DÜRKOPP ADLER

911-210-10

Additional Instructions

Neat seam beginning (NSB)

IMPORTANT
READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

1 General information

1.1 Components of the kit 0911 597494

The kit has been designed for machines with the control **DAC comfort**.

Check whether the scope of delivery for kit 0911 597494 is correct prior to installation.

Part number	Quantity	Description
0911 597954	1	NSB assembly, consisting of: • 0867 350363, stop block • 0867 350423, block • 0867 350470, plate • 0867 350440, stop • 9202 002067, screw M4x8 • 9330 000087, washer A4,3 • 0867 350410, counter blade • 9202 100328, countersunk screw M4x8 (3 pieces) • 0867 350330, thread-pulling knife • 0867 350400, clamping spring (4 pieces) • 9204 431657, screw M4x8 (2 pieces) • 0867 350290, retaining bracket (4 pieces) • 9202 002067, screw M4x8 (2 pieces) • 9330 000087, washer (2 pieces) • 9700 234002, screw D12x10 (2 pieces) • 9202 001727, screw M3x30 (5 pieces) • 9790 201000, WI-E coupling (4 pieces) • 9790 590441, slip-on bushing (round, red) • 9790 590442, slip-on bushing (round, green) • 9790 590443, slip-on sleeve (round, yellow) • 9790 590444, slip-on sleeve (round, blue) • 0911 350820, carrier plate • 0911 350813, holder
9202 002087	2	Screw M4x12
0911 140464	1	Kit lateral bearing, consisting of: • 0911 140430, plate • 9201 113297, screw (4 pieces) • 9330 000107, washer A6,4 (6 pieces) • 0911 140383, latching plate • 0911 140390, block (2 pieces) • 9202 002937, screw M6x35 (2 pieces) • 9231 110127, hexagon nut M6 • 9201 113398, screw M6x50
0579 140074	1	Container
0506 330130	1	Damping plate
0699 979123	1	Hose PVC (1.5 m)
0999 240384	1	GD-E coupling
9790 201000	1	WI-E coupling
9710 041003	1	Valve
9710 063410	2	Throttle valve

Part number	Quantity	Description
9790 590441	1	Slip-on bushing (round, red)
9790 590442	1	Slip-on bushing (round, green)
9790 590443	1	Slip-on bushing (round, yellow)
9790 590444	1	Slip-on bushing (round, blue)
9710 061410	1	Throttle valve
9790 212402	3	WI-E coupling
9790 201000	2	WI-E coupling
9731 005004	1	Hose PUR, gray (1.5 m)
9731 004014	1	Hose PUR, red (1 m)
9731 004024	1	Hose PUR, green (1 m)
9731 004034	1	Hose PUR, yellow (1 m)
9731 004044	1	Hose PUR, blue (1 m)

Information

The kit 0911 490484 (distribution block, pneumatic) is supplied together with the NSB kit. The kit must be additionally installed during the assembly of the machine.

1.2 Components of the kit 0911 597484

The kit has been designed for machines with the control **DAC 3**.

Check whether the scope of delivery for kit 0911 597494 is correct prior to installation.

Part number	Quantity	Description
0911 597954	1	NSB assembly, consisting of: • 0867 350363, stop block • 0867 350423, block • 0867 350470, plate • 0867 350440, stop • 9202 002067, screw M4x8 • 9330 000087, washer A4,3 • 0867 350410, counter blade • 9202 100328, countersunk screw M4x8 (3 pieces) • 0867 350330, thread-pulling knife • 0867 350400, clamping spring (4 pieces) • 9204 431657, screw M4x8 (2 pieces) • 0867 350290, retaining bracket (4 pieces) • 9202 002067, screw M4x8 (2 pieces) • 9330 000087, washer (2 pieces) • 9700 234002, screw D12x10 (2 pieces) • 9202 001727, screw M3x30 (5 pieces) • 9790 201000, WI-E coupling (4 pieces) • 9790 590441, slip-on bushing (round, red) • 9790 590442, slip-on bushing (round, green) • 9790 590443, slip-on sleeve (round, yellow) • 9790 590444, slip-on sleeve (round, blue) • 0911 350820, carrier plate • 0911 350813, holder
9202 002087	2	Screw M4x12
0911 140464	1	Kit lateral bearing, consisting of: • 0911 140430, plate • 9201 113297, screw (4 pieces) • 9330 000107, washer A6,4 (6 pieces) • 0911 140383, latching plate • 0911 140390, block (2 pieces) • 9202 002937, screw M6x35 (2 pieces) • 9231 110127, hexagon nut M6 • 9201 113398, screw M6x50
0579 140074	1	Container
0506 330130	1	Damping plate
0699 979123	1	Hose PVC (1.5 m)
0999 240384	1	GD-E coupling
9790 201000	1	WI-E coupling
9710 041003	1	Valve
9710 063000	2	Solenoid valve
9710 061200	1	Solenoid valve
0911 490484	1	Distribution block, pneumatic

Part number	Quantity	Description
9731 005004	1	Hose PUR, gray (2.5 m)
0911 200404	1	Throat plate holder
0911 200250	1	Throat plate

Information

The old throat plate holder and the old throat plate must be replaced by the new throat plate holder and the new throat plate included in the kit.

2 Assembling the neat seam beginning (NSB)

When the needle exits the sewing material after the first stitch, the thread-pulling knife pulls the initial thread into the clamp. This ensures secure sewing.

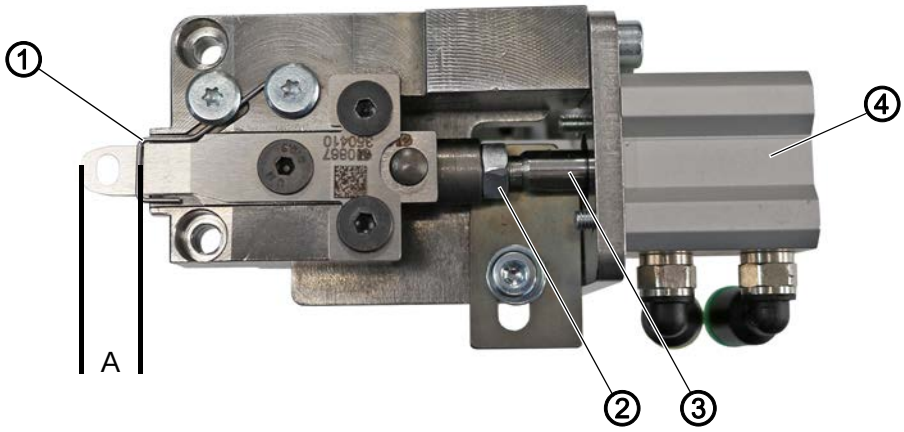
Following the 2nd stitch, the remaining thread is cut off and removed by the suction device.

2.1 Presettings outside of the machine (optional)

The kit has been preset at the factory and does usually NOT have to be adjusted.

Do not check or adjust the presettings outside of the machine UNLESS the NSB is without function.

Fig. 1: Presettings outside of the machine (1)



(1) - Clamping spring
(2) - Nut
(3) - Piston rod
(4) - Cylinder

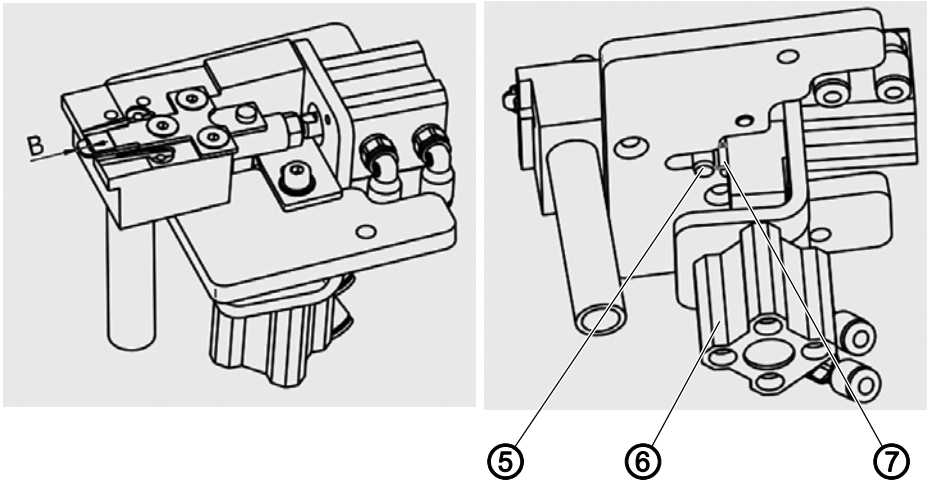
To complete the presettings outside of the machine:

1. Remove the clamping spring (1).
2. Loosen the nut (2).
3. Extend cylinder (4).
4. Turn the piston rod (3).

↳ Measurement **A** must be **8.8 mm** with the cylinder fully extended (4).

5. Tighten the nut (2).

Fig. 2: Presettings outside of the machine (2)

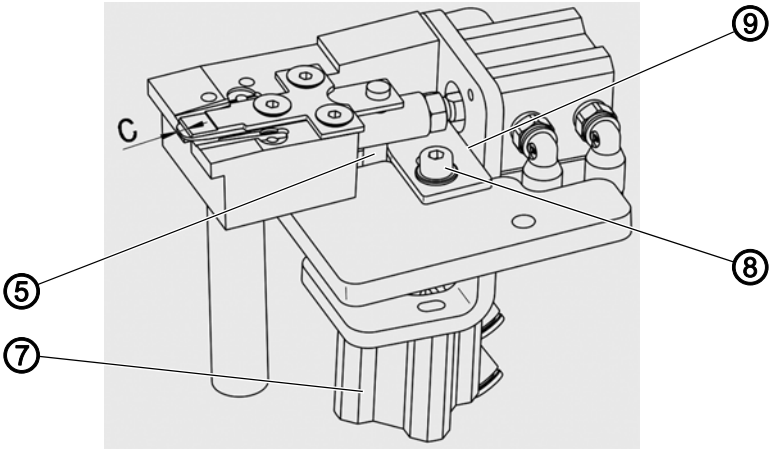


(5) - Pin
(6) - Cylinder
(7) - Threaded pin

6. Extend cylinder (6).
7. Retract cylinder (4).
8. Press the pin (5) against the threaded pin (7).
9. Turn the threaded pin (7).

↳ Measurement **B** must be **2.8 mm** when the pin (5) abuts on the threaded pin (7).

Fig. 3: Presettings outside of the machine (3)



(5) - Pin
(6) - Cylinder
(8) - Screw
(9) - Plate

10. Retract cylinder (6).
11. Loosen the screw (8).
12. Shift the plate (9).

↳ Measurement **C** must be **1.3 mm** when the pin (5) abuts on the plate (9).

13. Tighten the screw (8).
14. Place the clamping spring (1).

2.2 Checking and adjusting the cutting pressure

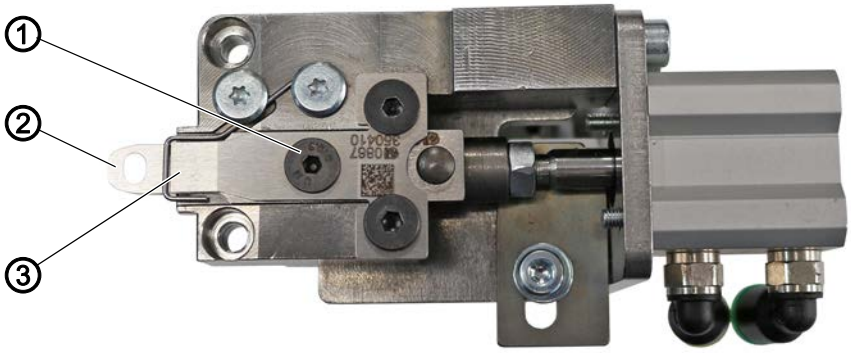
NOTICE

Property damage may occur!

Risk of knife breakage if pressure is adjusted too high.

Do not adjust the cutting pressure too high.

Fig. 4: Checking and adjusting the cutting pressure



(1) - Screw
(2) - Thread-pulling knife
(3) - Counter blade

Proper setting

Screw (1) is adjusted such that the thread-pulling knife (2) moves smoothly and the counter blade (3) cuts the loose thread cleanly.

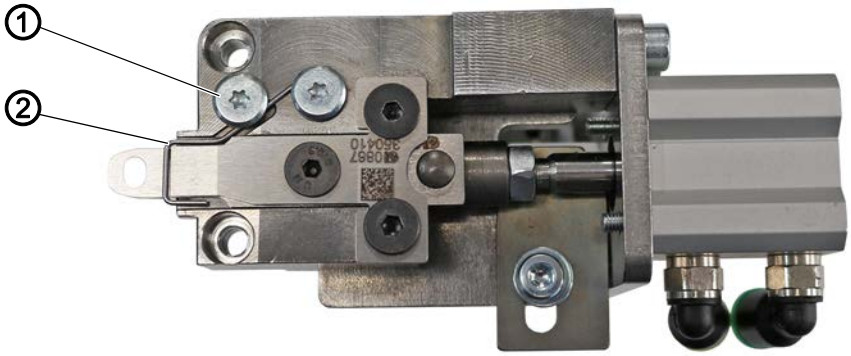
To check and adjust the cutting pressure:

1. Screw in screw (1) in such a way that the screw head abuts on the counter blade (3).
2. Turn the screw (1).
   - Increase the cutting pressure: Turn screw (1) clockwise
   - Reduce the cutting pressure: Turn screw (1) counterclockwise
3. Carry out a cutting test.
4. Readjust the cutting pressure if necessary.

2.3 Checking and adjusting the clamping spring pressure

The clamping spring clamps the needle thread after the 1st short stitch and prior to cutting.

Fig. 5: Checking and adjusting the clamping spring pressure



(1) - Screw *(2) - Clamping spring*

To adjust the clamping spring pressure:

1. Adjust screw (1) such that the needle thread is securely clamped by the clamping spring (2).
   The clamping spring pressure depends on the needle thread thickness.
   Make sure that the needle thread can be effortlessly pulled out of the clamped position.
2. Turn the screw (1).
   - Increase the cutting pressure: Turn screw (1) clockwise
   - Reduce the cutting pressure: Turn screw (1) counterclockwise

2.4 Checking the locking mechanism and the throat plate holder

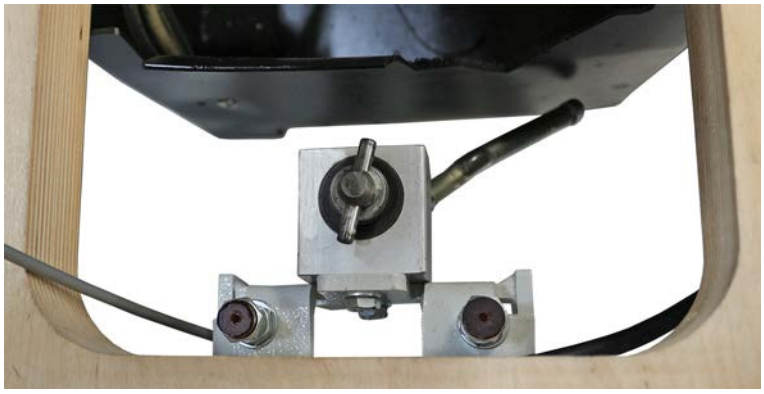
Information

To assemble the neat seam beginning, you must install the correct locking mechanism and the correct throat plate holder.

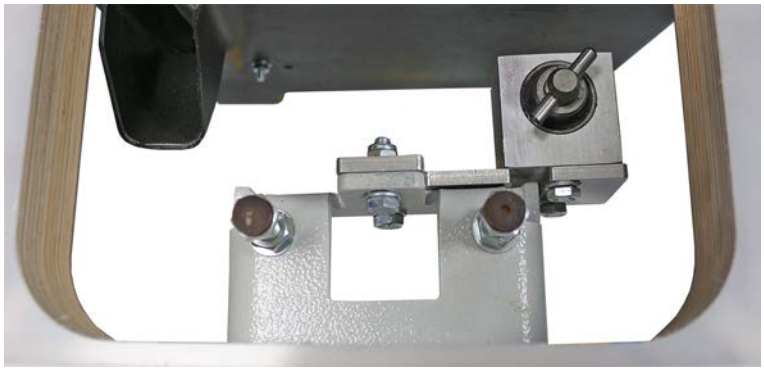
2.4.1 Locking mechanism

Fig. 6: Locking mechanism (1)

old locking mechanism:



correct locking mechanism:

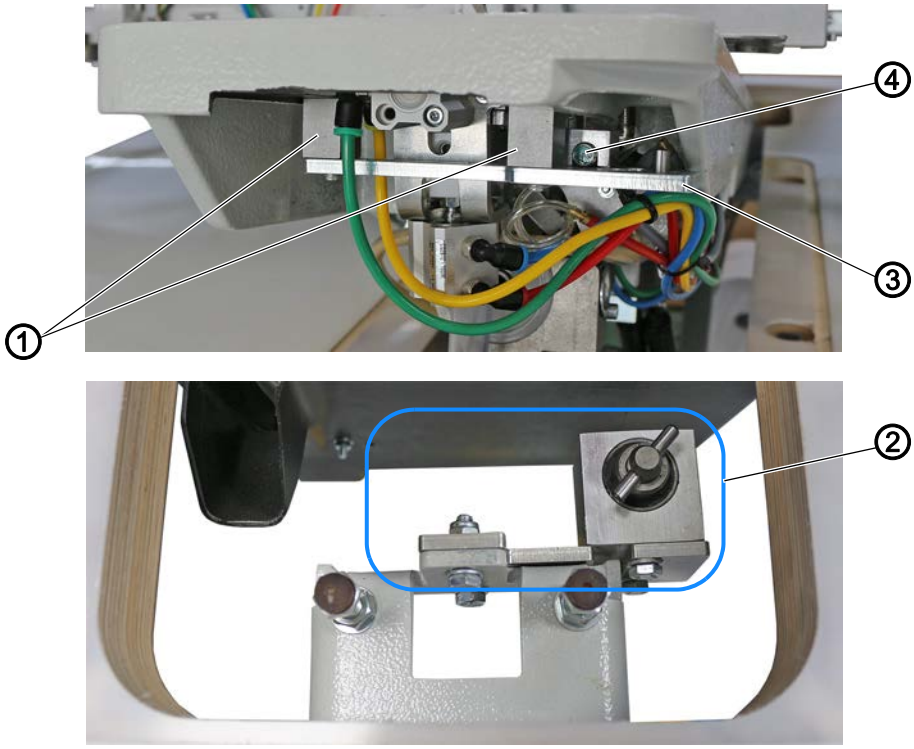


Check if the correct locking mechanism has been assembled. The correct locking mechanism (part number 0911 400163) is seated on the right in the tabletop cutout.

If the locking mechanism is seated in the center of the tabletop cutout, assemble the correct locking mechanism.

Assembling the locking mechanism

Fig. 7: Locking mechanism (2)

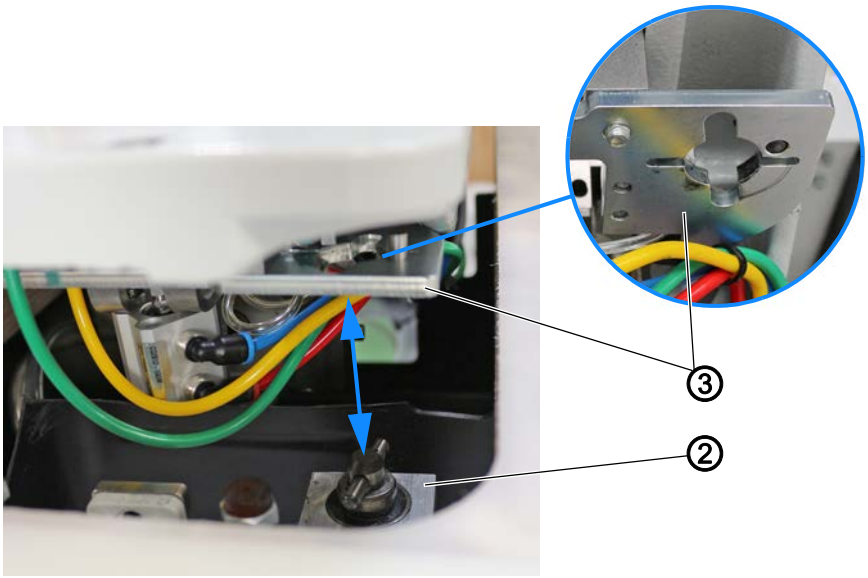


(1) - Block
(2) - Locking mechanism
(3) - Latching plate
(4) - Proximity switch

To assemble the locking mechanism:

1. Tighten the locking mechanism (2) to the stand.
2. Screw the proximity switch (4) onto the latching plate (3).
3. Screw the latching plate (3) with the block (1) in place under the base plate.

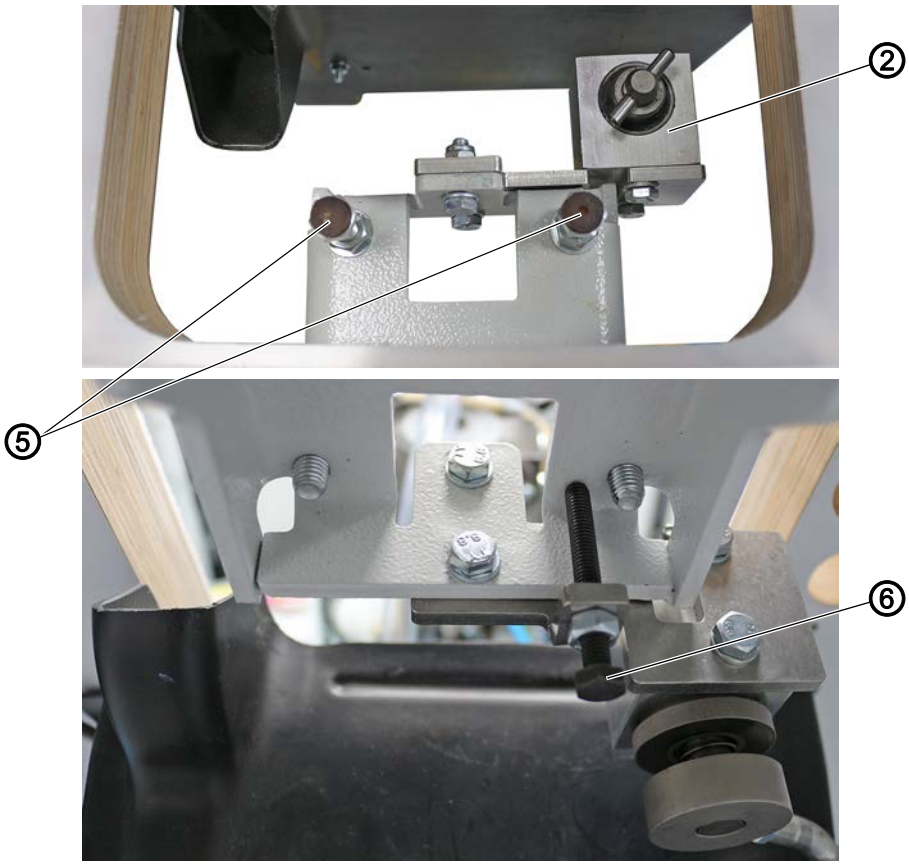
Fig. 8: Locking mechanism (3)



(2) - Locking mechanism
(3) - Latching plate

4. Align the latching plate (3) and the locking mechanism (2) such that the cylinder head and the axle are seated flush inside the slot in the latching plate (3).

Fig. 9: Locking mechanism (4)



(2) - Locking mechanism
(5) - Screws
(6) - Screw

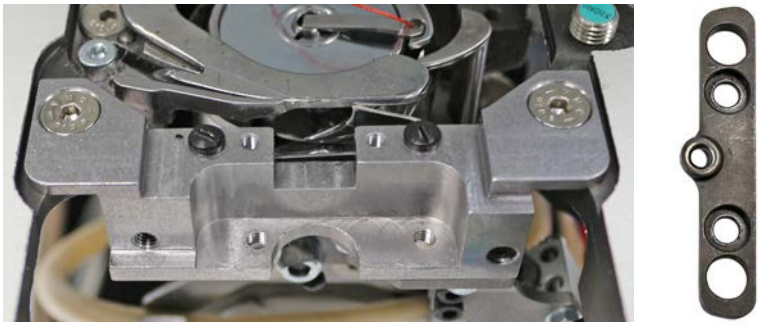
5. Adjust the height of the screws (5).
   ↳ When the machine head is folded down, the base plate rests on the rubber heads.
   The base plate lines up flush with the table.
6. Lock the locking mechanism (2) from the bottom using the screw (6).

2.4.2 Throat plate holder

Fig. 10: Throat plate holder (1)

old throat plate holder:

correct throat plate holder and throat plate:

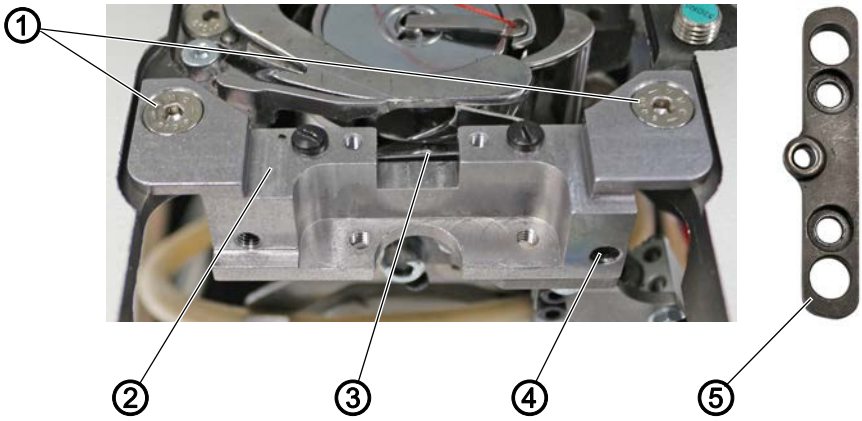


Check if the correct throat plate holder (part number 0911 207514) has been assembled together with the correct throat plate.

If not, assemble the correct throat plate holder and adjust the needle guide.

Assembling the throat plate holder and adjusting the needle guide

Fig. 11: Throat plate holder (2)

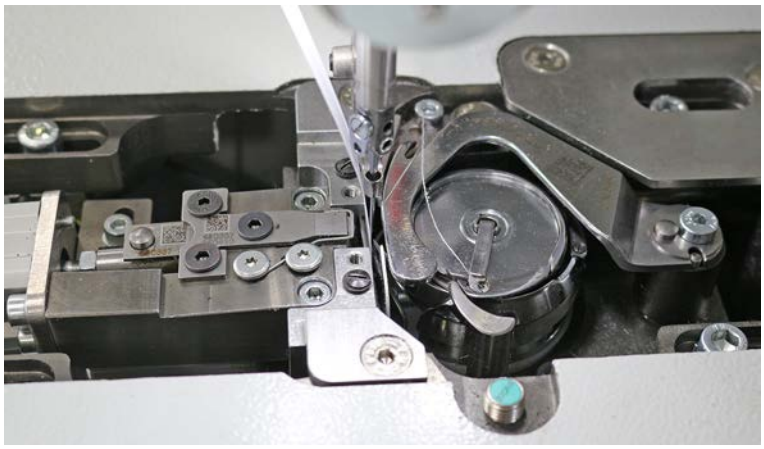


(1) - Screws
(2) - Throat plate holder
(3) - Needle guide
(4) - Screw
(5) - Throat plate

To assemble the correct throat plate holder and adjust the needle guide:

1. Tighten the throat plate holder (2) using the screws (1).
2. Assemble the throat plate (5).
3. Lock the machine in place at the looping stroke position.

Fig. 12: Throat plate holder (3)

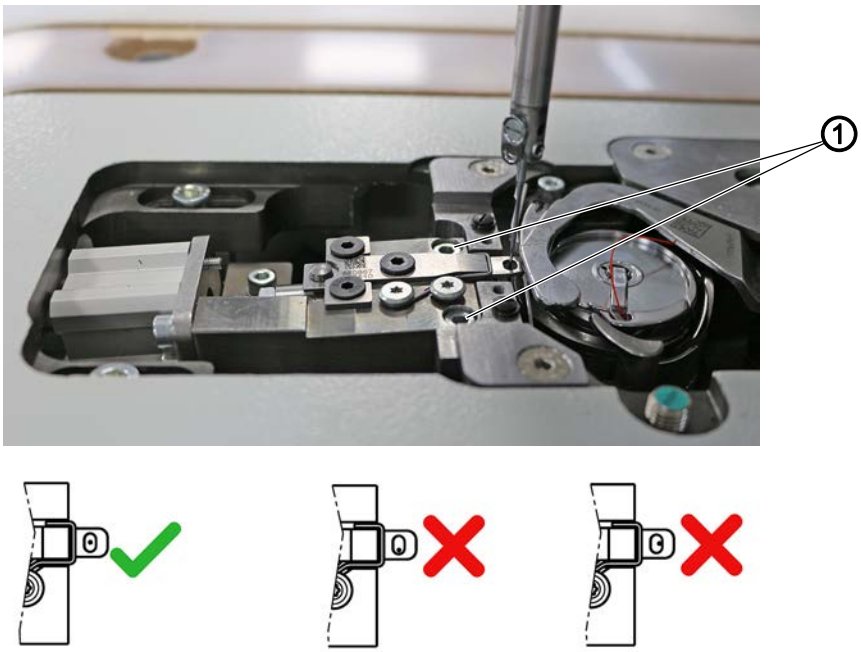


4. To adjust the needle guide (3), turn the screw (4).
   - To move the needle guide closer to the needle:
     Turn screw (4) clockwise
   - To move the needle guide further away from the needle:
     Turn screw (4) counterclockwise
5. Use a sheet of paper to check the distance between needle and needle guide (3) and adjust it if necessary.

↳ The space between needle and needle guide (3) must just be wide enough to allow a sheet of paper to pass through.

2.5 Assembling the NSB into the machine

Fig. 13: Assembling the NSB into the machine (1)



(1) - Screws

To assemble the NSB into the machine:

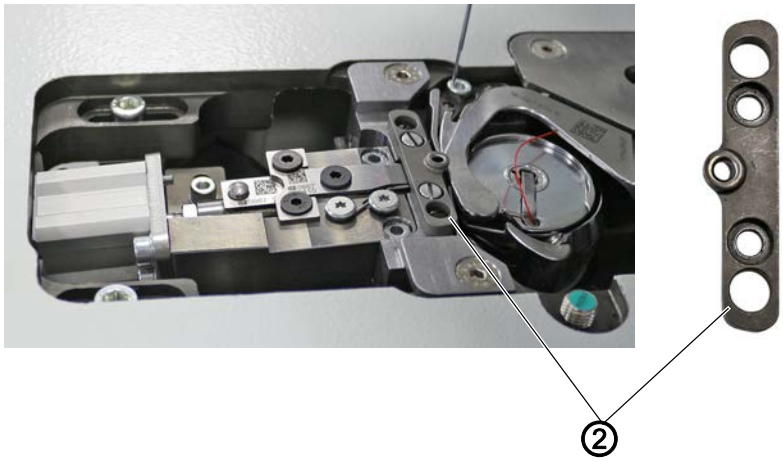
1. Switch off the machine.
2. Insert the NSB from the top.
3. Tighten the NSB (1) using the screws.
4. Lower the needle by turning handwheel.

   The needle must be positioned in the center of the needle hole of the thread-pulling knife.

If the needle is not positioned in the center of the needle hole of the thread-pulling knife:

5. Loosen the screws (1).
6. Move the entire NSB unit such that the needle is positioned precisely in the center of the needle hole of the thread-pulling knife (see figure above).
7. Tighten the screws (1).
   When doing so, make sure that you do not move the NSB unit.
8. Raise the needle by turning the handwheel.

Fig. 14: Assembling the NSB into the machine (2)



(2) - Throat plate

9. Assemble the throat plate (2).

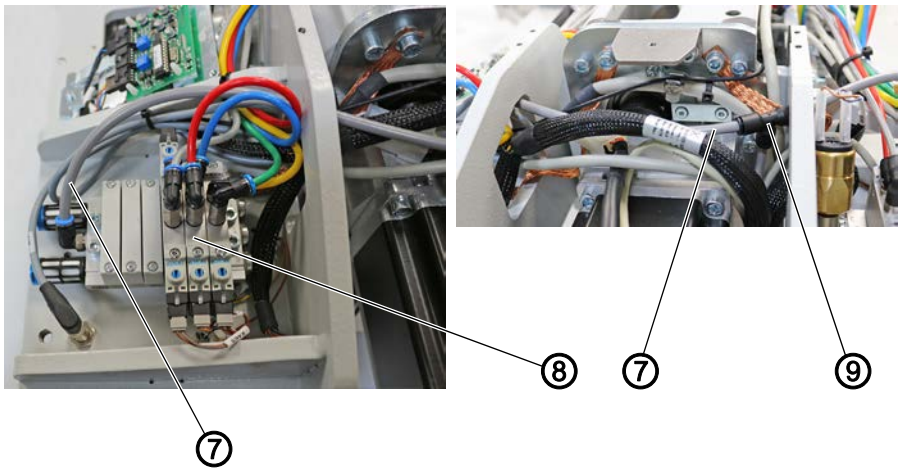
Fig. 15: Assembling the NSB into the machine (3)

(3) - Pneumatic hose
(4) - Pneumatic hose
(5) - Main air supply
(6) - Suction container

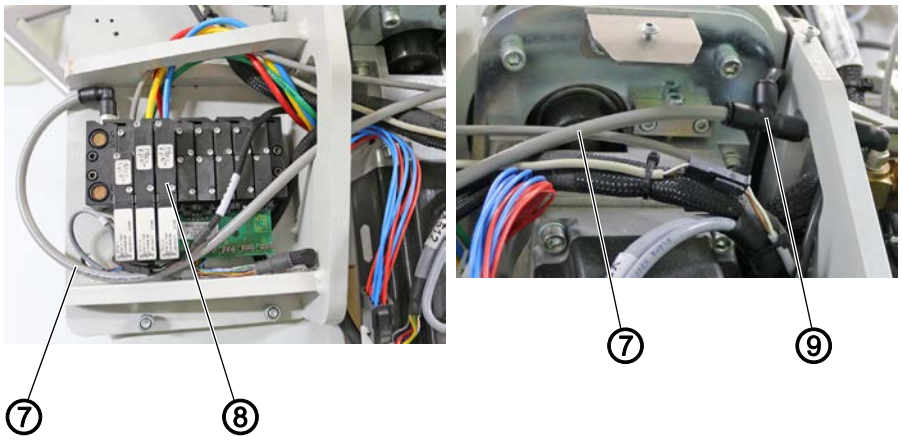
10. Assemble the suction container (6) under the tabletop.
11. Use the T-piece to connect the pneumatic hose (3) to the main air supply (5) of the compressed air maintenance unit.
12. Lay the pneumatic hose (4) under the machine along the valve block that is assembled in the rear section of the machine.

Fig. 16: Assembling the NSB into the machine (4)

Valve block Festo



Valve block Bürkert

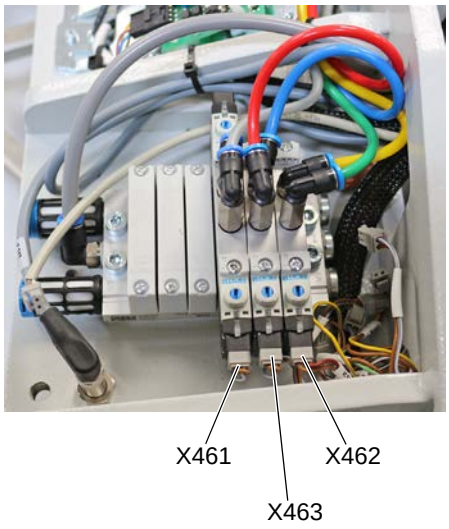


(7) - Pneumatic hose
(8) - Valve block
(9) - T-piece

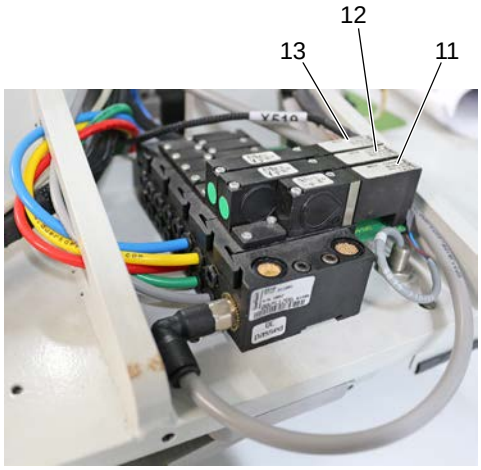
13. Tighten the valve block (8) in the rear section of the machine.
    - Valve block *Festo* for machines with the control **DAC comfort**
    - Valve block *Bürkert* for machines with the control **DAC 3**
14. Use the T-piece (9) to connect the pneumatic hose (7) to the main air supply.

Fig. 17: Assembling the NSB into the machine (5)

Valve block Festo



Valve block Bürkert

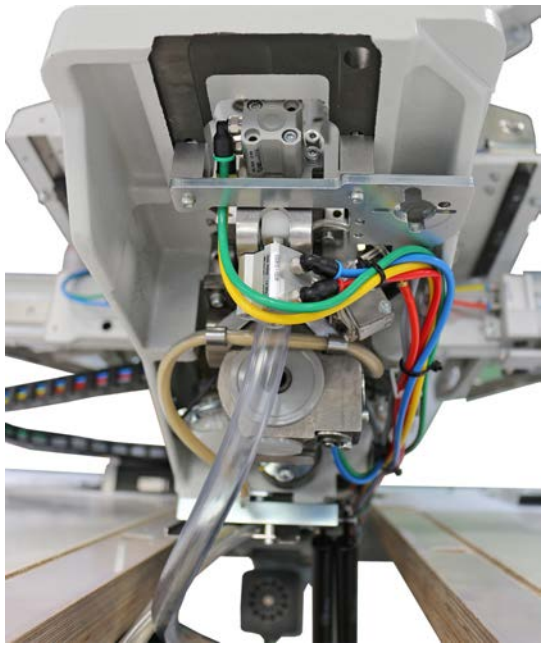


15. Connect the connectors and hoses on the valve block.

- Valve block Festo:
  - Connector **X461** + gray hose
  - Connector **X462** + green and yellow hose
  - Connector **X463** + red and blue hose
- Valve block Bürkert:
  - The positions of the valves on the valve block are fixed.
  - Position **11**: gray hose
  - Position **12**: green and yellow hose
  - Position **13**: red and blue hose

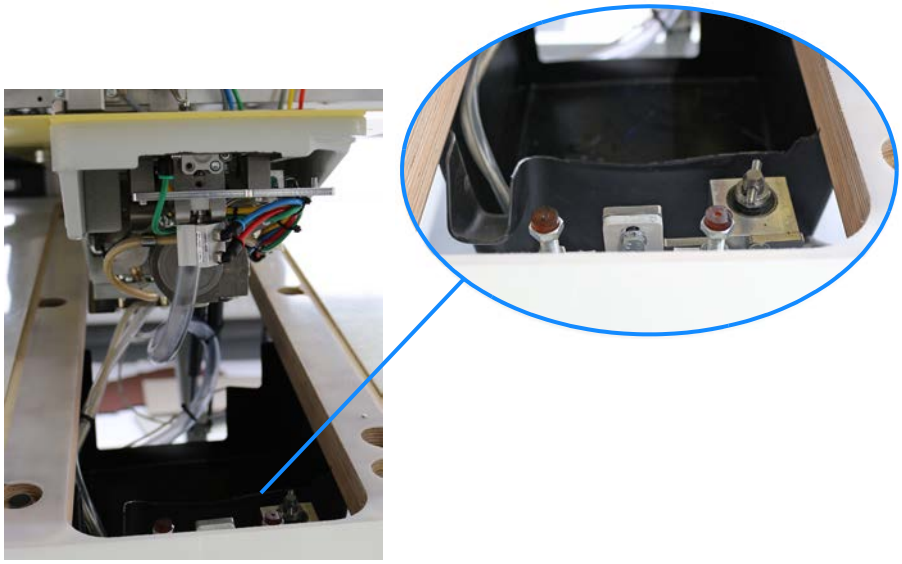
16. Lay the hoses under the machine and route them to the NSB. While doing so, make sure not to pinch any hoses.
17. Swivel up the machine head.

Fig. 18: Assembling the NSB into the machine (6)



18. Connect the hoses at the NSB by matching the colors of the hoses with the color markings on the connectors.

Fig. 19: Assembling the NSB into the machine(7)



19. To prevent the hoses and the NSB unit from colliding with the oil pan, the oil pan must be cut out in the front area.
    Reference: Cut out the oil pan at the 2nd stiffener.

2.6 Activating the NSB in the software

Information

Machines equipped with the control DAC 3 require software version **A.01** or later.

To activate the NSB in the software:

1. Switch on the machine.
2. Open the menu *Edit > Machine Parameters > MP1 - Configuration > Options* and select the **NSB** option.

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Subject to design changes - Part of the machines shown with additional equipment - Printed in Germany