



867 M-TYPE Flatbed machines

Additional Instructions

Throat plate slide interrogator

IMPORTANT
READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

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1 General information

This kit has been designed for CLASSIC and PREMIUM machines of the M-TYPE series.

During sewing, the throat plate slide (3) abuts on the throat plate (1) and is held in place by the locking spring (2). The machine is ready for operation:

Fig. 1: General information (1)



(1) - Throat plate
(2) - Locking spring

(3) - Throat plate slide

Fig. 2: General information (2)



(3) - Throat plate slide

When the throat plate slide (3) is open, e. g. during a bobbin change, the proximity switch will detect this condition and lock the machine. On CLASSIC machines, the display will show the message *3109*, while the display on PREMIUM machines will show the message *Service Stop 9922*. Sewing is not possible during this time. The machine will remain locked even if you press the pedal forward (position 1) or press a button.

This lock is an additional measure intended to prevent injuries.

Components of the kit

Check whether the scope of delivery for kit **0867 151174** is correct prior to installation.

The kit is comprised of the following parts:

| Part number | Number | Description |
|-------------|--------|-------------------|
| 9815 710221 | 1 | Sensor with cable |
| 9840 120104 | 3 | Cable holder |
| 9840 121002 | 10 | Cable tie |
| 0867 490110 | 1 | Plate |
| 9202 002067 | 1 | Screw M4X8 |
| 9840 120025 | 1 | Mounting clip |
| 9217 300517 | 1 | Screw M4X6 |



Information

This kit is required 1x and 2x for 1-needle machines and 2-machines, respectively.



Important

To install the throat plate slide interrogator on the machine, you will need another kit: Adapter **0867 592224**.

The circuit board included in the kit can accommodate up to 4 interrogator units (the throat plate slide interrogator is one of them).

2 Assembling the throat plate slide interrogator

WARNING



Risk of injury!

Faulty assembly, e.g. faulty wiring, can cause the entire machine to malfunction.

Only qualified specialists may assemble the throat plate slide interrogator.

Do not assemble the throat plate slide interrogator unless the machine is switched off.

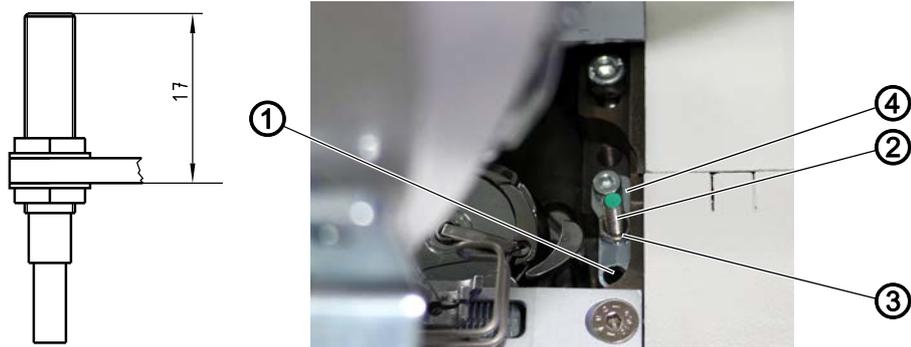
Fig. 3: Assembling the throat plate slide interrogator (1)



- (1) - Position
- (2) - Proximity switch
- (3) - Position

- (4) - Metal bracket
- (5) - Screw
- (6) - Throat plate slide

Fig. 4: Assembling the throat plate slide interrogator (2)



- (1) - Position
- (2) - Proximity switch

- (3) - Position
- (4) - Metal bracket



To assemble the interrogator of the throat plate slide:

1. Open the throat plate slide (6).

2. Tighten the proximity switch (2) to the metal bracket (4) using the nuts and toothed washers:
 - The distance between the lower edge of the metal bracket (4) and the upper edge of the proximity switch (2) is **17 mm**
 - Machine with short thread cutter (KFA): Tighten the proximity switch (2) at position (3) (right hole in the metal bracket (4)).
 - Machine with/without thread cutter (FA): Tighten the proximity switch (2) at position (1) (left hole in the metal bracket (4)).
 3. Screw the metal bracket (4) into the threaded hole in the hook bearing using the screw (5).
- ↙ This setting requires a safe switching distance of approx. 0.5 mm between throat plate slide (6) and proximity switch (2).



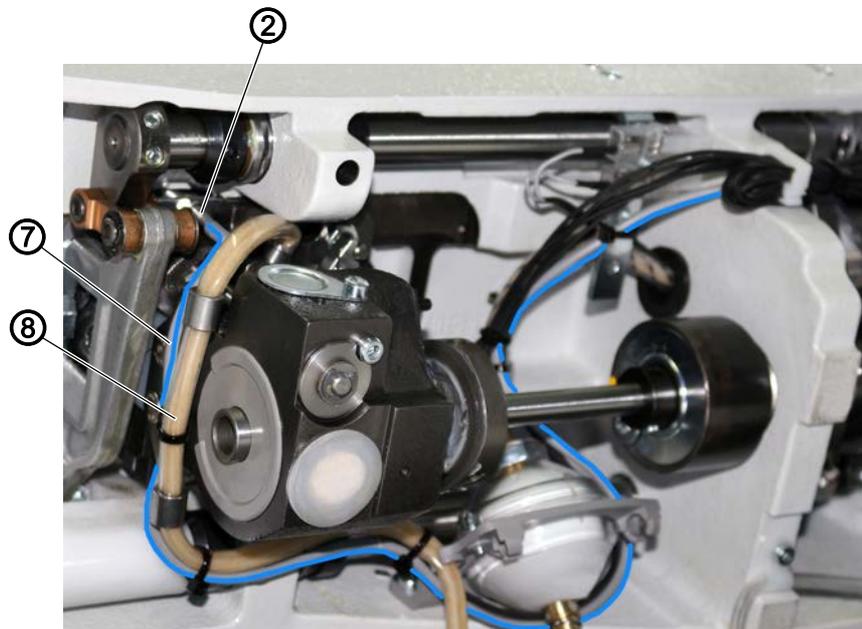
Information

Switching distance between throat plate slide (6) and proximity switch (2):

- Standard switching distance: 0.8 mm
- safe switching distance: 0.64 mm

Laying the cable

Fig. 5: Assembling the throat plate slide interrogator (3)



(2) - Proximity switch
(7) - Cable

(8) - Oil line



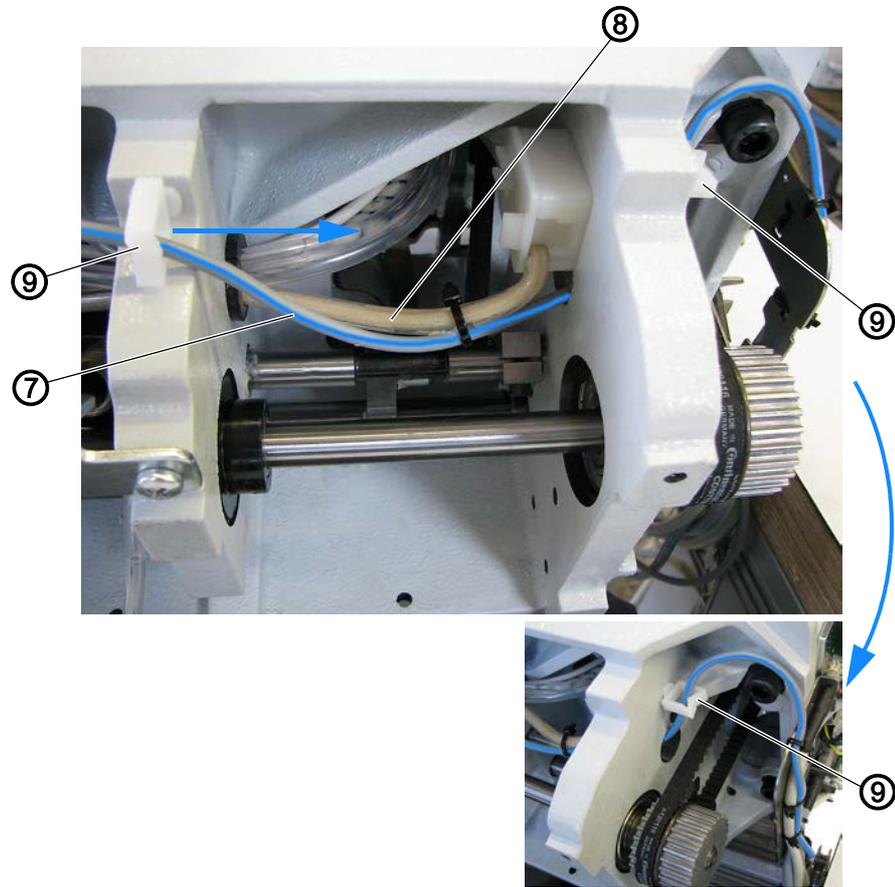
4. Swivel up the machine head ( *Operating Instructions*).
5. Tighten the cable (7) of the proximity switch at the hook support.
6. Lay the cable (7) to the right towards the circuit board along the oil line (8).



Important

Make sure not to pinch off the oil line (8).

Fig. 6: Assembling the throat plate slide interrogator (4)



(7) - Cable
(8) - Oil line

(9) - Clip



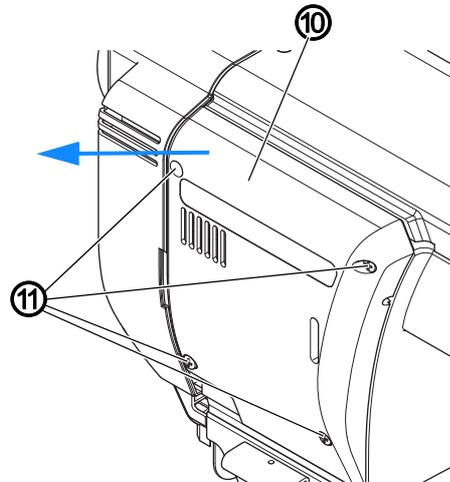
7. Guide the cable (7) through the clips (9) and lay it along the oil line (8).



Information

The circuit board to which the throat plate slide interrogator is connected is found behind the valve cover and behind the cover on the side, respectively, on CLASSIC and PREMIUM machines.

You will, therefore, have to remove different covers in order to connect the interrogator.

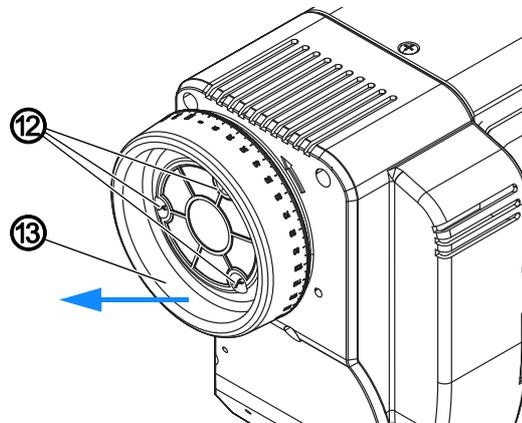
Removing the valve cover (CLASSIC)*Fig. 7: Assembling the throat plate slide interrogator (5)*

(10) - Valve cover

(11) - Screw



8. Loosen the screws (11).
9. Remove the valve cover (10).

Removing the handwheel (PREMIUM)*Fig. 8: Assembling the throat plate slide interrogator (6)*

(12) - Screw

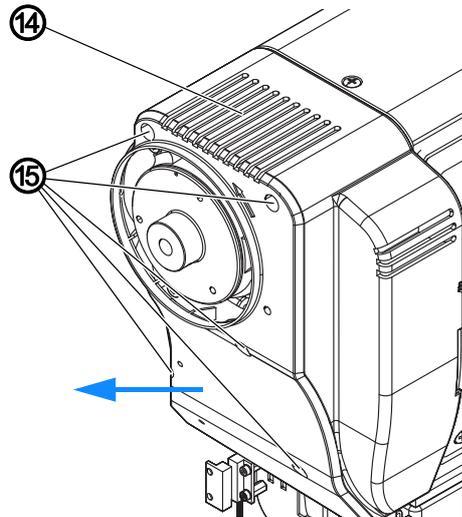
(13) - Handwheel



10. Loosen the screws (12).
11. Remove the handwheel (13).

Removing the cover on the side (PREMIUM)

Fig. 9: Assembling the throat plate slide interrogator (7)



(14) - Cover on the side

(15) - Screw

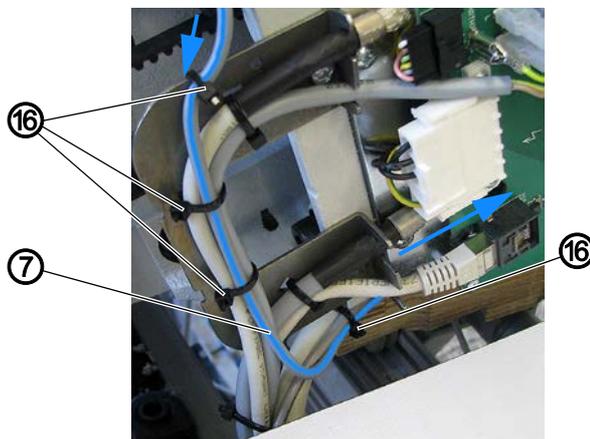


12. Loosen the screws (15).

13. Remove the cover on the side (14) and set it down carefully on the tabletop next to the machine.

⚠ The cover on the side (14) is still connected to the machine via the switch housed in the cover.
Do not pull on the cable.

Fig. 10: Assembling the throat plate slide interrogator (8)



(7) - Cable

(16) - Cable tie



14. Guide the cable (7) with the cable ties (16) up and along the other cables towards the circuit board.

⚠ You have successfully assembled the throat plate slide interrogator.

You can now connect the throat plate slide interrogator (📖 p. 10).

3 Connecting the throat plate slide interrogator

WARNING



Risk of injury from sharp and moving parts!

Crushing, cutting and punctures are possible.

Do not connect the throat plate slide interrogator unless the machine is switched off and de-energized. Disconnect the machine from the power supply before connecting the interrogator.

NOTICE

Property damage may occur!

The cables may be crushed, kinked and cut.

Make sure not to guide the cables over sharp edges and moving parts and do not kink or crush the cables.



Order

1. Assemble the throat plate slide interrogator (📖 p. 5).
2. **Connect the throat plate slide interrogator.**
3. Test functionality (📖 p. 15).



Information

If not yet present on the machine, the adapter (part no. **0867 592224**) must be assembled first.

The plug connection **X6** (IN) of the circuit board must ALWAYS be connected to the machine distributor. The corresponding cable is included.

Depending on the type of machine distributor, the plug connection and setting must be established:

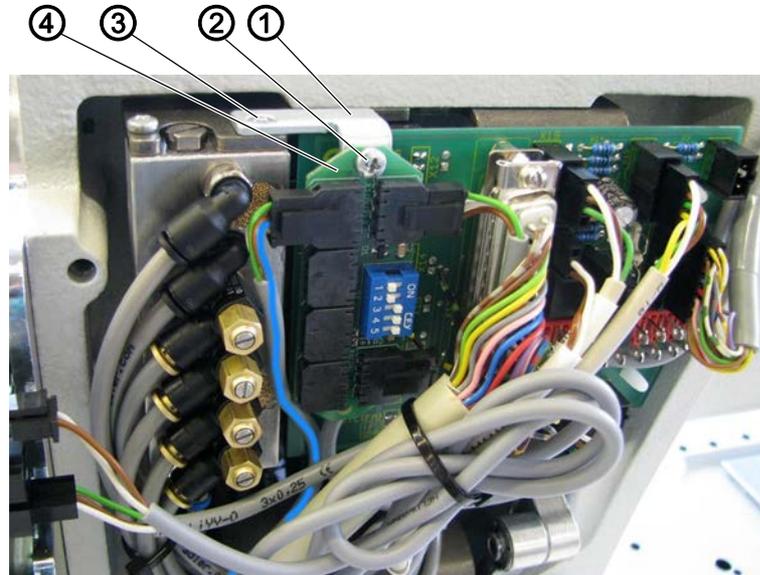
| Machine distributor | Plug | Comment |
|---------------------|------|-----------------------------------|
| 9850 688001 (DA178) | X15 | J1 must be open (OFF) |
| 9850 867000 (DA174) | X26 | J2 must be open (OFF) |
| 9850 867020 (DA289) | X29 | S2 must be open (OFF) |
| 9850 838000 (DA199) | X23 | S2 in position 1-OFF; 2-ON; 3-OFF |



To connect the throat plate slide interrogator:

Assembling the circuit board (if not yet present on CLASSIC machines)

Fig. 11: Connecting the throat plate slide interrogator (1)



(1) - Bracket

(2) - Screw

(3) - Screw

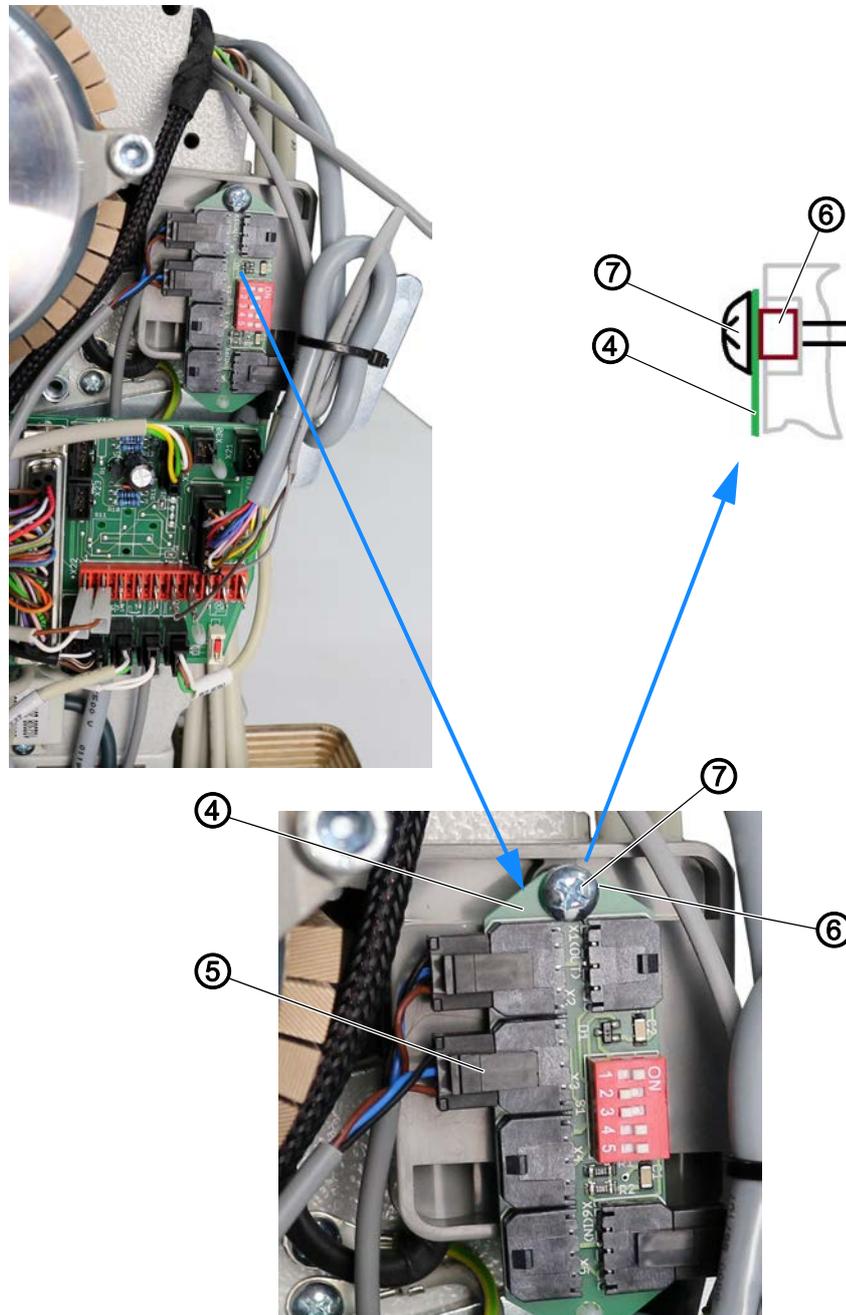
(4) - Circuit board



1. Loosen the screw (3).
2. Tighten the bracket (1) as shown using screw (3).
3. Tighten the circuit board (4) to the bracket (1) using screw (2).

Assembling the circuit board (if not yet present on PREMIUM machines)

Fig. 12: Connecting the throat plate slide interrogator (2)



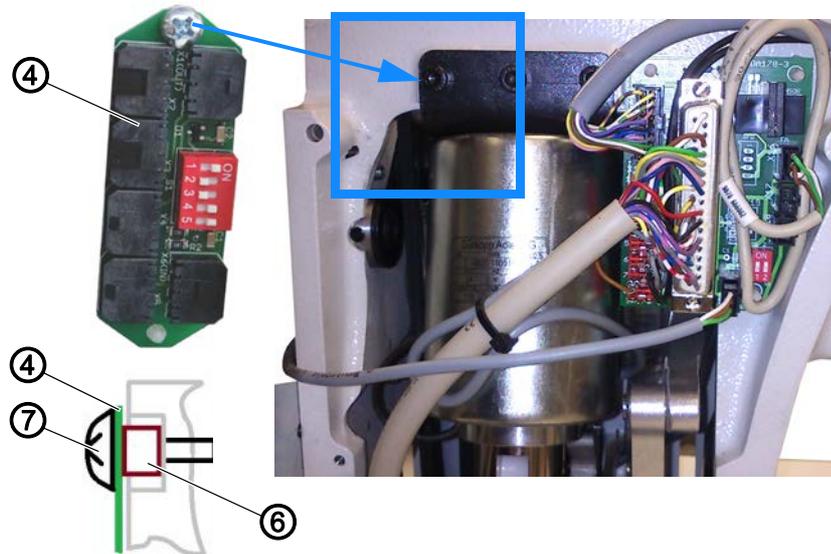
- | | |
|------------------------------------|----------------------------|
| (4) - Circuit board | (6) - Socket (not visible) |
| (5) - Plug (of interrogator cable) | (7) - Screw |



4. Position the socket (6) on the plastic housing (behind the cover on the side and next to the sewing motor).
5. Position the circuit board (4) over top.
6. Tighten the circuit board (4) through the plastic housing using the screw (7) and the socket (6).

Assembling the circuit board (if not yet present on shoe machines)

Fig. 13: Connecting the throat plate slide interrogator (3)



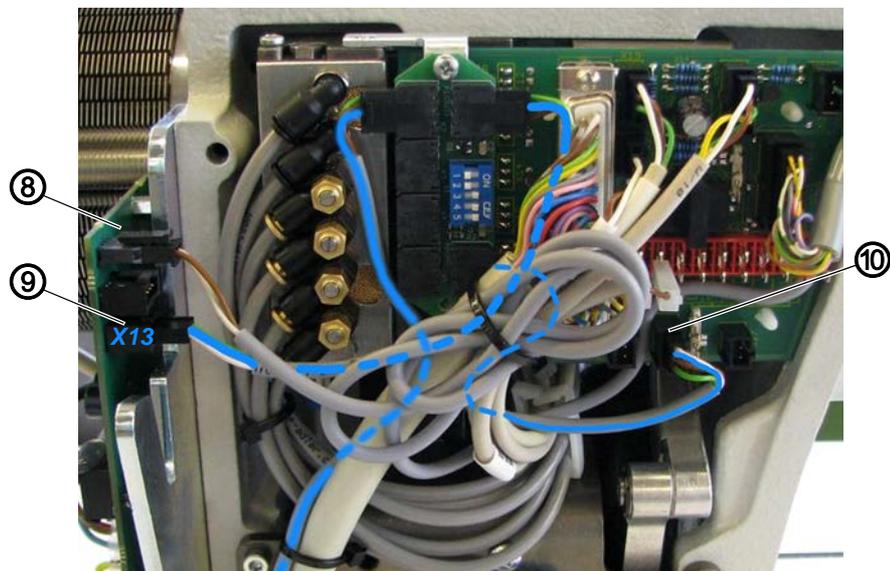
(4) - Circuit board



7. Assemble the circuit board at the top left on the back of the machine arm (4) using the socket (6) and the screw (7).

Connecting the throat plate slide interrogator

Fig. 14: Connecting the throat plate slide interrogator (4)

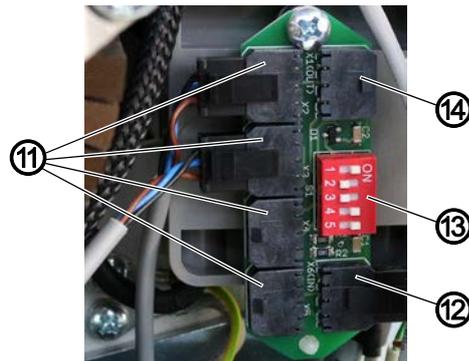


(8) - Circuit board

(9) - Plug connection X13

(10) - Slot on the machine distributor

Fig. 15: Connecting the throat plate slide interrogator (5)



(11) - Plug connection **X2-X5**

(13) - DIP switch 1-5

(12) - Plug connection **X6 (IN)**

(14) - Plug connection **X1**



8. Connect the cable of the throat plate slide interrogator at any available slot **X2/X3/X4/X5** (11).
9. Connect the corresponding slot on the machine distributor (depending on the machine) to plug connection **X6** (12).
10. When the circuit board (8) is connected to the machine, connect plug connection **X13** (9) with plug connection **X1** (14).
11. Set all DIP switches (13) whose slots **X1-X5** are NOT occupied to position **ON**.



Information

The **ON** position of the DIP switches signifies that no interrogator is connected at the corresponding slot or that the function of the respective interrogator is switched off.

- ↪ The DIP switches (13) shown in the figure below **MUST** be set to the following position:
 - DIP switch **1: ON**
 - DIP switch **2: OFF**
 - DIP switch **3: OFF**
 - DIP switch **4: ON**
 - DIP switch **5: ON**
- ↪ The needle cover interrogator has been successfully assembled and connected.

Proceed by testing the functionality of the throat plate slide interrogator (📖 p. 15).

4 Testing the functionality



Order

1. Assemble the throat plate slide interrogator ( p. 5).
2. Connect the throat plate slide interrogator ( p. 10).
3. **Test functionality.**



To test the functionality of the throat plate slide interrogator:

1. Connect the machine to the power supply.
 2. Set the main switch (2) on the control to position 1.
- ↳ The machine is ready for operation.

Fig. 16: Testing the functionality



(1) - Throat plate slide



3. Open the throat plate slide (1).

↳ The machine is now locked and not sewing.
The display of the corresponding control panel shows the following message:

- CLASSIC machines: 3109 (operation lock)
- PREMIUM machines: Service Stop 9922

You have successfully set up the throat plate slide interrogator.



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