to the machine when tilting the machine head or removing the belt cover and the V belt.
- 8. If your machine is equipped with a serve-motor, the motor does not produce noise while the machine is at rest. To avoid possible accidents due to abrupt start of the machine, be sure to turn OFF the power to the machine.
- 9. To avoid electrical shock hazards, never operate the sewing machine with the ground wire for the power supply removed.
- 10. To prevent possible accidents because of electric shock or damaged electrical component (s), turn OFF the power switch in prior to the connectrion/disconnecti on of the power plug.

CONTENTS

BEFORE OPERATION 16
1. INSTALLATION 16
2. LUBRICTION 17
3. ADJUSTING THE AMOUNT OF OIL (OIL SPLASHES) IN THE HOOK $\cdots\cdots 17$
4. ATTACHING THE NEEDLE 19
5. SETTING THE BOBBIN INTO THE BOBBIN CASE19
6. THREADING THE MACHINE HEAD
7. ADJUSTING THE STITCH LENGTH
8. THREAD TENSION 21
9. THREA TAKE-UP SPRING······21
10. HAND LIFTER
11. PRESSER FOOT PRESSURE
12. ADJUSTING THE FEED TIMING
13. HEIGHT OF THE FOOT DOG23
14. NEEDLE-TO-HOOK RELATIONSHIP23
15. ADJUSTING THE HEIGHT OF THE PRESSER FOOT24
16. ADJUSTING THE THREAD TAKE-UP STROKE24
17. INSTALLING THE BELT COVER24
18. ADJUSTING THE HEIGHT OF THE KNEE LIFTER25
19. WINDING THE BOBBIN 26
20. SPECIFICATIONS

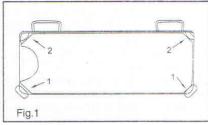
Attention required before operation

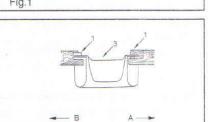
Attention:

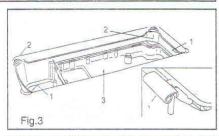
To avoid machine damaging or some accident, please do remember:

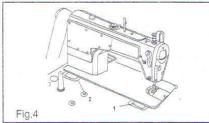
- 1. before using the machine for the first time, please clean it thoroughly, get rid of all the dust and make sufficient lubrication.
- make sure that the voltage is right, and that plug and power source are correctly connected.
- 3.if the voltage in your country is different from the voltage of this machine, please do not use it.
- 4...make sure the running direction of the motor wheel is right.
- 5.during the first month when using this machine, you should run it in the normal speed or lower speed.

Fixing of the machine









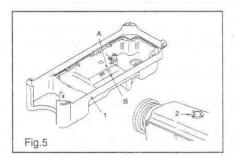
1.fixing oil tray

Fig.2

- 1) oil tray should be put at the four corners of the slot in table plate.
- 2) Fix two arm cushion"1"to the"A"side of oil tray"3"(facing the operator). Fix the two stand bases"2"to the "B"side of oil tray"3"(hinge side), then fix the oil tray"3"(picture1,picture2)
- 3) Plug the hinge"1"into hole of bed plate, put the machine head on the table plate, hinge at the sink place and then fix the machine head on cushions of the four oil tray corners (picture 3, picture 4).

attention:in the packing box ,the rubber cushions fixed at the four corner of oil tray is not for any other usage,just for packaging.

2. LUBRICATION (Fig., 5,6)





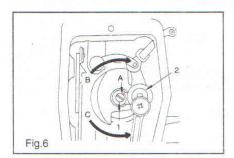
WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine.

1. Information on Iubrication

- 1) Fill oil pan ① with sewing-machine oil (No.10 white oil) up to HIGH mark A.
- When the oil level lowers below LOW mark B, refill the oil pan with the specified oil.
- When you operate the machine after lubrication, you will see splashing oil through oil singht window ② if the lubrication is adequate.
- 4) Note that the amount of the splashing oil is unrelated to the amount of the lubricating oil.

(Precaution) When you first operate your machine after setup or after an extended period of disuse, run your machine at 2,000 s.p.m. To 2,500 s.p.m for about 10 minuter for the purpose of break-in.





WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine.

Adjusting the amount of oil supplied to the face plate parts.

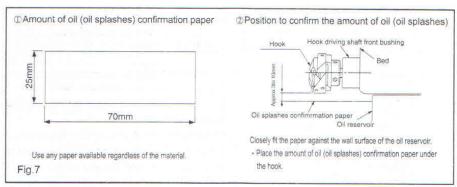
- Adjust the amount of oil supplied to the thread take-up and needle bar crank ② by turning adjust pin ① .
- 2) The minimum amount of oil is reached when marker dot A is brought close to needle bar crank ② by turning the adjust pin in drection B.
- 3) The maximum amount of oil is reached when marker dot A is brought to the position just opposite from the needle bar crank by turning the adjust pin in direction C.

3. ADJUSTING THE AMOUNT OF OIL (SPLASHES IN THE HOOK (Fig,7.8.9)



WARNING:

Be extremely careful about the operation of the machine since the amount of oil has to be checked by turning the hook at a high speed.

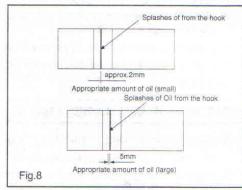


*When carrying out the procedure described below in 2), remove the slide plate and take extreme caution not to allow your fingers to come in contact with the hook.

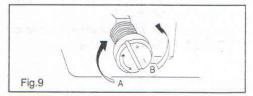
(Cautions 1) If the machine has not been sufficiently warmed up for operation, make the machine run idle for approximately three minutes. (Moderate intermittent operation)

- Place the amount of oil (oil splashes) confirmation paper under the hook while the sewing machine is in operation
- Confirm that the height of the oil surface in the oil reservoir is within the range between "HIGH" and "LOW".
- Confirmation of the amount of oil should be completed in five seconds. (Check the period of time with a watch)

Sample showing the appropriate amount of oil

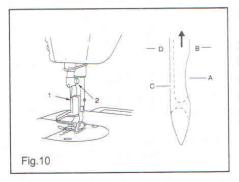


Adjusting the amount of oil (oil splashes) in the hook



- 1) The amount of oil shown is the samples on the left should be finely adjusted in accordance with sewing processec. Be careful not to excessively increase/decrease the amount of oil in the hook. (If the amount of oil is too small, the hook will be seized (the hook will be hot). If the amount of oil is too much, the sewing product may be stained with oil.)
- Adjust the amount of oil in the hook so that the oil amount (oil splashes) should not change while checking the oil amount three time (on the three sheets of paper).
- Turning the oil amount adjustment screw mounted on the hook driving shaft front bushing in the "+" direction (in direction A) will increase the amount of oil (oil splashes) in the hook, or in the "-" direction (in direction B) will decrease it.
- 2) After the amount of oil in the hook has been properly adjusted with the oil amount adjustment screw, make the sewing machine run idle fot approximately 30 seconds to check the amount of oil (oil splashes) in the hook.

4. ATTACHING THE NEEDLE (Fig.10)



WARNING:



Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine.

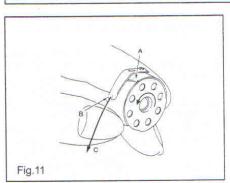
Follow the procedure described below to attach the needle, after confirming that the motor has come to a complete stop.

A needle of DP x 5 should be used, Select a proper needle size according to the count of thread and the type of material used.

- Turn the handwheel until the needle bar reaches the highest point of its stroke.
- Loosen screw②, and hold needle①with its indented part A facing exactly to the right in direction B.
- Insert the needle fully into the hole in the needle bar in the direction of the arrow until the end of hole is reached.
- 4) Securely tighten screw 2.
- 5) Check that long groove C of the needle is facing exactly to the left in direction D.
- 1. Notes:The standard needle for leather is DB*5 (16-23#);

Another standard needle for heavy material 5 is DB*5 (16-18#) the standard needle for light material is DB*1 (9-18#)

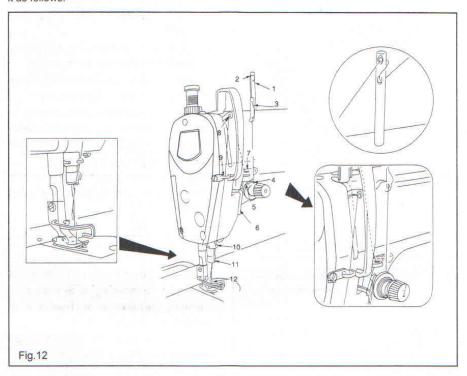
5. SETTING THE BOBBIN INTO THE BOBBIN CASE (Fig.11)



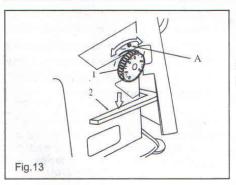
- 1) Install the bobbin in the bobbin case so that the thread wound direction is counterclockwise.
- Pass the thread through thread slit A, and pull the thread in direction B. By so doing, the thread will pass under the tension spring and come out from notch B.
- 3) Check that the bobbin rotates in the direction of the arrow when thread C is pulled.

6. THREADING THE MACHINE HEAD (Fig.12)

The needle bar should be the highest, Then draw a thread end from the thread holder and thread it as follows:

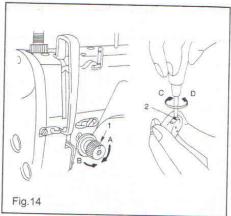


7. ADJUSTING THE STITCH LENGTH (Fig.13)



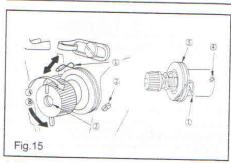
- Turn stitch length dial ①in the direction of the arrow, and align the desired number to marker dot A on the machine arm.
- 2) The dial calibration is in millimeters.
- 3) When you want to decrease the stitch length, turn stitch length dial while pressing feed lever in the direction of the arrow.

8. THREAD TENSION (Fig.14)



- 1. Adjusting the needle thread tension
- Adjust the needle thread tension using tension adjust nut ① according to the sewing specifications.
- As you turn nut ① clockwise (in direction A). the needle thread tension will increase.
- As you turn nut © counterclockwise (in direction B), the tension will decrease.
- 2. Adjusting the bobbin thread tension
- As you turn tension adjust screw@clockwise (in direction C), the bobbin thread tension will increase.
- As you turn screw@counterclockwise (in Direction D), the bobbin thread tension will decrease.

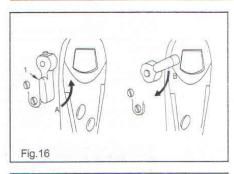
9. THREAD TAKE-UP SPRING (Fig.15)



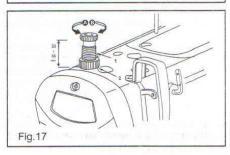
- 1. The width of take-up spring is 8-10mm. if the sewing material is thin material (short needle width), pls lighten the take-up spring tension and wide the sway of it. Otherwise, pls do to opposition.
- 2. Changing the stroke of thread take-up spring ①.
- 1) Loosen set screw 2.
- As you turn tension post © clockwise (in sirection A), the stroke of the thread take-up spring will be increased.

- As you turn the knob counterclockwise (in direction B), the stroke will be decreased.
- Changing the pressure of thead take-up spring ①.
- Loosen set screw②, and remove thread tension①.
- 2) Loosen set screw 4.
- As you turn tension post clockwise (in direction A), the pressure will be increased.
- As you turn the post counterclockwise (in direction B), the pressure will be decreased.
- Ususlly, upon the machine coming out, all the take-up spring has been adjusted well, Only while sew special material or special thread, it need to be adjusted again.

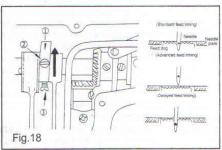
10. HAND LIFTER (Fig.16)



11. PRESSER FOOT PRESSURE (Fig.17)



12. ADJUSTING THE FEED TIMING (Fig.18)



- 4) To delay the feed timing in order to increase stitch tightness, move the feed eccentric cam in the opposite direction from the arrow.
- if feed eccentric cam adjust too much, it will cause the broken of needle.

- 1) To stop the machine with its presser foot up, turn hand lifter lever ①in direction A.
- 2) The presser foot will go up about 5.5mm and
 - The presser foot will go back to its original position when hand lifter lever is turned down in direction B.
- Using the knee lifter, you can get the standard presser foot lift of about 10mm and a maximum lift of about 13mm.

WARNING:



Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine

- Loosen nut②. As you turn presser spring regulator①clockwise (in direction A), the presser foot pressure will be increased.
- As your turn the presser spring regulator counterclock-wise (in direction B), the pressure will be decreased.
- 3) After adjustment, tighten nut 2.
- 4) For general fabrics, the standard height of the presser spring regulator is 33 to 36mm (5 kg).

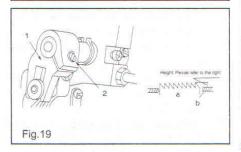
WARNING:



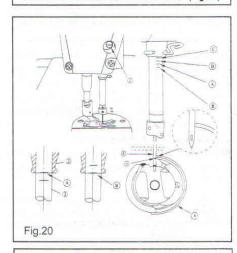
Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine.

- Loosen screws 2 and 3 in feed eccentric cam 3. Move the feed eccentric cam in the direction of the arrow or opposite direction of the arrow, and firmly tighten the screws.
- 2) For the standard adjustment, adjust so that the top surface of feed dog and the top end of needle eyelet are flush with top surface of throat plate when the feed dog descends below the throat plate.
- To advance the feed timing in order to prevent uneven material feed, move the feed eccentric cam in the direction of the arrow.

13. HEIGHT OF THE FEED DOG (Fig.19)



14. NEEDLE-TO-HOOK RELATIONSHIP (Fig.20)



WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing

1. Adjust the timing between the needle and the hook as follows.

Turn the handwheel to bright the needle bar down to the lowest point of its stroke, and loosen set screw① (Adjusting the needle bar height)

2) Locate the needle height

 while using DB needle, aligh marker line A with the bottom end of needle bar lower bushing 3, then tighten set screw 1.

CAUTION:

Be careful not to move the feed eccentric cam too far, or else needle breakage may result.

WARNING:



Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine.

- 1) The feed dog is factory-adjusted so that it just out from the throat plate surface 1.15mm to 1.25mm.
- 2) To adjust the height of the feed dog:
 - ①Loosen screw②of crank①
 - 2 Move the feed bar up of down to make adjustment.

③Securely tighten screw②.

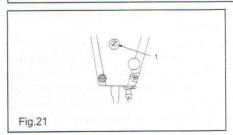
(Caution) If the clamping pressure is insufficient, the forked portion will wear out.

- a, Feed dog b. Needle plate
- 3) The feed dog for leather heavy material must be adjusted 1.15-1.25mm higher than needle plate. The feed dog for mid-heavy material must be 0.8-0.9mm higher than needle plate, while sew thin material, the suitable height is 0.7-0.8mm.
- b. While using DA needle, align mark line C with the bottom end of needle bar lower bushing 3, then tighten set screw 1.
- 3) Locate the hook position.
- a. While using DB needle, loosen the two hook set screws, turn the hand wheel, and align market line B on ascending needle bar 2 with the bottom end of needle bar lower bushing 3.
- b. While using DA needle, loosen the two hook set screw, turn the hand wheel, and align marker line D on asending needle bar 2 with the bottom end of needle bar lower bushing 3.
- 4) After making the adjustments mentioned in the above steps, align hook blade point 3 with the center of needle 4 . Provide a clearance of 0.06mm to 0.15mm (reference value) between the needle and the hook, then securely tighten setscrews in the hook.

(Caution)1. If the clearance between the blade point of hook and the needle is smaller than the specified value, the blade point of hook will be damaged. If the clearance is larger, stitch skip-ping will result.

2. Use a hook of the same part No. when replacing your hook with a new one.

15. ADJUSTING THE HEIGHT OF THE PRESSER FOOT (Fig.21)

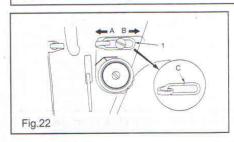


WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine.

- Loosen setscrew ①. And adjust the presser foot height and the angle of the presser foot.
- 2) After adjustment, securely tighten the set screw

16. ADJUSTING THE THREAD TAKE-UP STROKE (Fig.22)



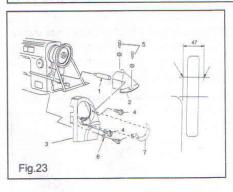
WARNING:

Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing machine

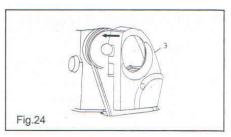
- When sewing heavy-weight materials, move thread guide to the left in direction A to increase the length of thread pulled out by the thread take-up.
- 2) When sewing light-weight materials, move thread guide

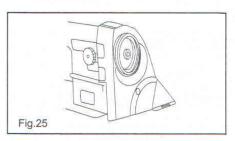
 to the right in direction B to decrease the length of thread pulled out by the thread take-up.
- Normally, thread guide ⊕ is positioned in a way that marker line C is aligned with the center of the screw.

17. INSTALLING THE BELT COVER (Fig.23, 24, 25)



- 1. Installation procedure
- 1) Drill four guiding holes A and B for wooden screws in the table.
- 2) Install belt cover support in the taped hole in arm.
- 3) Pass the handwheel through the hole in belt cover A ③, then set the handwheel on the arm. At this time, you can smoothly install the handwheel diagonally from the rear of the handwheel by tilting belt cover A ③ as illustrated in the figure.
- Place belt cover B②on guiding holes A and B.
- 5) Fix belt cover A③ on the arm using screws ⑥, ⑤ and washer⑥, At this time, tighten screw④ with a tightening torque of





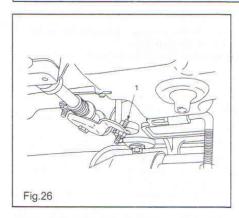
of 30 kgf/cm and screw swith a tightening torque of 25 kgf/cm. If you tighten further these screws, the securing state of the belt cover will not change.

6) Move belt cover B@backward E until the rubber section of belt cover B@comes in contact with belt cover A 3. Then, further move the belt cover B in the same direction by 0.5 to 1mm. Now, fix the belt cover B in position using wooden screw and washer.

Warnings:1) For safty's needs, belt cover should be installed.

7) Fit cat to the belt cover A.

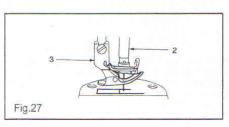
18. ADJUSTING THE HEIGHT OF THE KNEE LIFTER (Fig.26, 27)



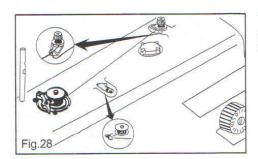


Turn OFF the power before starting the work so as to prevent accidents caused by abrupt start to the sewing

- 1. The standard height of the presser foot lifted using the knee lifter is 10mm.
- 2) You can adjust the presser foot lift up to 13mm using knee lifter adjust screw ①.
- 3) When you have adjusted the presser foot lift to over 10mm, be sure that the bottom end of needle bar@in its lowest position does not hit presser foot 3.



19. Winding the bobbin



Thread the bobbin winder and wind the bobbin thread onto the bobbin as illustrated in the figure 28.

20. SPECIFICATIONS

Application		For Light medium- heavy materials	For heavy materials	For Leather materials
Max Sewing Speed		5500 RPM	3000 RPM	3000 RPM
Max Stitch Length		5 mm	8 mm	8 mm
Lifting height of presser foot	Hand Lifter	6mm (MAX.)	6mm (MAX.)	8mm (MAX.)
	Knee Lifter	13mm (MAX.)	13mm (MAX.)	13mm (MAX.)
Needle		DBX1 9#~18#	DPX5 16#~18#	DPX5 20#~23#
Lubrication oil		White oil No.10		
Motor power		370W		

^{1.} While Sewing Light materials, the machine need to change the presser foot, needle bar and feed dog and do some adjustment.

^{2.} Machine with "R" added is using roller presser foot.