



867  
867-M  
867-M PREMIUM

## Additional Instructions

Neat seam beginning (NSB)

**IMPORTANT**  
**READ CAREFULLY BEFORE USE**  
**KEEP FOR FUTURE REFERENCE**

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## 1 General information

The kit is used to create a neat seam beginning.

### Components of the kit

Check whether the scope of delivery for the kit is correct prior to installation. The different kits for the neat seam beginning differ in some parts, which are listed separately below.

Part number	Quantity	Designation
0867 350504	1	NSB assembly, consisting of: <ul style="list-style-type: none"> <li>• 0867 350280, carrier plate</li> <li>• 0867 350290, retaining bracket</li> <li>• 0867 350313, holder</li> <li>• 0867 350330, thread-pulling knife</li> <li>• 0867 350363, stop block</li> <li>• 0867 350400, clamping spring</li> <li>• 0867 350410, counter blade</li> <li>• 0867 350423, block</li> <li>• 0867 350440, stop</li> <li>• 0867 350470, plate</li> <li>• 9202 100328, countersunk screw; 4x8 (3 pieces)</li> <li>• 9204 431657, cylinder-head bolt; 4x8 (2 pieces)</li> <li>• 9330 000087, washer A4.3 (3 pieces)</li> <li>• 9202 002077, cylinder-head bolt M4x10</li> <li>• 9202 002067, cylinder-head bolt M4x8 (7 pieces)</li> <li>• 9202 100338, countersunk screw M4x10 (2 pieces)</li> <li>• 9700 234002, cylinder D12x10 (2 pieces)</li> <li>• 9202 001727, cylinder-head bolt M3x30 (5 pieces)</li> <li>• 9790 201000, WI-E coupling (4 pieces)</li> <li>• 9712 867001, valve block</li> <li>• 9731 004014, hose PUR, red (0.06 m)</li> <li>• 9731 004024, hose PUR, green (0.095 m)</li> <li>• 9731 004034, hose PUR, yellow (0.115 m)</li> <li>• 9731 004044, hose PUR, blue (0.07 m)</li> </ul>
0579 140074	1	Container
0742 002096	2	Clip
0867 350450	1	Thread-pulling knife
0999 240392	1	WI-E coupling R 1/8" D6
0999 240402	1	T-R coupling D6
9081 200810	1	Pin wrench X10
9202 002897	2	Cylinder-head bolt M6x16
9790 610460	1	Plug-in connection WI-E DA6/4
9330 200110	2	Washer A6.4
9731 005004	0.5 m	Hose PUR, gray
9731 006004	1.5 m	Hose PUR, gray
9732 010033	1	Hose AMORVIN
9790 201001	1	WI-E coupling R 1/8" D4

Part number	Quantity	Designation
9840 120001	6	Nail clamp
9840 120026	1	Mounting clip
9840 123003	6	Steel needle
0791 867716 EN	1	Additional Instructions
<b>Kit 0867 591164 (867/867-M CLASSIC) - configuration with machine</b>		
0867 140574	1	Oil pan
9870 867061	1	Adapter cable
<b>Kit 0867 591184 (867/867-M CLASSIC) - as retrofit kit</b>		
9840 130009	1	Cable gland
9870 867061	1	Adapter cable
<b>Kit 0867 593564 (867-M PREMIUM) - configuration with machine</b>		
0867 140574	1	Oil pan
9202 002067	2	Cylinder-head bolt M4x8
9330 000087	1	Washer A4.3
9840 123004	6	Steel needle
9870 867058	1	Cable
<b>Kit 0867 593594 (867-M PREMIUM) - as retrofit kit</b>		
9840 130009	1	Cable gland
9870 867058	1	Cable



### Important

The use of the NSB requires that the new sewing equipment **E212/0-6 / E212/0-9** has been installed ( *Parts List*).

The new sewing equipment is comprised of

- Feed dog (needle hole size 2.2x3.2; saw-tooth)
- Throat plate with left and right throat plate slide
- Presser foot
- Feeding foot (non-toothed)

## 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 provides for secure sewing.

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



### Important

The NSB will not be active until the completion of the **2nd stitch** after the machine was switched on.

The NSB is not active if the needle tip remains below the throat plate level during sewing.

### 2.1 Presettings outside of the machine (optional)

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

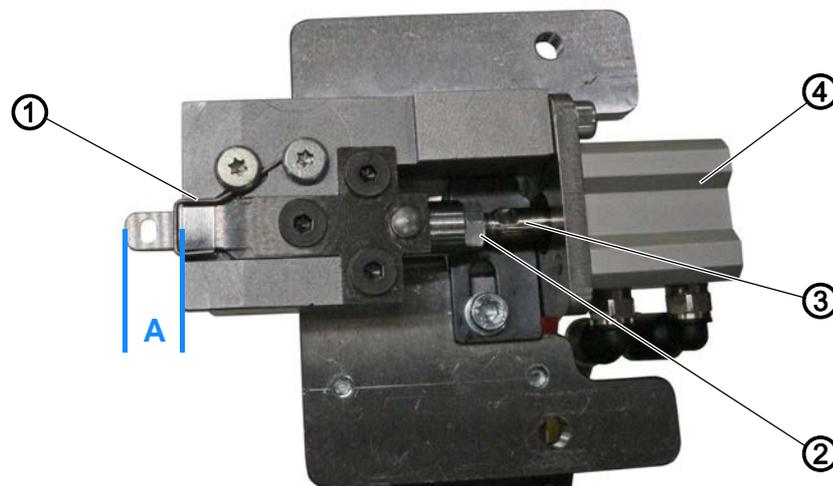
Do not check or set the presettings outside of the machine UNLESS the NSB is without function.



### Order

1. **Complete the presettings outside of the machine.**
2. Check/set the cutting pressure ( p. 7).
3. Check/set the clamping spring pressure ( p. 8).
4. Assemble the NSB ( p. 9).
5. Activate the NSB ( p. 17).

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



(1) - Clamping spring  
(2) - Nut

(3) - Piston rod  
(4) - Cylinder

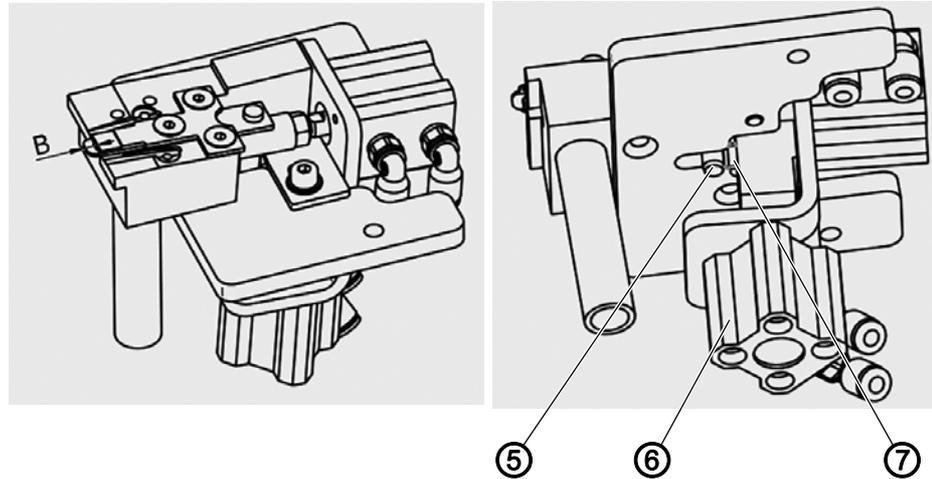


To complete the presettings outside of the machine:

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)



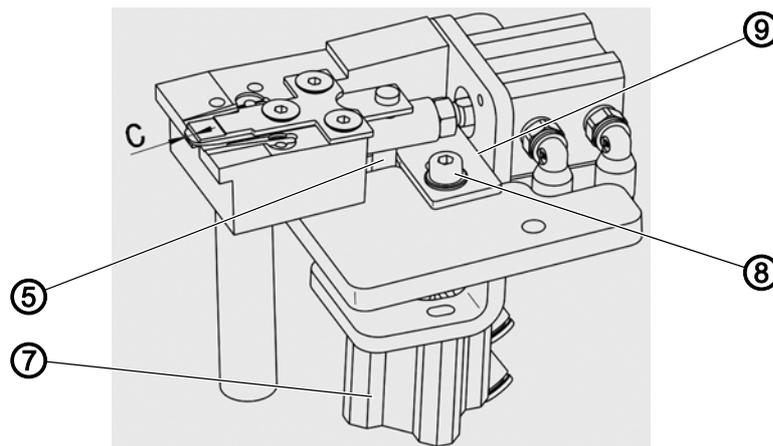
- (5) - Pin
- (6) - Cylinder

- (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 setting the cutting pressure

### NOTICE

#### Property damage may occur!

Risk of knife breakage if pressure is set too high.

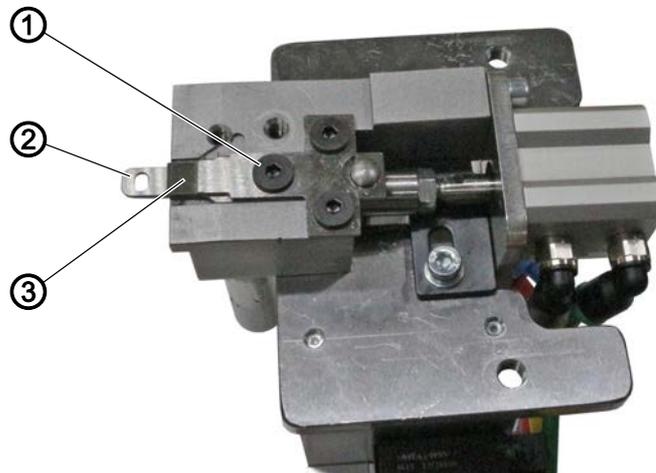
Do not set the cutting pressure too high.



#### Order

1. Complete the presettings outside of the machine (📖 p. 5).
- 2. Check/set the cutting pressure.**
3. Check/set the clamping spring pressure (📖 p. 8).
4. Assemble the NSB (📖 p. 9).
5. Activate the NSB (📖 p. 17).

Fig. 4: Checking and setting the cutting pressure



(1) - Screw

(2) - Thread-pulling knife

(3) - Counter blade



#### Proper setting

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



To check and set 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 setting the clamping spring pressure

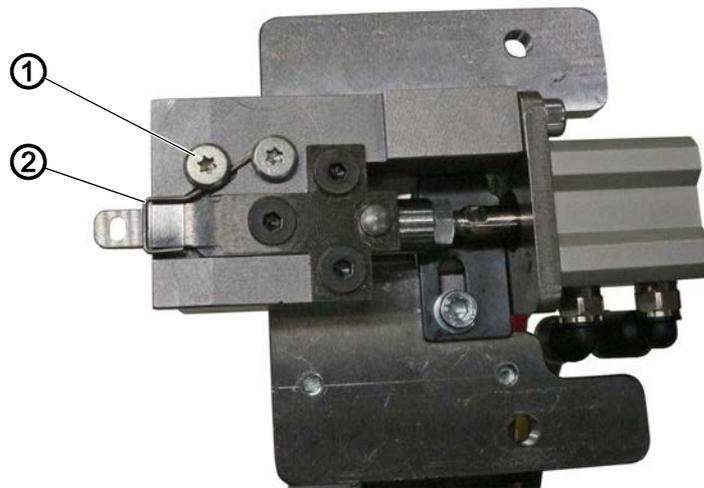
The clamping spring clamps the needle thread after the 1st stitch and prior to cutting.



#### Order

1. Complete the presettings outside of the machine (📖 p. 5).
2. Check/set the cutting pressure (📖 p. 7).
- 3. Check/set the clamping spring pressure.**
4. Assemble the NSB (📖 p. 9).
5. Activate the NSB (📖 p. 17).

Fig. 5: Checking and setting the clamping spring pressure



(1) - Screw

(2) - Clamping spring



To set the clamping spring pressure:

1. Set 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 Assembling the NSB into the machine

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### Information

You will find a video on how to assemble the NSB into the machine on our YouTube channel.

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### Order

1. Complete the presettings outside of the machine ( p. 5).
2. Check/set the cutting pressure ( p. 7).
3. Check/set the clamping spring pressure ( p. 8).
4. **Assemble the NSB.**
5. Activate the NSB ( p. 17).



To assemble the NSB into the machine:



### Important

#### Class 867

- Switch off the machine
- Lock the sewing feet in place
- Set the stitch length to 0

#### Class 867-M PREMIUM

- Set the stitch length to 0
  - Do NOT switch off the machine
  - Lock the sewing feet in place
  - Press the Service Stop button
1. Remove the throat plate slide
  2. Disassemble the throat plate ( *Service Instructions*).
  3. Disassemble the feed dog ( *Service Instructions*).
  4. Disassemble the short thread cutter blade ( *Service Instructions*).
  5. Tilt the machine head.

Fig. 6: Assembling the NSB into the machine (1)

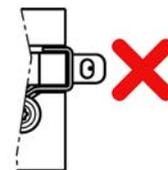
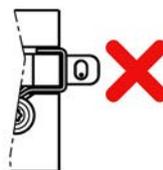
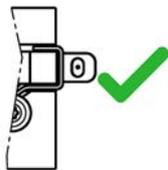


(1) - Screws



6. Insert the NSB from the bottom.
7. Tighten the NSB (1) using the screws.
8. Erect the machine head.

Fig. 7: Assembling the NSB into the machine (2)



(1) - Screws

(2) - Thread-pulling knife



9. Extend the thread-pulling knife (2) by hand without pressure as far as it will go.
10. Lower the needle by turning the handwheel
- ⚠ The needle must be positioned in the center of the needle hole of the thread-pulling knife (2).
11. Loosen the screws (1).
12. Move the entire NSB unit such that the needle is positioned precisely in the center of the needle hole of the thread-pulling knife (2) (see figure above).
13. Tighten the screws (1).  
When doing so, make sure that you do not move the NSB unit.
14. Raise the needle by turning the handwheel.
15. Slide the thread-pulling knife (2) all the way back.

Fig. 8: Assembling the NSB into the machine (3)



(3) - Feed dog

(4) - Short thread cutter blade



16. Assemble the short thread cutter blade (4).

17. Assemble the feed dog (3).

⚠ The needle must pierce exactly in the center of the needle holes of feed dog (3) and thread-pulling knife (2).

Fig. 9: Assembling the NSB into the machine (4)



(5)

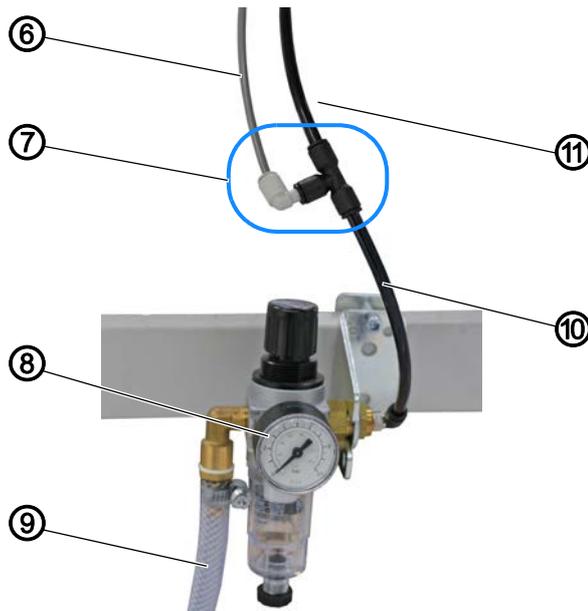
(5) - Throat plate



18. Assemble the throat plate (5).

19. Tilt the machine head.

Fig. 10: Assembling the NSB into the machine (5)



- |                                       |                         |
|---------------------------------------|-------------------------|
| (6) - Air supply - machine            | (9) - Connection hose   |
| (7) - T-piece                         | (10) - Air hose         |
| (8) - Compressed air maintenance unit | (11) - Air supply - NSB |



20. Assemble the compressed air maintenance unit (8) to the stand (only for class **867-M PREMIUM** if not present).
21. Connect the air hose (10).
22. Connect the air supply of the machine (6) and the air supply of the NSB (11) to the air hose (10) using the T-piece (7).

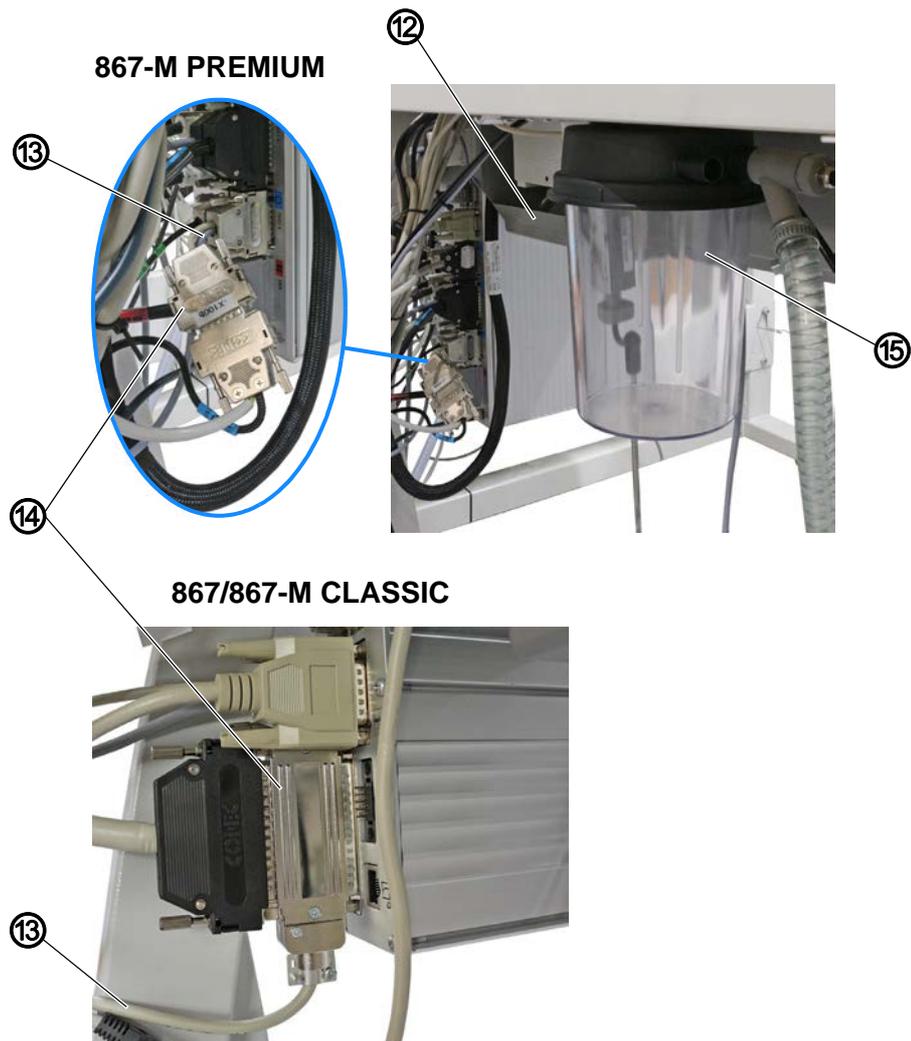


### Information

The **867-M PREMIUM** only requires the connection of the air supply to the machine (6) if additional pneumatic equipment has been installed aside from the NSB.

23. Connect the connection hose (9) to the compressed air supply.

Fig. 11: Assembling the NSB into the machine (6)



(12) - Oil pan

(13) - Connection cable NSB

(14) - Adapter

(15) - Suction container



24. Assemble the new oil pan (12).



### Information

If you do not use a new oil pan, you need to drill holes into the old oil pan and assemble the cable gland. A drawing containing the corresponding dimensions is included in the **Appendix** (📖 p. 27).

25. Assemble the suction container (15) under the tabletop.

26. Connect the adapter (14) to the port on the control using the cable (13).  
The connection cable NSB (13) is fitted with valve connectors.



**Information**

For class **867-M PREMIUM**: Use port **X100b**.

Fig. 12: Assembling the NSB into the machine (7)



(10) - Air hose

(12) - Oil pan

(13) - Connection cable NSB

(15) - Suction container

(16) - Suction hose

(17) - Pneumatic hose



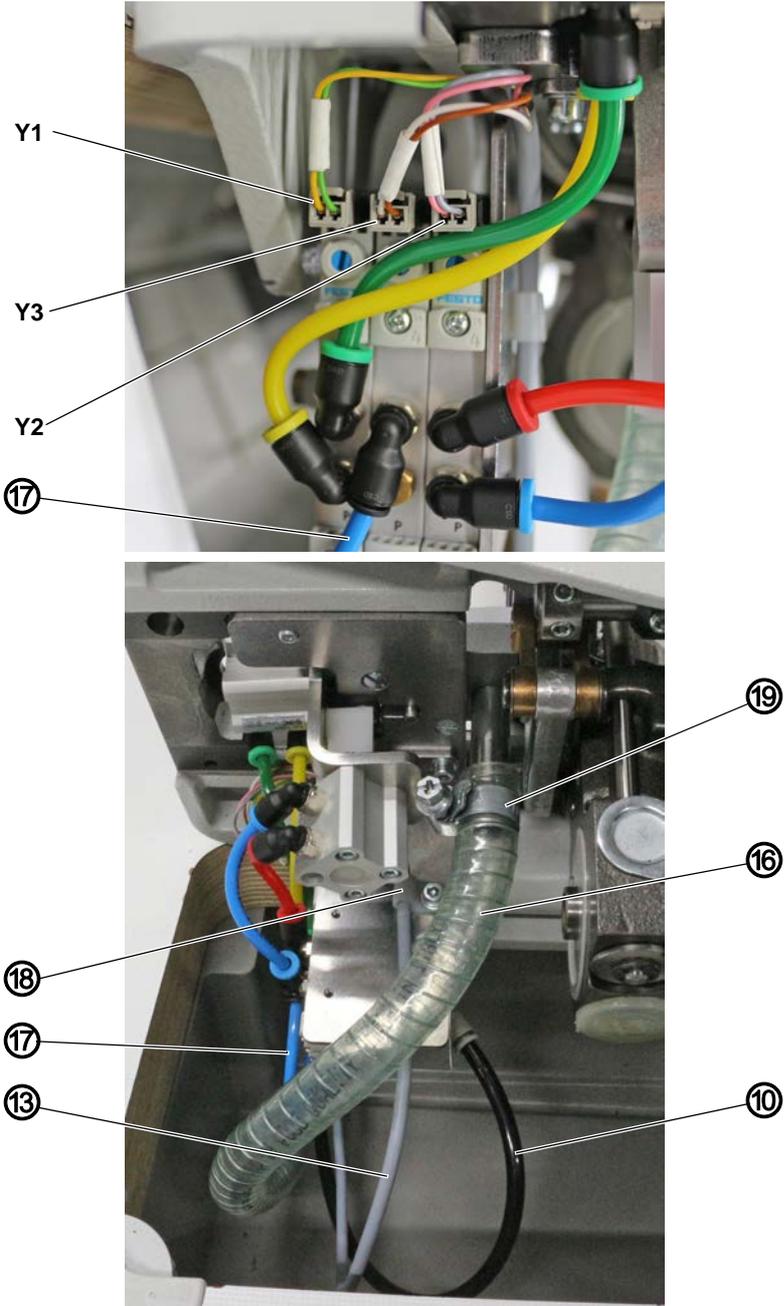
27. Install the air hose (10) of the compressed air maintenance unit and the cable (13) under the tabletop using cable clamps.

28. Assemble the suction hose (16) to the suction container (15) using the clip.

29. Connect the pneumatic hose (17) to the suction container (15).

30. Guide all cables and hoses through the holes in the oil pan (12).

Fig. 13: Assembling the NSB into the machine (8)



(10) - Air hose  
(13) - Connection cable NSB  
(16) - Suction hose

(17) - Pneumatic hose  
(18) - Strain relief mechanism  
(19) - Clip

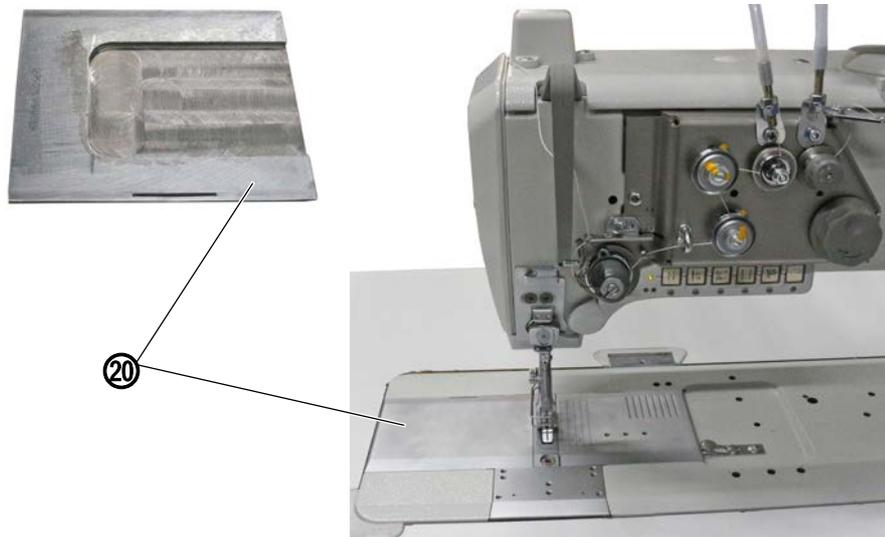


31. Connect cables and hoses to the NSB.

- Assemble the suction hose (16) using the clip (19)
- Insert the pneumatic hose (17) of the suction container (15)
- Insert the air hose (10)
- Connect valve connectors **Y1**, **Y2** and **Y3** to the valve blocks  
 Y1: yellow/green (cylinder of thread-pulling knife)  
 Y2: gray/pink (cylinder for clamping position)  
 Y3: brown/gray (suction)
- Screw the connection cable NSB (13) along with the strain relief mechanism (18) to the valve block

32. Erect the machine head.

Fig. 14: Assembling the NSB into the machine (9)



(20) - Throat plate slide



33. Insert throat plate slide (20).



**Important**

The left throat plate slide must be replaced with throat plate slide (20) in order to prevent collisions.

## 2.5 Activating the NSB in the software

The NSB must be activated by setting the corresponding parameters on the control panel.

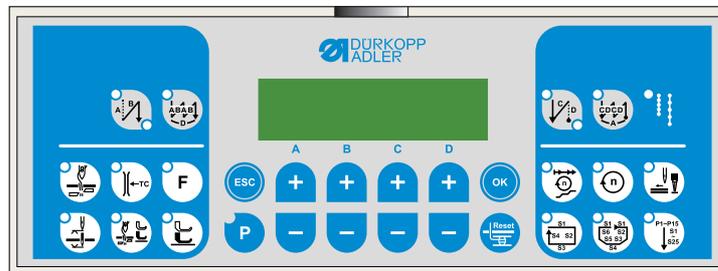


### Order

1. Complete the presets outside of the machine (📖 p. 5).
2. Check/set the cutting pressure (📖 p. 7).
3. Check/set the clamping spring pressure (📖 p. 8).
4. Assemble the NSB (📖 p. 9).
5. **Activate the NSB.**

### 2.5.1 Activating NSB for class 867/867-M CLASSIC

Fig. 15: Activating NSB for class 867/867-M CLASSIC



To activate the NSB in the software:

1. Check the software version.



### Important

The software version must be **B03.50** or later.  
You can download the latest machine software on the Internet (<https://software.duerkopp-adler.com/maschinenprogramme.html>).

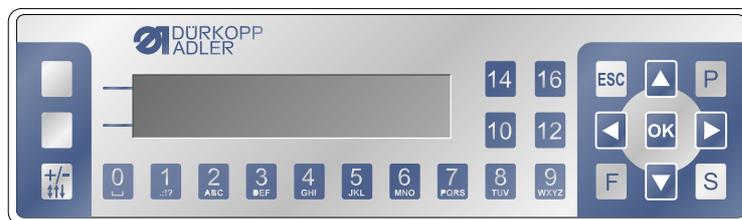
2. Update to the latest software version if necessary.
3. Press and hold the buttons  and  at the same time.
4. Open parameter  $t\ 01\ 30$ .
5. Enter the value **2**.
- ↳ The NSB has been activated in the software.
6. Check all NSB parameters and adjust them if necessary.
7. To activate the NSB during sewing, press the  button.

**List of NSB parameters**

E	C	P	Min	Max	Preset value	Unit	Description
t	01	30			2	-	Neat seam beginning (NSB) 0 = Off 1 = without NSB, thread clamp active 2 = with NSB, thread clamp active
t	01	31	0	359	40	ms	Waiting time after short stitch
t	01	32	0	359	270	°	Deactivation angle during the 1st stitch (clamp thread - cylinder 1)
t	01	33	0	359	000	°	Activation angle of the suction device during the 1st stitch
t	01	34	0	359	50	msx10	Duration of suction
t	01	36	0	359	250	°	Deactivation angle during the 2nd stitch (cut thread - cylinder 2)
t	51	53	0	39	34	-	34 = activate suction
t	51	55	0	39	22	-	22 = NSB stop (cut thread - cylinder 2)

**2.5.2 Activating NSB for class 867-M PREMIUM (OP3000)**

Fig. 16: Activating NSB for class 867-M PREMIUM (1)



To activate the NSB in the software:

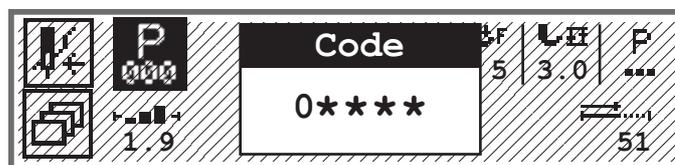
1. Check the software version.


**Important**

The software version must be **A04.30** or later.  
You can download the latest machine software on the Internet  
(<https://software.duerkopp-adler.com/maschinenprogramme.html>).

2. Update to the latest software version if necessary.
  3. Press the **P** and **S** buttons at the same time.
- ↪ The display shows the input screen for the password:

Fig. 17: Activating NSB for class 867-M PREMIUM (2)





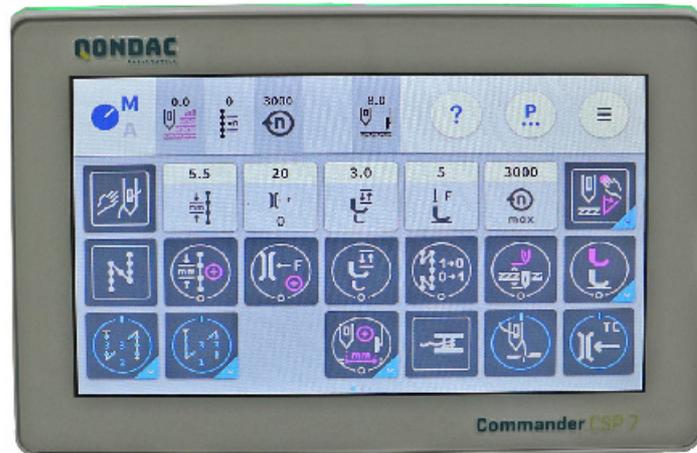
4. Use the numeric buttons to enter the password (25483).  
↪ You are on the Technician level.
5. Open the menu *Machine config.* > *Thread clamp* > *NSB*.
6. Check the box with **OK**.  
↪ NSB is activated.

#### List of NSB parameters

No.	Parameter	Min	Max	Preset value	Unit	Description
	<b>NSB</b>					Submenu for NSB
t 01 30	On	0	1	0	-	On/Off 0 = No 1 = Yes
t 01 31	Knife at position	0	1000	40	ms	Activation delay after short stitch
	<b>Thread-pulling knife</b>				-	Submenu Thread-pulling knife
t 01 32	Off	0	359	49	°	Deactivation angle during the 1st stitch (clamp thread)
	<b>Thread clamp</b>				-	Submenu Thread clamp at pulling knife
t 01 34	Off	0	359	52	°	Deactivation angle during the 2nd stitch (cut thread)
	<b>Suction</b>				-	Submenu Suction
t 01 35	On	0	359	167	°	Activation angle of the suction device
t 01 36	Off	0	99999	500	ms	Duration of suction

### 2.5.3 Activating NSB for class 867-M PREMIUM (Commander Basic/Pro)

Fig. 18: Activating NSB for class 867-M PREMIUM



To activate the NSB in the software:

1. Press the symbol and log out the signed-in user.
2. Log in as a *Technician* by entering the password 25483.
3. Press the symbol to bring up the navigation pane.
4. Go to *Machine configuration* > *Needle thread clamp* and enable the *Neat Seam Beginning* menu item.
- ↳ NSB is activated.
5. Press the symbol to return to the start screen.

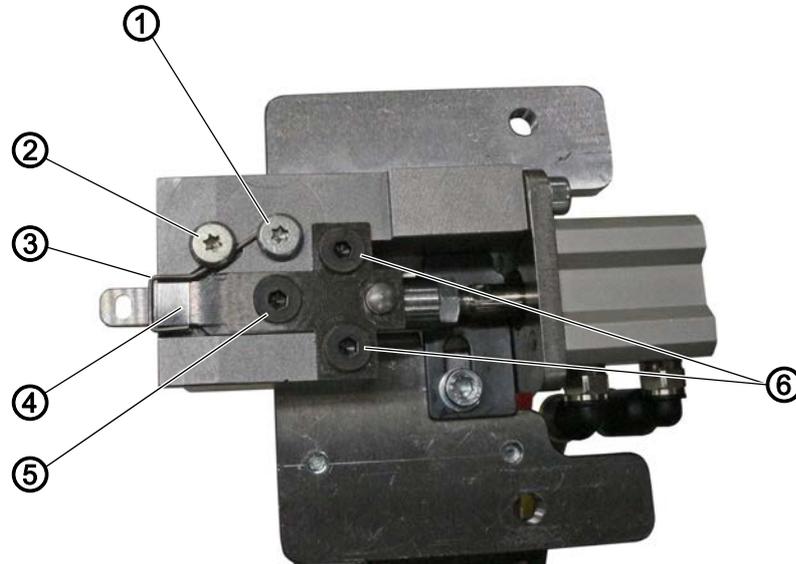
**List of NSB parameters**

No.	Parameter	Icon	Min	Max	Preset value	Unit	Description
T 01 30	On		0	1	0	-	Thread clamp On/Off at NSB 0 = Off; 1 = On
T 01 31	Delay		0	1000	40	ms	Delay for activating the NSB after the thread has been cut
T 01 32	Off		0	359	49	°	Position to switch off the knife during the first stitch
T 01 34	Off		0	359	52	°	Position to switch off the knife clamp during the second stitch
T 01 35	On		0	359	167	°	Position to start the suction device
T 01 36	Off		0	99999	500	ms	Duration of suction

### 3 Changing the knives

To change the knife, you will need a size 10 Torx screwdriver for the clamping spring and a 2.5 mm hexagon socket screwdriver for the knife screws.

Fig. 19: Changing the knives (1)



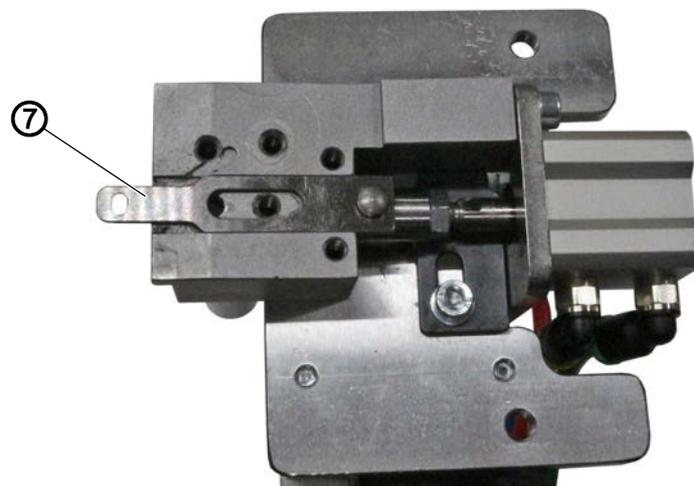
- |                       |                       |
|-----------------------|-----------------------|
| (1) - Screw           | (4) - Counter blade   |
| (2) - Adjusting screw | (5) - Adjusting screw |
| (3) - Clamping spring | (6) - Screws          |



To change the knives:

1. Disassemble the throat plate ( *Service Instructions*).
2. Loosen screw (1) and adjusting screw (2).
3. Remove the clamping spring (3).
4. Loosen adjusting screw (5) and screws (6).
5. Remove the counter blade (4).

Fig. 20: Changing the knives (2)



- (7) - Thread-pulling knife



6. Remove the thread-pulling knife (7).
7. Place the new thread-pulling knife.



**Important**

Make sure to place the thread-pulling knife with the correct orientation:  
The slanted surface is found on the underside.

8. Place the new counter blade.



**Important**

Make sure to place the counter blade with the correct orientation:  
The countersunk screws can be inserted properly into the holes.

9. Tighten the screws (6).
10. Screw in screw (5) and set the cutting pressure ( p. 7).
11. Place the clamping spring (3).
12. Tighten the screw (1).
13. Screw in screw (2) and set the clamping spring pressure ( p. 8).

## 4 Maintenance

Fig. 21: Maintenance (1)



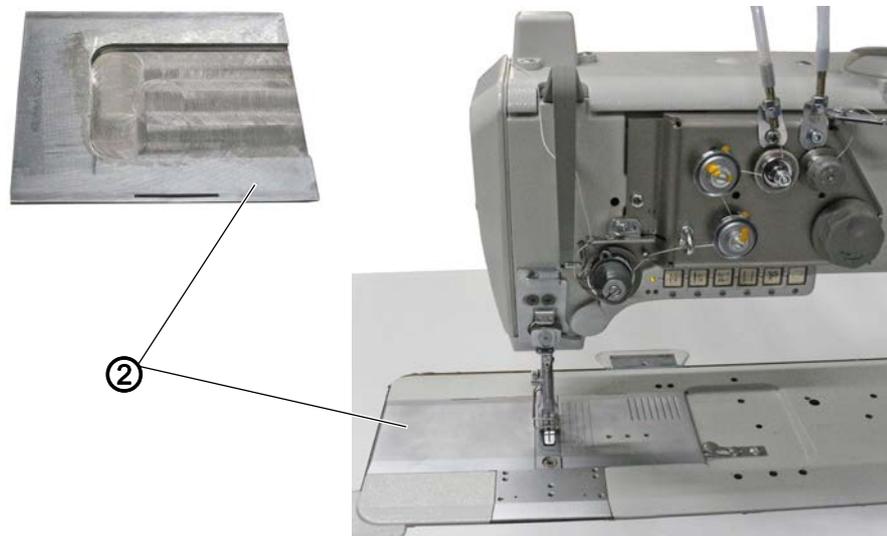
(1) - Suction container



To perform maintenance on the NSB:

1. Empty the suction container (1).

Fig. 22: Maintenance (2)

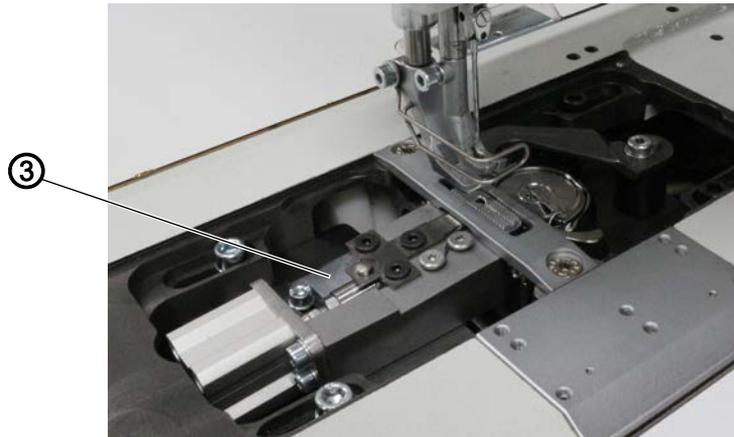


(2) - Left throat plate slide



2. Clean the left throat plate slide (2) every day.

Fig. 23: Maintenance (3)



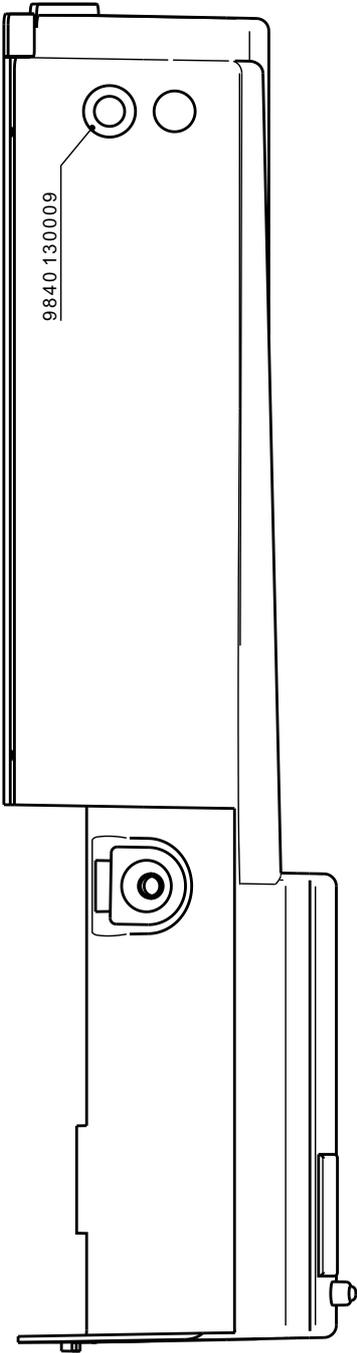
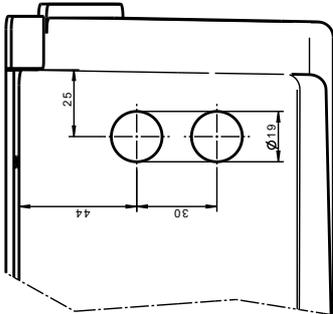
(3) - NSB unit



3. Open the left throat plate slide (2).
4. Use a compressed air gun to clean the NSB unit (3) every day.



### 5.2 Dimensions oil pan hole









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