



MAUSER
S P E Z I A L

MH-2645

Single Needle
Top, Bottom and Needle Feed
Lockstitch Sewing Machine



Instruction Manual

Authorized Distributor of Sales and Service:

www.collierequipment.com

Collier Equipment
100 Mill Creek Circle/Po Box 175
Lexington, Alabama 35648 USA
Phone: (256)229-6595 Fax: (256)229-6779



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1 Safety

1.01 Order

This machine is formulated in accordance with the European regulations given in the declaration of conformity and the manufacturer's declaration.

In addition to this manual, you should also comply with the generally valid laws and other regulations of the country where the operator is located, as well as applicable environmental protection regulations.

Strictly abide by the effective regional regulations of the local occupational accident social insurance association or other supervisory agencies.

1.02 General Safety Instructions

- The operator must understand the instruction manual and be instructed !
- Be sure to read the manual of the motor manufacturer before operating the machine !
- Note the Danger Tips marked on the machine !
- It is only allowed to operate the machine in accordance with the regulations, and it is prohibited to operate the machine without relevant safety protection devices; at the same time, all relevant safety regulations must be observed.
- When changing sewing tools, threading, leaving the workplace, and maintaining, the main switch must be turned off or the power plug must be unplugged !
- Only appropriately trained personnel can do daily maintenance.
- Only professionals and appropriately trained personnel can do repairs and special maintenance.
- Only qualified professionals can operate electrical equipment.
- Prohibit the operation of live parts and devices ! Special cases are handled in accordance with EN 50110.
- When refitting or changing the equipment, all corresponding safety regulations must be observed !
- Only spare parts approved by us can be used on repairing! We hereby expressly declare that the spare parts and accessories not supplied by our factory will not be tested and approved by us. Installation and use of similar products may adversely affect the design properties of the machine. We are not responsible for damage caused by the use of non-original parts.

1.03 Safety Symbols



Beware of danger !



Beware of electric shock !



Beware of sharp objects !



Beware of being crushed !



Warning

Working without finger guards and guards is prohibited. Turn off the power before threading the thread, replacing the bobbin and needle, and cleaning the machine.



1.04 User instructions

- The Operating Manual is a part of the machine and must ensure that operators are always accessible.
- Before first time operating, one must read the Operating Manual.
- Operators and professionals must be instructed on machine protection devices and safe working methods.
- Users must ensure that the machine is operated only under normal conditions.
- Users must not remove or invalid any safety devices.
- Only those who are authorized can operate the machine.

Please ask the relevant sales organization for detailed information.

1.05 Operators and Professionals

1.05.01 Operators

Operators refer to the person responsible for machine setup, operation, cleaning and sewing area troubleshooting.

Operators must observe the following points:

- Always follow the safety precautions in the instruction manual !
- It is prohibited to use any working methods that affect the safety of the machine !
- Wear close-fitting clothing, no jewelry !
- Ensure that only authorized personnel stay in the danger area of the machine !
- Immediately notify the person in charge of any changes that affect the safety of the machine !

1.05.02 Professionals

Professionals refer to those who have received professional training in electrical or electronic equipment and mechanical devices and are responsible for the lubrication, maintenance, repair and calibration of the machine.

Professionals must observe the following points:

- Always follow the safety precautions in the instruction manual !
- Please turn off the power and prevent it from reconnection before calibrating or repairing !
- Start calibration or repair after the power indicator on the electric control box goes out.
- Prohibit the operation of live parts and devices! Special cases are handled in accordance with EN 50110.
- The safety equipment cannot be removed or deactivated unless there is a need and must be reinstalled and restarted after the repair or maintenance !

1.06 Danger Warning



During operation, 1 meter working area must be set aside around the machine for personnel to access the machine at any time.



It is prohibited to reach into the needle area during sewing in case of causing casualties !

It is prohibited to place objects on the workbench during the operation in case of causing casualties by being caught or thrown !

All warning symbols must be clear and must not be removed !

Any missing or damaged labels must be replaced immediately !



2 Performance Description

2.01 Features

MH2645 is a Lock Stitch Flatbed Sewing Machine.

General Technical Features

- Extra large vertical hook(XXL)
- Feeding: lower feeding, needle feeding and alternate presser foot upper feeding
- Maximum lifting height of pneumatic sewing presser foot: 20mm
- Electromagnetically operated wire cutter, the remaining wire length is 15mm
- Snap-in safety connector, preventing misadjustment and damage to the hook caused by wire jam
- Automatic oil rope lubrication system of machine and hook, equipped with vertical oil level indicator
- Built-in winding device

2.02 Use

MH2645 is suitable for sewing from thin materials to medium thickness fabrics.

Use needles with the following strengths according to the sewing material:

- From thin material to medium thickness sewing material: 90-110Nm
- Medium thickness material: 110-140Nm
- Thick material: 140-180Nm

The machine can only process dry materials.

Sewing material should not contain hard objects.

The machine is only used for industrial purposes.

The manufacturer is not responsible for damage caused by improper use.

2.03 Technical Data

Noise Level

Workplace related emission value according to DIN EN ISO 10821:

LC = 78 dB(A) $\pm$ 1.07 dB(A)

Test conditions: Stitch length: 7.2mm

Sewing presser foot stroke: 1.5 mm

Rotating speed: 1900rpm

Sewing material: 4 times material thickness GI DIN 23328

MH2645

Stitch type:	Lock stitch 301
Hook type:	Extra large vertical hook(XXL)
Number of needles:	1
Needle specification:	134-35
Maximum needle strength[Nm]:	180
Max thread thickness:	80/3-10/3
Forward and reverse stitch length[mm]:	9/9
Adjustable stitch length:	1
Maximum sewing speed[rpm]:	3000
Sewing speed when the stroke exceeds 3mm[rpm]:	2400
Sewing speed when the stroke exceeds 5mm [rpm]:	2000
Sewing speed when the stroke exceeds 6.5mm [rpm]:	1800
Maximum pneumatic presser foot height[mm]:	20



Maximum sewing presser foot stroke[mm]:	9
Normal operating pressure[bar]:	6
Air consumption[NL]:	0.7
Length, Width and Height[mm]:	790/220/460
Weight[kg]:	62
Rated voltage[V/Hz]:	220/60
Rated power[KVA]:	Depends on the size of the drive unit

3 Scrapped Machine Disposal

- Users are responsible for the scrapped machine disposal in accordance with the regulations.
- The materials used in the machine include steel. Aluminum, brass and plastics. Electrical equipment is composed of plastic and copper.
- Dispose of scrapped machines in accordance with the local environmental protection regulations. Entrust professional companies if necessary.



Pay attention to the special disposal according to the local environmental regulations of waste parts with lubricating oil !

4 Shipping, Packaging and Inventory

4.01 Ship to Customer Factory

The machine is shipped after being fully packaged.

4.02 Transportation within the Customer' s Factory

Manufacturer is not responsible for any damages caused during the transportation within the customer' s factory or to a place of use.

Pay attention that the machine can only be transported upright.

4.03 Packaging Material Disposal

The packaging of the machine includes paper, cartons and VCE fibers. Customers are responsible for packaging waste disposal in accordance with regulations.

4.04 Store

When the machine is not in use, it should be dust-proof and moisture-proof and can be stored for up to 6 months.

If the machine is stored for a long time, the parts need to be treated with anti-corrosion treatment such as oil film.

5 Symbol Interpretation

In this manual, the work to be performed or important information is emphasized by symbols with the following meanings



Important hints



Set up correctly



Tips, information



Maintenance, repair and assembly
(Only by professionals)



Operating steps
(Sewing and installation)



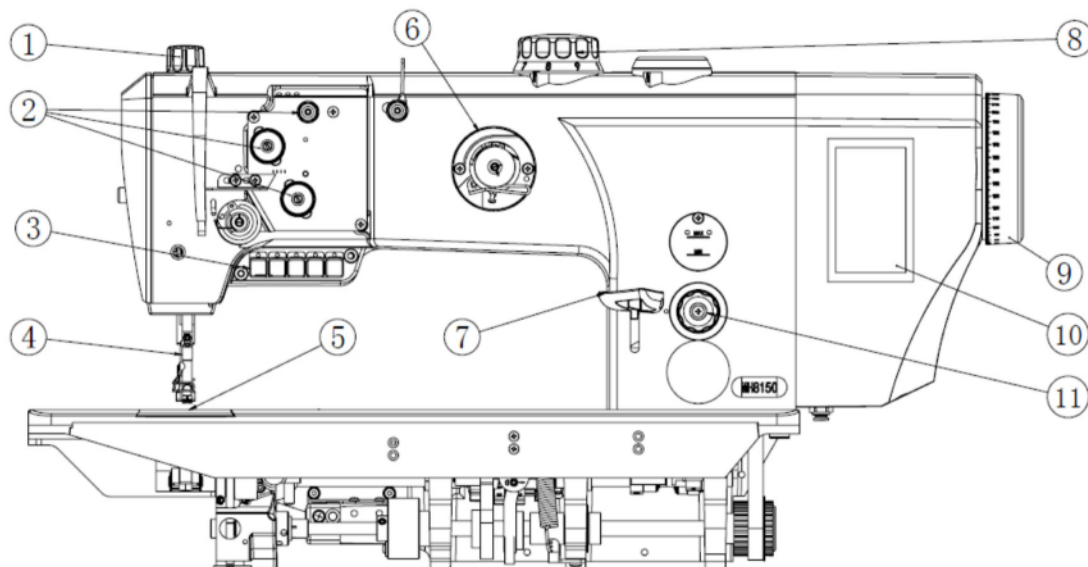
Faults caused by improper setting



6

Device Description

Full view



- | | |
|--|--|
| (1) — sewing presser foot pressure adjustment knob | (7) — manual reverse stitching wrench |
| (2) — thread tensioner | (8) — sewing presser foot stroke adjustment knob |
| (3) — head press keyboard | (9) — hand wheel |
| (4) — needle bar | (10) — operation control panel |
| (5) — hook (below the needle plate) | (11) — stitch length adjusting knob |
| (6) — bobbin winder | |

7

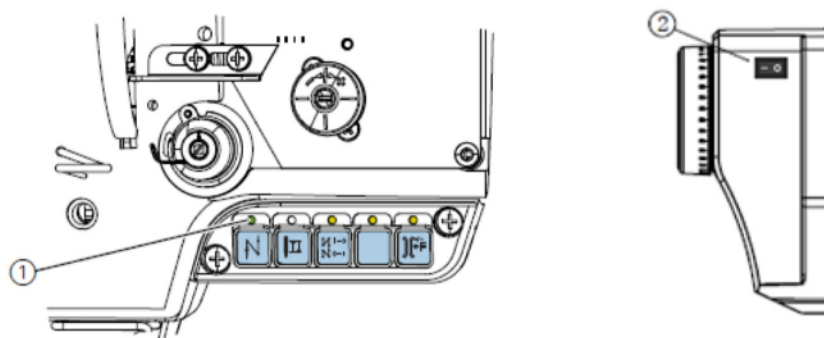
Operating Instructions

7.01

Power On and Off

The main switch (2) on the back of the integrated electric control controls the power supply

【As the following picture shows】



(1) — indicator light on the nose keyboard

(2) — power main switch

Power On:

1. Press the main switch (2) to the "I" position, the indicator light (1) turns on.

Power Off:

1. Press the main switch (2) to the "O" position, the indicator light (1) go out.

7.02

Needle Installation and Change

The needle tip and moving parts pose a danger of injury.



Power off before changing the needle. Do not touch the needle tip.

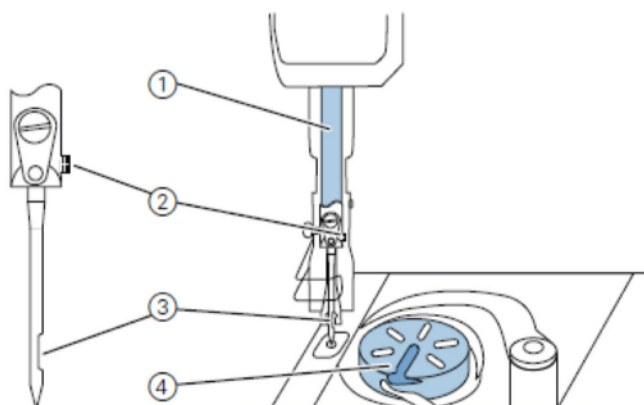


After changing the needle, check the distance between the needle and the tip of the hook.
Incorrect distance can cause damage to the machine, broken needles or broken sutures.



Incorrect distance to the hook tip will cause following faults:
After changing a thinner needle: 1. Stitch skipping 2. Broken thread.
After changing a thicker needle: 1. Broken hook tip 2. broken needle.

As the picture shows: Install and change the needle



(1) — needle bar (2) — setscrew (3) — groove (4) — hook



1. Turn the hand wheel till the needle bar reach the top.
2. Loosen the setscrew (2).
3. Pull down the needle.
4. Replace a new needle.
5. Turn the groove (3) toward the hook (4).
6. Tighten the setscrew (2).

7.03

Threading



Needle tip and moving parts pose a risk of injury.
Power off before threading.

As the picture shows: Pay-off bracket

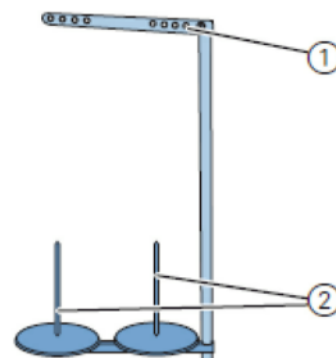
- (1) — thread guide stand on the pay-off bracket
(2) — thread stand



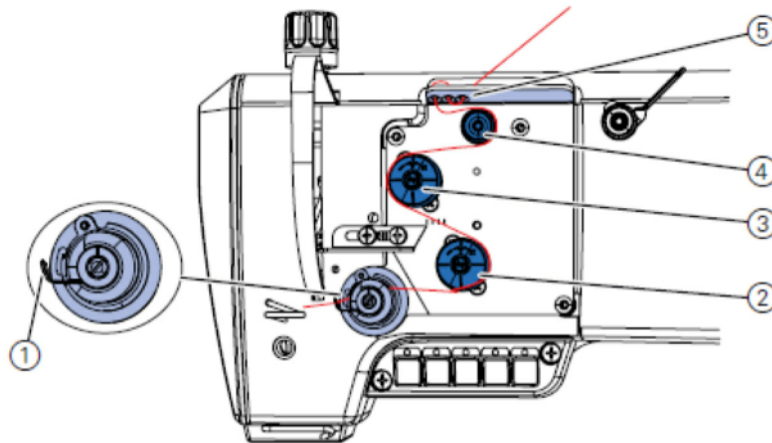
1. Insert the thread ball into the thread stand.
2. Pass the thread through the thread guide hole on the thread guide stand from back to front



The pay-off bracket must be parallel to the thread stand



As the picture shows: Needle threading process - (1)

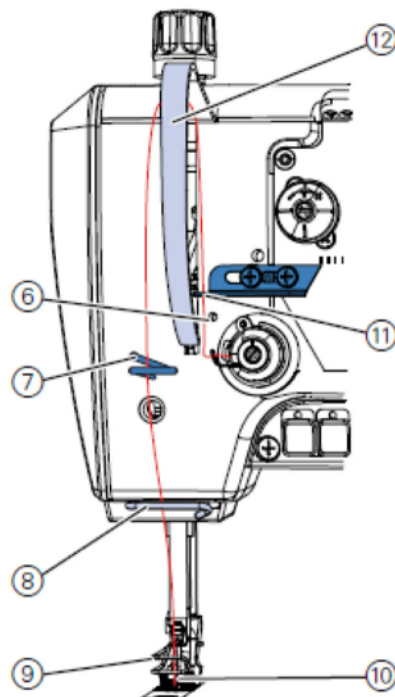


- (1) — thread tensioning spring (2) — main thread tensioner (3) — second thread tensioner
(4) — pre-tensioning thread tensioner (5) — thread guide rod



3. Pass the thread through the three holes of the thread guide rod (5) in a wave form: go through the right hole from top to bottom, then go through the middle hole from bottom to top, and finally go through the left hole from top to bottom.
4. Pass the thread clockwise around the pre-tensioning thread tensioner (4).
5. Pass the thread counterclockwise around the second thread tensioner (3).
6. Pass the thread clockwise around the main thread tensioner (2).
7. Pull the thread below the thread tensioning spring (1).

As the picture shows: Needle threading process - (2)



- (6) — thread guide rod (7) — thread guide ring (8) — thread guide rod below
(9) — thread guide rod on the needle bar (10) — needle hole
(11) — thread regulator (12) — thread take-up protective cover





8. Guide the thread below the thread guide rod (6).
9. Pass the thread through the hole on the thread regulator (11) from bottom to top.
10. Pass the thread from right to left through the thread take-up lever hole at the back of the thread take-up protective cover.
11. Pass the thread through the thread guide ring (7).
12. Pass the thread through the thread guide rod below (8).
13. Pass the thread through the thread guide rod on the needle bar (9).
14. Pass the thread through the needle hole (10) and make the left end of the thread face the hook

7.04

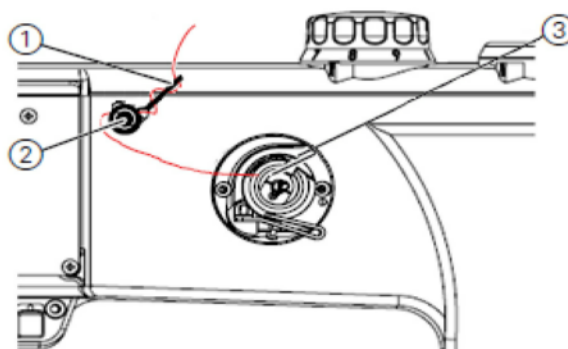
Insert the Bobbin and Wind the Bobbin Thread



Needle tip and moving parts pose a risk of injury.

Power off before inserting the bobbin and winding the bobbin thread.

As the picture shows: Bobbin winding - (1)

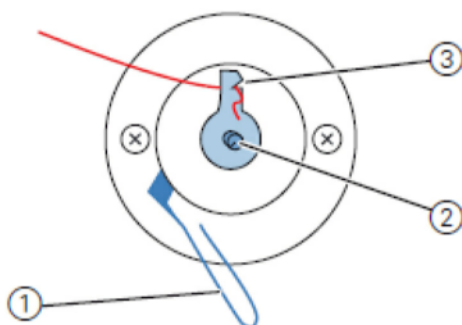


(1) — thread guide rod (2) — pre-tensioning thread tensioner (3) — thread winder



1. Insert the sewing pagoda thread ball into the thread stand.
2. Pass the thread through the thread guide hole on the thread stand from back to front.
3. Pass the thread through the three holes of the thread guide rod (1) in a wave form: go through the uppermost hole from top to bottom, then go through the middle hole from bottom to top, and finally go through the bottom hole from top to bottom.
4. Pass the thread counterclockwise around the pre-tensioning thread tensioner (2).
5. Guide the thread to the thread winder (3).

As the picture shows: Bobbin winding - (2)



(1) — bobbin drawbar
(2) — bobbin axis
(3) — thread trimmer



from the back of the thread cutter.

trimmer (3) and cut the left end of the thread

7. Insert the bobbin onto the bobbin axis.
8. Rotate the bobbin clockwise to lock it in.
9. Raise the bobbin drawbar (1) up.

Generally, the bobbin winding is during the sewing process. The bobbin thread can also be wound when not sewing, for example, a full bobbin is required before sewing starts.





Winding the bobbin thread when seamless material may damage the sewing presser foot and the needle plate.

At this time, lock the sewing presser foot at the highest position and adjust the stroke of the Sewing foot to the minimum.

Winding steps



1. Power on the sewing machine.
2. Depress the treadle forward. The machine starts sewing and at the same time winds the bobbin thread from the thread regiment to the bobbin. If the bobbin thread is full, the bobbin winder automatically stops winding. The bobbin lever moves down. The thread cutter automatically moves to its basic vertical position.
3. Pull out the full bobbin.
4. Cut the thread behind the thread cutter.
5. Put the full bobbin into the hook.
6. Repeat the above winding process with an empty bobbin.

7.05

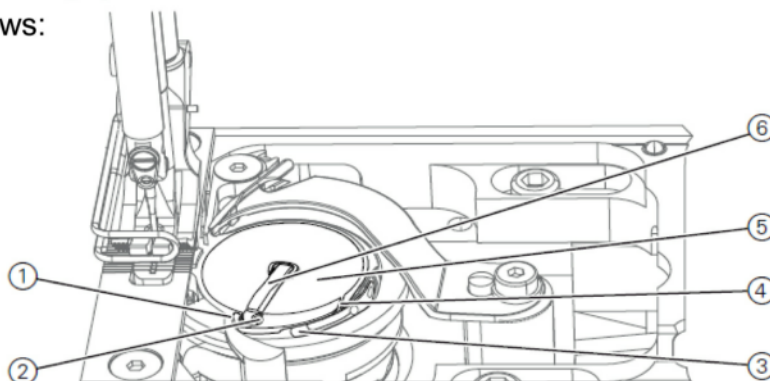
Change the Bobbin



Needle tip and moving parts pose a risk of injury.

Power off before changing the bobbin.

As the picture shows:



- (1) — groove (2) — thread guide rod (3) — thread tensioning spring
(4) — bobbin case groove (5) — bobbin (6) — bobbin shell catcher



1. Pull up the bobbin shell catcher (6).
2. Take out the empty bobbin.
3. Load the full bobbin. **【When the hook thread is recycled, the movement direction of the bobbin is opposite to that of the hook】**
4. Insert the bobbin thread into the bobbin case groove (4) on the bobbin case.
5. Pull the bobbin thread under the thread tensioning spring (3).
6. Guide the bobbin thread through the groove (1) and tension about 3cm.
7. Close up the bobbin shell catcher (6).

7.06

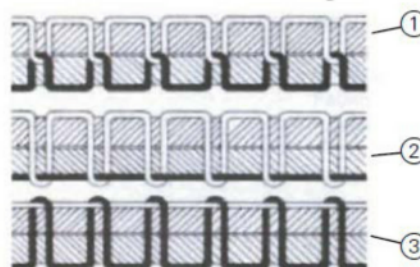
Thread Tension

The tension of the needle thread and the hook thread determines the position of the knot. If the tension of the needle thread and the hook thread are the same, the knot is in the middle of the sewing material.

As the picture shows:



- (1) — Needle thread and shuttle thread have the same tension
- (2) — The hook thread tension is higher than the needle thread tension
- (3) — Needle thread tension is higher than shuttle thread tension



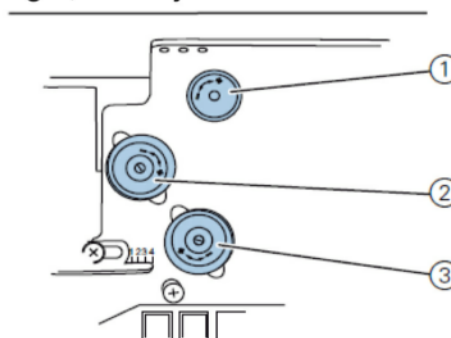
7.06.01

Adjust the Thread Tension

Three tension screws arranged in a triangle, the adjustment knob can determine the tension of the needle thread.

As the picture shows:

- (1) —pre-tensioning thread tensioner
- (2) —second thread tensioner
- (3) — main thread tensioner

**Main Thread Tensioner**

Main thread tensioner (3) determines the normal tension during sewing.



Main thread tensioner should be set as low as possible. The knot should be correctly located

In the middle of the sewing material.



Failure occurs when the tension is too high:

- ① Wind up the thread ② Cut the thread

Pre-tensioning Thread Tensioner

If the main thread tensioner (3) and the second tensioner (2) are fully open, then pre-tensioning thread tensioner (1) will make the thread in the correct position.

Pre-tensioning thread tensioner (1) can also determine the starting thread length of the new stitch after automatic trimming.

Short start thread — Turn the adjusting screw of the pre-tensioning thread tensioner (1) clockwise.

Long start thread—Turn the adjusting screw of the pre-tensioning thread tensioner (1) counterclockwise.

Second Thread Tensioner

When sewing thicker seams, the tension of the second thread tensioner (2) will greatly increased.



The second thread tensioner (2) must be lower than the main thread tensioner (3).

In the basic position, the top of the adjusting knob is flush with the middle screw.

Increase the thread tension — Turn the adjusting knob clockwise.

Decrease the thread tension — turn the adjusting knob counterclockwise.

Relieve the thread tension

Thread tension is automatically released when the thread is trimmed.

7.06.02

Adjust the Bobbin Thread Tension

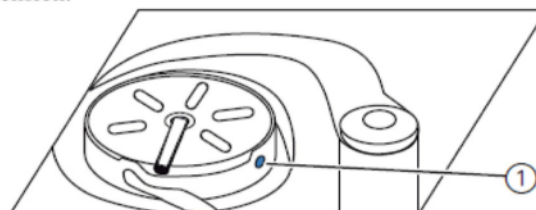
Needle tip and moving parts pose a risk of injury.

Power off before adjusting the bobbin thread tension.

As the picture shows:

- (1) — adjusting screw

Adjust the tension of the bobbin thread through the adjusting screw (1).



Increase the bobbin thread tension — Turn the adjusting screw (1) clockwise.

Decrease the bobbin thread tension — Turn the adjusting screw (1) counterclockwise.



7.07

Set the Thread Take-up

Needle tip and moving parts pose a risk of injury.

Power off before setting the thread take-up.

The thread regulator can determine the amount of thread on the hook. The amount of thread required depends on the thickness of the material, the strength of the thread and the stitch length.

More amount of thread in the following cases:

- ① thick material ② strong thread ③ large stitch length

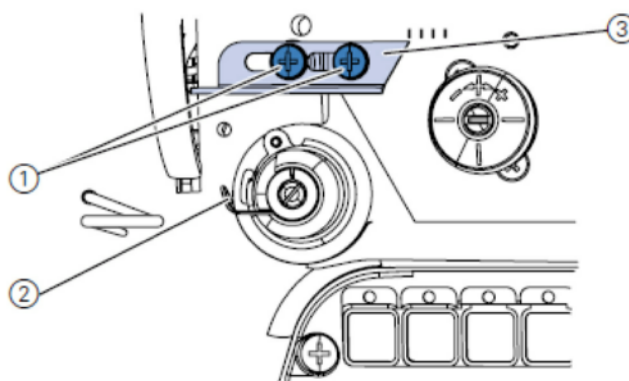
Less amount of thread in the following cases:

- ① thin material ② weak thread ③ small stitch length



Thread loop slides over the thickness point of the hook with very low tension.

If the thread loop exceeds the maximum hook diameter, the maximum thread volume is required. If the setting is correct, the thread tensioning spring (2) is pulled up about 0.5mm from the lower end position. As the picture shows:



- (1) — screw (2) — thread tensioning spring (3) — thread regulator



1. Loosen the screw (1).
2. Move the thread regulator (3)

Decrease the amount of thread: Move the thread regulator (3) to the right.

Increase the amount of thread: Move the thread regulator (3) to the left.

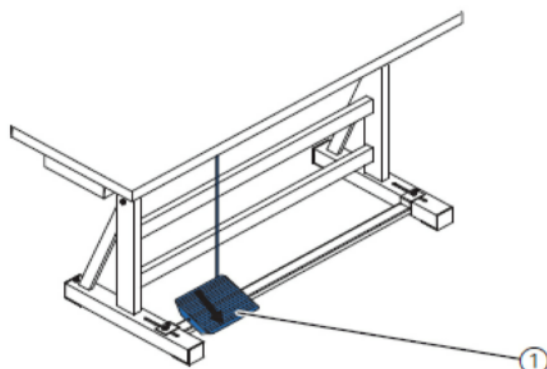
3. Tighten the screw (1).

7.08

Pneumatic Sewing Presser Foot

There is a danger of crushing when lowering the sewing presser foot.

Do not put hands under the sewing presser foot which have been ventilated



- (1) — treadle



1. Step the treadle (1) backward halfway. The machine stops and the sewing presser foot is ventilated and lifted. The sewing presser foot will remain lifted as long as the treadle is stepped backward halfway.

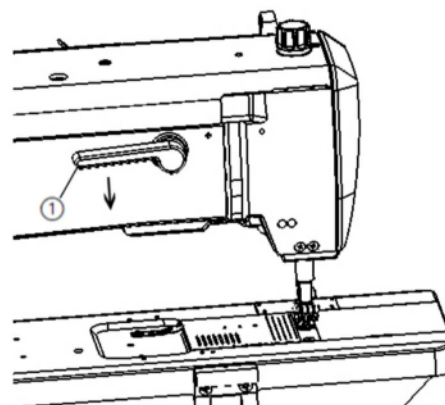


2. Step the treadle (1) backward the whole process, the thread trimming is activated, and the sewing presser foot is ventilated and lifted.

7.09 Keep the Sewing Foot In the Upper Position

Lift the sewing presser foot and keep it in the upper position by pressing the handle in the direction of the arrow to rotate 90 degrees.

As the picture shows: Lock the sewing presser foot in the upper position by operating as the picture shows.



Cancelled the lock:

When the sewing presser foot is in the upper position, press the handle in the opposite direction to rotate 90 degrees to drop the sewing presser foot. The lock is cancelled.

7.10 Set the Sewing Presser Foot Pressure

The contact pressure between the sewing presser foot and the sewing material can be determined By the knob on the upper left of the stand.

The pressure can be adjusted continuously by turning the knob.

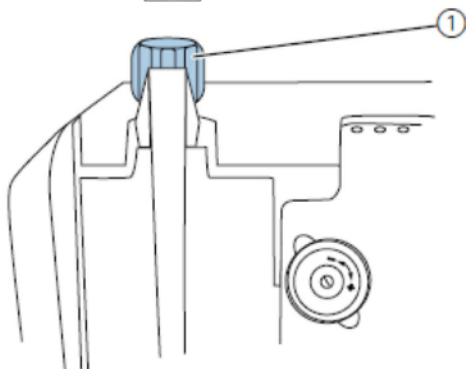
Choose the suitable pressure according the material: Low pressure for soft material and high pressure for hard material.



Set up correctly: The sewing material slides and feeds smoothly.



Failures will occur when the sewing presser foot pressure is set incorrectly:



Excessive pressure will tear the material, not enough pressure will make the material slip.

As the picture shows:

(1) —knob for adjusting the pressure of the sewing Presser foot



Increase sewing presser foot pressure: Turn the knob (1) clockwise.

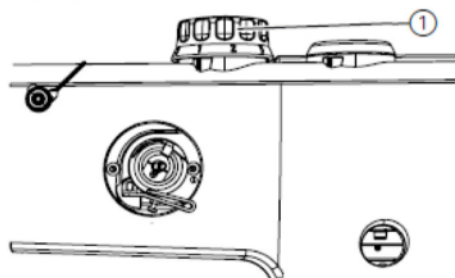
Decrease sewing presser foot pressure: Turn the knob (1) counterclockwise.

7.11 Set the Sewing Presser Foot Stroke

The lifting height of the sewing presser foot can be determined by the knob on the stand. By turning the knob, the sewing presser foot stroke can be continuously adjusted from 1mm to 9mm.

As the picture shows:

(1) —knob for adjusting the sewing presser foot stroke





Increase sewing presser foot stroke: Turn the knob (1) clockwise.

Decrease sewing presser foot stroke: Turn the knob (1) counterclockwise.

Fast stroke adjustment with pneumatic: When sewing over thick seams, the sewing presser foot can be lifted by the knob (1) for up to 9mm.

7.12

Adjust the Stitch Length

The knob on the machine column controls the stitch length. The stitch length can be adjusted continuously from 1mm to 9mm by turning the knob (2).

The adjustment mark on the left of the knob represents the selected stitch length.

As the picture shows:

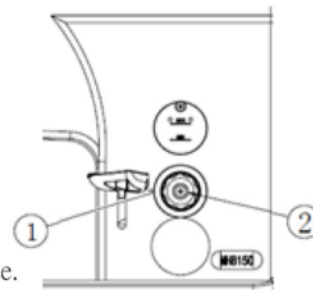
(1) — adjustment mark representing the selected stitch length

(2) — stitch length adjusting knob



Decrease Stitch Length: Turn the knob (1) clockwise.

Increase Stitch Length: Turn the knob (1) counterclockwise.

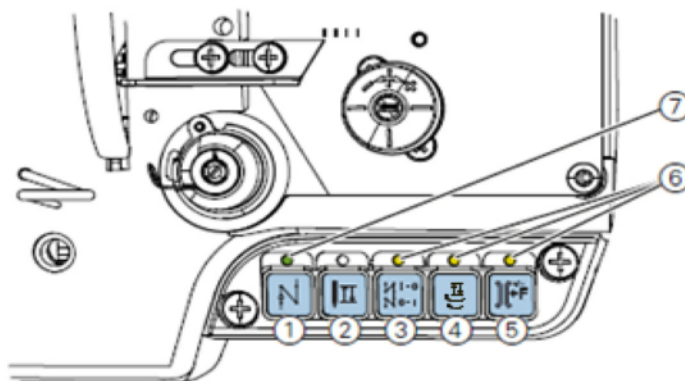


7.13

Buttons On the Case

Each button can trigger a function while sewing.

As the picture shows:



(1) — reverse stitch button (2) — needle position button (3) — front and rear reinforcement button

(4) — fast stroke button (5) — second thread tensioner button (6) — button LED indicator

(7) — power LED indicator



Reverse stitch button(1): Hold the button (1), the machine sews in reverse until it is released.



Needle position button(2): Press the button (2), the needle moves to the upper position.



Operation function button(3) —(5):

Activate a function: Press a button and the button LED indicator (6) above the button is on.

Deactivate a function: Press the button again and the button LED indicator (6) above the button goes out.

Front and rear reinforcement button(3) : Press the button (3) will cancel the sewing and ending the thread. If the thread reinforcement before the sewing is started, the thread reinforcement after sewing will be stopped after pressing the button (3). If the thread reinforcement before the sewing has not begun, the thread reinforcement after sewing will start after pressing the button (3).

Fast stroke button(4) : Press the button (4) to increase the height stroke of the inner and outer sewing presser foot.

Second thread tension button(5) : Press the button (5) to activate the second thread tension.

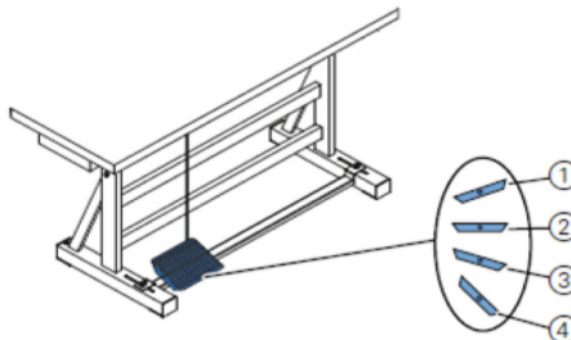


7.14

Sewing

There is a danger of being injured by the needle tip when sewing accidentally.
Be careful not to touch the treadle when fingers are around the needle tip.

The sewing process can be controlled by stepping the treadle. As the picture shows:



- (1) — Treadle position +1: Sewing
- (2) — Treadle position 0: Still
- (3) — Treadle position -1: Sewing presser foot lifted
- (4) — Treadle position -2: Reinforce an cut the thread

Starting position: Treadle position 0, the machine is stationary, the needle is lifted, and the sewing presser foot is lowered



Sewing material positioning before sewing: Step the treadle to position -1, the sewing presser foot is lifted in order to put the material on the sewing place.

Sewing: Step the treadle to position +1, the machine start sewing, keep stepping forward and the speed of sewing will increase.

Interrupt the sewing : Release the treadle back to position 0, the machine stops and the needle and sewing presser foot drop.

Continue the sewing: Step the treadle to position +1, the sewing goes on.

Sewing thick material: Press the button (4) to lift the sewing presser foot stroke.

Change stitch length: Turn the knob to have the required stitch length when the machine is stopped.

Increase thread tension: Press the button (5) to activate the second thread tensioner.

End the sewing: Step the treadle to position -2, the sewing ends, the cutter cuts the thread, the machine stops, the needle and the sewing presser foot lift and take away the material.

8

Maintenance

Only the operators can do the daily maintenance. Advanced maintenance work can only be carried out by qualified professionals.

8.01

Oil Level Inspection

Skin contact with lubricating oil will cause allergies. Avoid skin contact with lubricating oil, and wash thoroughly once contacted.

Lubricating oil is a hazardous substance and cannot enter drains and soil. Waste oil must be disposed of in accordance with laws and regulations.

8.01 .01

Nose Lubrication

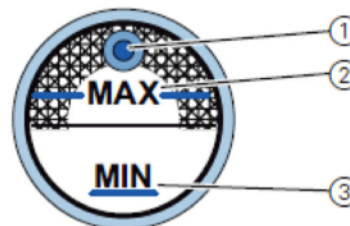
AS the picture shows: oil level indicator.

- (1) — oil filling port
- (2) — highest oil level
- (3) — lowest oil level



Check the oil level indicator each day: The oil level must be in between the highest oil level (2) and the lowest oil level (3).

Power off and refuel on request till the oil level reaches but not over the highest oil level (2).





Incorrect oil level will damage the machine.

Only DA 10 lubricating oil or equivalent lubricating oil with the following characteristics can be used on the nose and the hook:

- Viscosity at 40°C: 10mm² /s
- Flash point: 150°C

Incorrect type of the lubricating oil will damage the machine.

8.01 .02

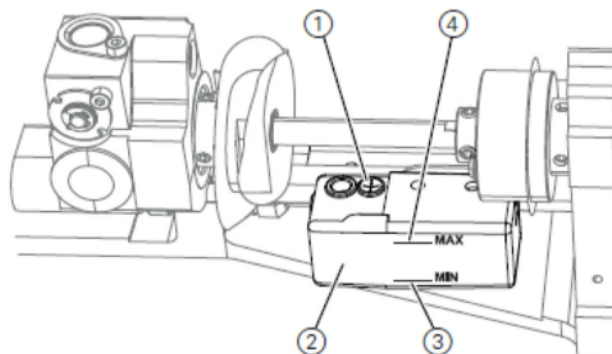
Hook Lubrication

Check the oil level of the hook about once a week.

As the picture shows:

Hook lubricating oil level indicator

- (1) — oil filling port
- (2) — oil box
- (3) — lowest oil level
- (4) — highest oil level



Check the oil level: Power off and turn the nose

Backward. Check the amount

of the oil in the oil box (2). Refuel the oil through the oil filling port (1) as required till the oil level reaches but not over the highest oil level (4). The oil level must be in between the lowest oil level (3) and the highest oil level (4)

8.02

Cleaning

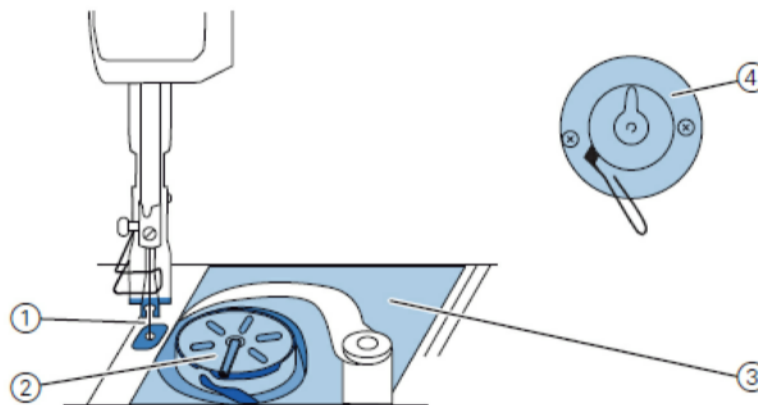
Use a compressed air gun or brush to clean the sewing debris and the thread ends each day after working for 8 hours. The machine should be cleaned more frequently if the sewing material is very fluffy.



Power off before cleaning. Flying debris particles may enter the eyes and cause injury.

Pay attention to prevent particles from getting into the oil plate. Sewing debris and thread ends can affect machine operation.

As the picture shows: Areas requiring special cleaning.



- (1) — area around the needle
- (2) — hook
- (3) — area below the needle plate
- (4) — thread cutter on the bobbin thread winder

Areas particularly prone to contamination:

- Thread cutter on the bobbin thread winder (4)
- Area below the needle plate (3)
- Hook (2)
- Area around the needle (1)



Cleaning steps:

1. Power off.
2. Use a compressed air gun or brush to clean the sewing debris and the thread ends.



8.03

Pneumatic System Inspection

As the picture shows: Air filter pressure indicator.

- (1) — reference value: 6bar
(2) — pressure indicator



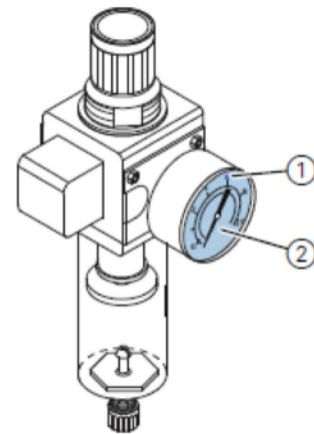
Check the pressure indicator each day.

Reference value: 6 bar.



The difference from the reference pressure shall not exceed 1 bar.

Incorrect pressure will damage the machine.



Condensate will accumulate in the water separator of the air filter.

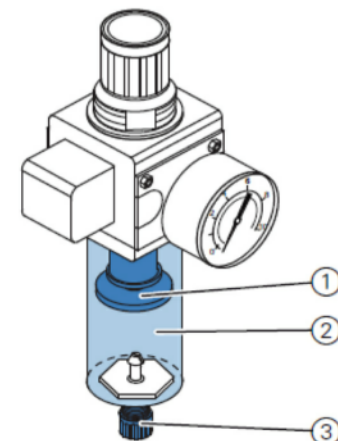
As the picture shows: Water level of the air filter.

- (1) — Filter element
(2) — Water separator
(3) — Drain screw



Check the water level each day.

The condensate shall not reach the filter element (1).



Discharge water as required:

1. Power off.
2. Put the water collecting tray under the drain screw (3).
3. Break the connection of between the compressed air pipe and supply system.
4. Unscrew the drain screw (3).
5. Make water flow into the tray.
6. Retighten the drain screw (3).
7. Reconnect the compressed air pipe and supply system.
8. Power on.



Excessive condensation in the air filter may cause damage to the machine.

9

Installation Instructions

This machine can only be installed by trained professionals.
Wear safety gloves and safety boots when unpacking and installing.

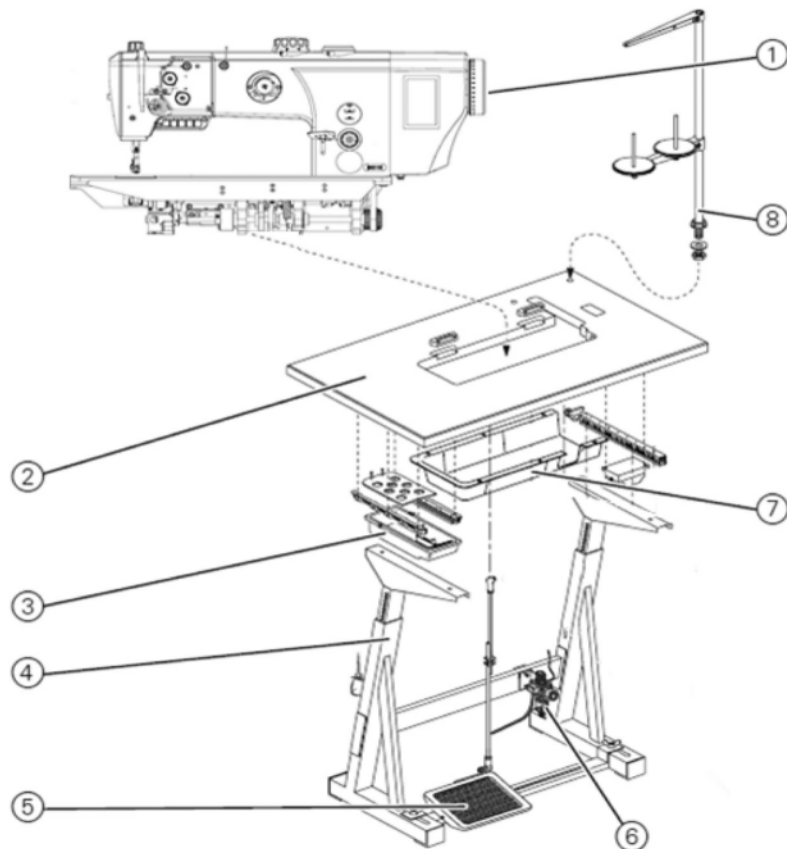
9.01

Delivery Scope Inspection

The scope of delivery depends on the order. Please check whether all parts are complete before installation.



As the picture shows: Delivery scope



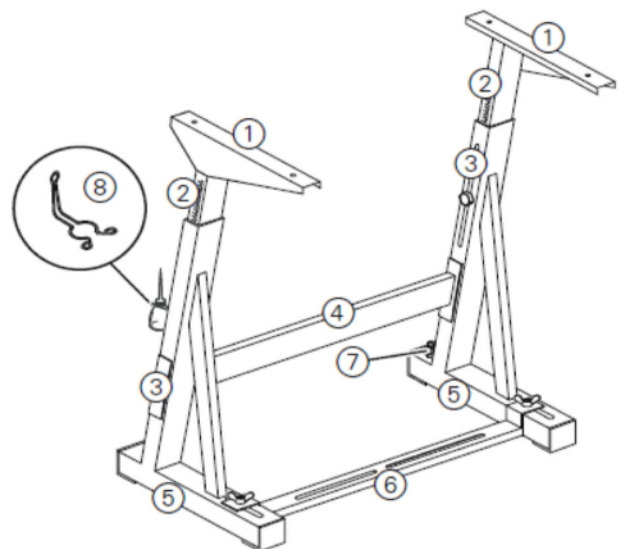
- | | | |
|---------------------|--------------------|------------------|
| (1) — nose | (2) — table | (3) — drawer |
| (4) — stand | (5) — treadle | (6) — air filter |
| (7) — oil reservoir | (8) — thread stand | |

9.02

Stand Components Installation

As the picture shows:

- (1) — top of the inner rod
- (2) — inner rod
- (3) — stand rod
- (4) — cross rod
- (5) — stand foot support
- (6) — stand support plate
- (7) — adjusting screw
- (8) — oil can stand



1. Fix the cross rod (4) to the stand rod (3) with screws.
2. Fix the oil can stand (8) to the backside of the stand rod (3) with screws.
3. Fix the stand support plate (6) to the stand foot support (5) with screws.
4. Insert inner rod (2) so that the longer end of the top of the inner rod (1) is above the longer end of the stand foot support (5).
5. Fix (2) firmly with screws so that the height of the two sections of the top of the inner rod (1) is the same.
6. Turn the screw (7) to balance the force when the stand is in contact with the ground.



9.03

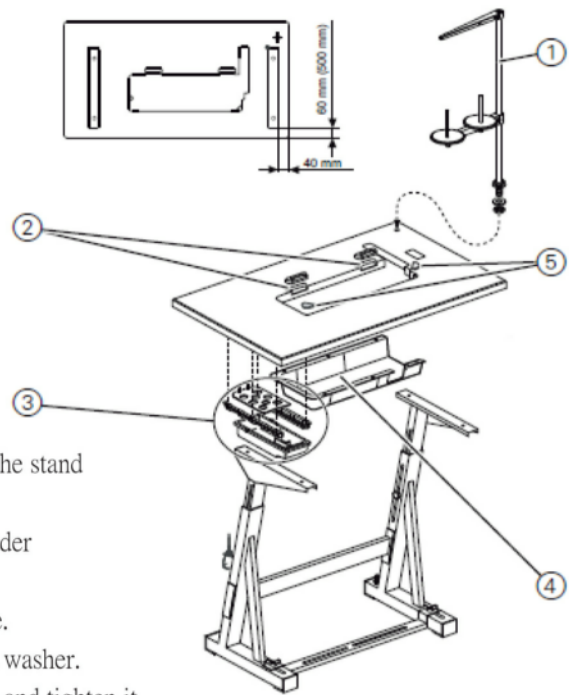
Table Installation

As the picture shows: table installation

- (1) — thread stand
- (2) — groove for mounting hinge seat
- (3) — drawer
- (4) — oil reservoir
- (5) — raised seat of rubber pad



1. Fix the drawer (3) to the left side of the stand under the plate.
2. Fix the oil reservoir (4) to the groove under the machine
3. Insert the thread stand (1) into the whole.
4. Fix the thread stand (1) with screws and washer.
5. Insert the hinge seat into the groove (2) and tighten it.
6. Insert the rubber mat into the pad (5).
7. Place the platen on the top of the inner rod.
8. Fix the plate firmly to the stand with screws.



9.04

Set the Working Height

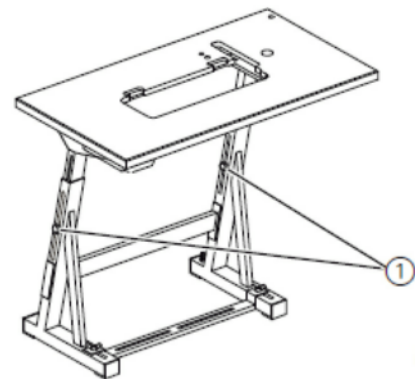
Working height can be adjusted from 750mm to 900mm.

As the picture shows: set the working height

- (1) — bolt



1. Loosen the bolt (1) on the stand rod
2. Adjust the platen to the desired height.
To prevent tilting or overturning, remove or push the platen on both sides at the same time.
3. Tighten the bolt (1).

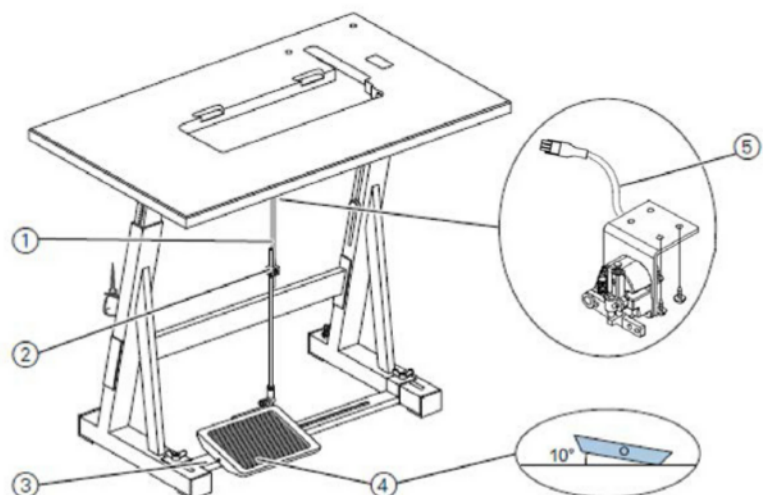


9.05

Set the Treadle and Speed Governor

As the picture shows:

- (1) — treadle link
- (2) — screw
- (3) — stand support plate
- (4) — treadle
- (5) — speed governor





1. Put the treadle (4) on the stand support plate (3), make the middle of the treadle under the needle tip. There is a slot on the stand support plate which can be used to adjust the treadle.
2. Fix the treadle (4) firmly on the stand support plate (3) with screws.
3. Fix the speed governor (5) under the plate and make the treadle link (1), speed governor (5) and the treadle (4) vertical.
4. Use bolts to connect the treadle link (1), the treadle (4) and the speed governor (5).
5. Adjust the treadle link (1) to the correct length: Tilt 10 degrees when the treadle (4) is released
6. Tighten the screw (2).

9.06

Nose Installation

As the picture shows:

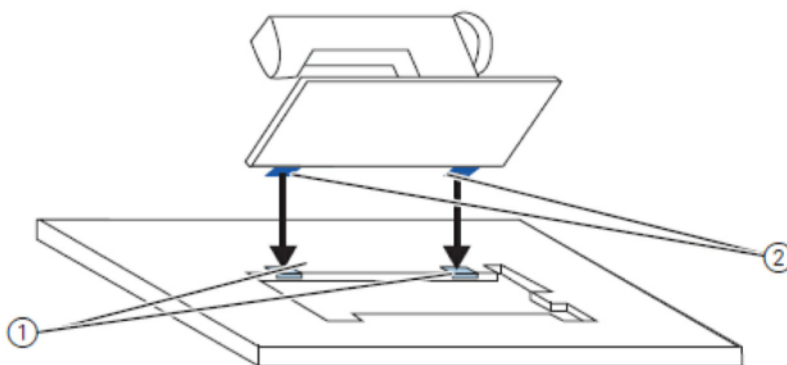
- (1) — rubber mat
(2) — parts of the upper part of the hinge seat



Beware of being crushed



1. Fix the parts (2) to the nose with screws.
2. Insert the nose at a 45 degree angle from above.
3. Insert the parts (2) into the rubber mat (1).
4. Turn the nose down and insert it into the groove.



9.07

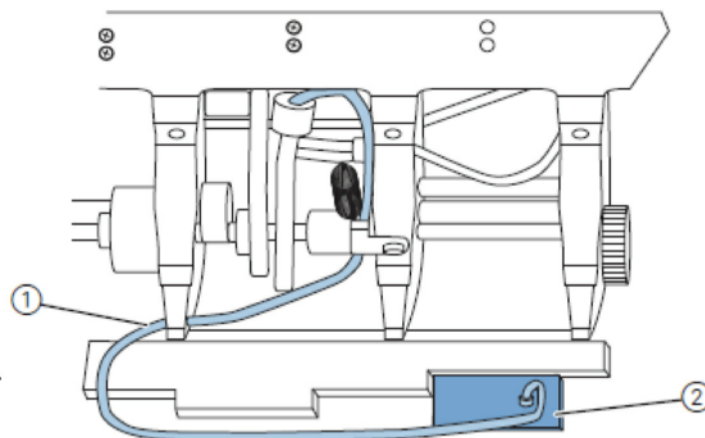
Oil Suction Pipe Installation

As the picture shows:

- (1) — oil suction pipe
(2) — filter



1. Flip back the nose
2. Fix the fitter (2) in the oil pan with screws with the plastic adapter on the right.
3. Insert the oil suction pipe (1) into the plastic adapter.



9.08

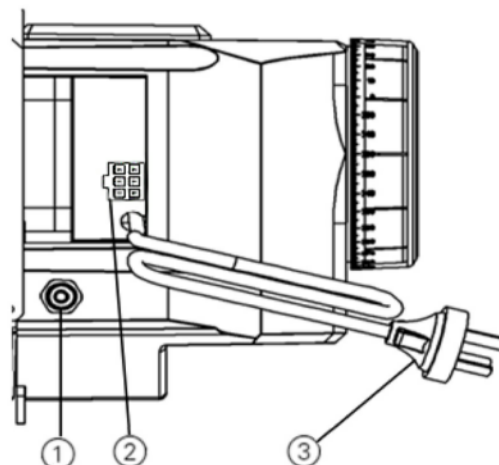
Electrical Component Installation

Be aware that electric shock can cause life-threatening danger.

The voltage on the nameplate of the sewing machine must be consistent with the main voltage.

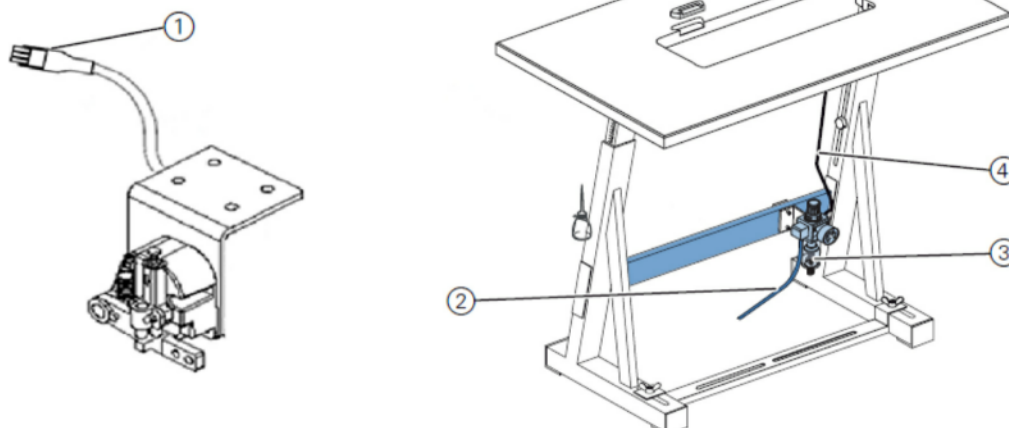
As the picture shows: Interface under the electric control box

- (1) — tracheal interface
(2) — speed governor interface
(3) — main power plug





This is an all-in-one machine and the gas and electrical connections are at the bottom of the electric control box.



As the picture shows: Electrical connections

- | | |
|----------------------|---|
| (1) — speed governor | (2) — system trachea |
| (3) — air filter | (4) — trachea connecting to the machine |



1. Fix the speed governor (1) to the oil pan under the platen, make the pedal link, speed governor and the pedal basically vertical.
2. Use brackets, screws and clips to fix the air filter to the crossbar of the stand.
3. Turn the nose back.
4. Insert the governor plug into the governor interface under the electric control box.
5. Connect the trachea connecting to the machine (4) to the air pipe interface under the electric control box.
6. Connect the system trachea (2) to the pneumatic system.
7. Turn the nose upright.
8. Connect the main power plug of the electric control box to the power system.

9.09

Set the Operating Air Pressure

As the picture shows: Set up operating air pressure

- (1) — knob
(2) — pressure indicator

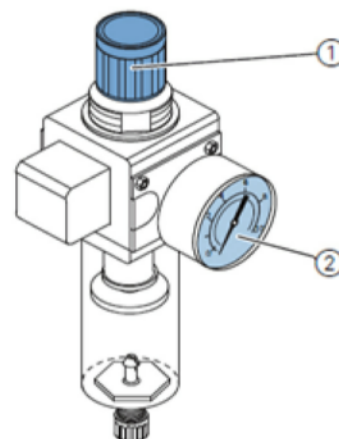


The operating air pressure of the pneumatic components is 6bar

Make sure the operating air pressure is set correctly before start.



1. Pull up the knob (1).
2. Set the operating air pressure to 6 bar:
Increase the air pressure: Turn the knob (1) clockwise.
Decrease the air pressure: Turn the knob (1) counterclockwise.
3. Press the knob (1).



9.10

Sewing Test

Perform a sewing test before starting the sewing operation. Adjust the machine according to the requirements of the sewing machine.



1. Install the needle.



- ## 10 Appendix

[illegible]



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