

867 M-TYPE

Additional Instructions

Needle area cover interrogator

IMPORTANT READ CAREFULLY BEFORE USE KEEP FOR FUTURE REFERENCE

All rights reserved.

Property of Dürkopp Adler GmbH and protected by copyright. Any reuse of these contents, including extracts, is prohibited without the prior written approval of Dürkopp Adler GmbH.

Copyright © Dürkopp Adler GmbH 2021



1	General information	3	
2	Setting up the needle area cover interrogator	6	
2.1	Preparing assembly	6	
2.2	Assembling the needle area cover interrogator	10	
2.3	Connecting the needle area cover interrogator	14	
2.4	Testing the functionality	19	





1 General information

Fig. 1: General information (1)



(1) - Cover

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

During sewing, the cover (1) in front of the needle is at its regular position (see figure). When the cover (1) is swiveled to the side, e.g. during a needle 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 592244/0867 592344** is correct prior to installation.

Kit 0867 592244 (CLASSIC)

Part number	Quantity	Description	
0667 105164	1	Head cover	
H867 V93298 001	1	Mounting bracket	
H867 V93298 002	1	Holder	
9205 102467	1	Threaded pin	
9301 102541	1	Cylinder pin	
H867 V93298 005	1	Sleeve	
9400 000168	1	Pressure piece	



Part number	Quantity	Description	
9231 000397	1	Nut	
9202 042327	2	Cylinder-head bolt	
9330 000087	2	Disk	
1001 009243	4	Disk	
0867 592290	1	Holder	
0867 592250	1	Cover	
9204 431657	2	Cylinder-head bolt	
0867 592300	1	Mounting plate	
9203 003637	2	Cylinder-head bolt	
9815 710221	1	Inductive transmitter	
9840 120025	1	Mounting clip	
9204 201657	1	Pan-head screw	

Kit 0867 592344 (PREMIUM)

Part number	Quantity	Description
H867 V93298 001	1	Mounting bracket
H867 V93298 002	1	Holder
9205 102467	1	Threaded pin
9301 102541	1	Cylinder-head bolt
H867 V93298 005	1	Sleeve
9400 000168	1	Pressure piece
9231 000397	1	Nut
9202 042327	2	Cylinder-head bolt
9330 000087	2	Disk
1001 009243	4	Disk
0867 592290	1	Holder
0867 592250	1	Cover
9204 431657	2	Cylinder-head bolt
0867 592300	1	Mounting plate
9203 003637	2	Cylinder-head bolt
9815 710221	1	Inductive transmitter
0798 120401	1	Cable clip





Important

To install the interrogator for the needle area cover 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 needle area cover interrogator is one of them).



2 Setting up the needle area cover interrogator

2.1 Preparing assembly

WARNING



Risk of injury!

Crushing, cutting and punctures are possible. Do not assemble the needle area cover interrogator unless the machine is switched off.

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. Prepare assembly.
- 2. Assemble the needle area cover interrogator (\square *p. 10*).
- 3. Connect the needle area cover interrogator (p. 14).
- 4. Test functionality (p. 19).



To prepare the assembly of the needle cover area interrogator:

Replacing the head cover (CLASSIC)



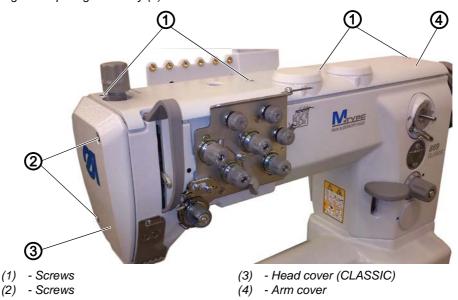
Information

CLASSIC machines are missing the two holes in the head cover that are needed for the assembly of the needle area cover interrogator. This is why the kit for CLASSIC machines includes a new head cover.

You do not need to replace the head cover on PREMIUM machines.



Fig. 2: Preparing assembly (1)



- 150
- 1. Loosen the 2 screws (2).
- 2. Remove the head cover (3).
- 3. Tighten the new head cover using 2 screws.

Removing the arm cover (CLASSIC and PREMIUM)

- 4. Loosen the cable of the control panel (PREMIUM).
- 5. Loosen the screws (1).
- 6. Remove the arm cover (4).

Preparing the head cover (PREMIUM)

Fig. 3: Preparing assembly (2)



(5) - Plug

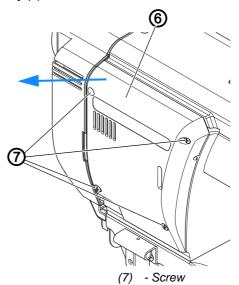


7. Take out both plugs (5) and keep them in a safe place.



Removing the valve cover (CLASSIC and PREMIUM)

Fig. 4: Preparing assembly (3)



(6) - Valve cover



- 8. Loosen the screws (7).
- 9. Remove the valve cover (6).

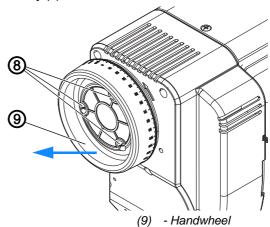


Information

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

Removing the handwheel (PREMIUM)

Fig. 5: Preparing assembly (4)

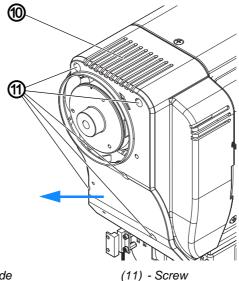


- (8) Screw
- 1/2
- 10. Loosen the screws (8).
- 11. Remove the handwheel (9).



Removing the cover on the side (PREMIUM)

Fig. 6: Preparing assembly (5)



(10) - Cover on the side



- 12. Loosen the screws (11).
- 13. Remove the cover on the side (10) and set it down carefully on the tabletop next to the machine.
- The cover on the side (10) is still connected to the machine via the switch housed in the cover. Do not pull on the cable.

You can now assemble the needle area cover interrogator (p. 10).



2.2 Assembling the needle area cover interrogator

WARNING



Risk of injury!

Faulty wiring can cause the entire machine to malfunction.

Only qualified specialists may assemble the needle area cover interrogator.

Do not assemble the needle area cover interrogator unless the machine is switched off.

NOTICE

Property damage may occur!

The cables may be crushed, kinked and cut.

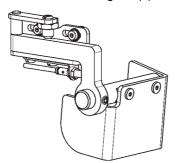
Make sure not to guide the cables over sharp edges and moving parts and do not kink or crush the cables.



Order

- 1. Prepare assembly (\square *p. 6*).
- 2. Assemble the needle area cover interrogator.
- 3. Connect the needle area cover interrogator (\square *p. 14*).
- 4. Test functionality (p. 19).

Fig. 7: Assembling the needle area cover interrogator (1)



The needle area cover interrogator ships fully pre-assembled (see figure above).

Only the parts necessary for assembling the head cover are included as loose single items.



Fig. 8: Assembling the needle area cover interrogator (2)

- (1) Disk
- (2) Head cover
- (3) Holder

- (4) Screw
- (5) Washer (not all visible)



To assemble the interrogator of the needle area cover:

1. Assemble the holder (3) to the head cover (2) using 4 disks (1), 2 screws (4) and 2 washers (5) (see figure).



Information

Do not tighten the screws (4) all the way yet to ensure that you can still align the needle area cover interrogator.



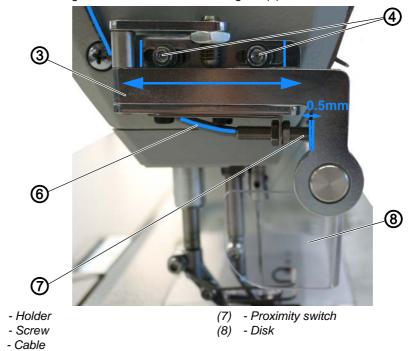


Fig. 9: Assembling the needle area cover interrogator (3)

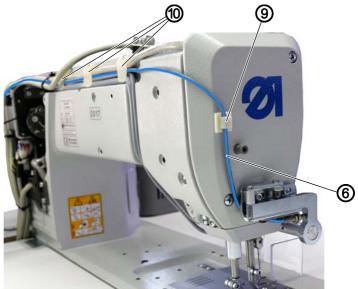


(3) (4)

- 2. Align the needle area cover interrogator in such a way that it does not come into contact with any other part of the machine when swung open and closed.
- 3. Tighten the screws (4).
- 4. Carefully remove the protective film from the disk (8).
- 5. Check if the distance between the proximity switch (7) and the holder (3) is approx. 0.5 mm.

This distance has been preset at the factory.

Fig. 10: Assembling the needle area cover interrogator (4)



- (6) Cable
- (9) (Adhesive) clip





6. PREMIUM: Apply the adhesive clip (9) to the head cover.



Information

On CLASSIC machines, a cable clamp has been tightened to the head cover at the factory.

- 7. Lay the cable (6) to the circuit board by inserting it through the (adhesive) clip (9) and the cable clamps (10) and guiding it up and towards the rear.
- ♦ You have successfully assembled the needle area cover interrogator.

You can now connect the needle area cover interrogator (p. 14).



2.3 Connecting the needle area cover interrogator

WARNING



Risk of injury from moving parts!

Crushing, cutting and punctures are possible.

Do not connect the needle area cover 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. Prepare assembly (\square *p. 6*).
- 2. Assemble the needle area cover interrogator (\square *p. 10*).
- 3. Connect the needle area cover interrogator.
- 4. Test functionality (p. 19).



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

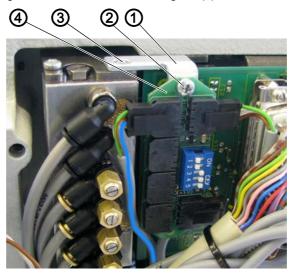




To connect the interrogator of the needle area cover:

Assembling the circuit board (CLASSIC)

Fig. 11: Connecting the needle area cover interrogator (1)



- (1) Bracket
- (2) Screw

- (3) Screw
- (4) Circuit board

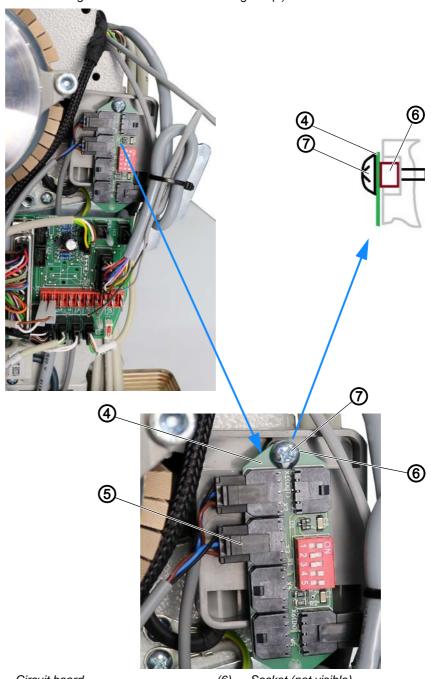


- 1. Loosen the screw (3).
- 2. Tighten the bracket (1) as shown using screw (3).
- 3. Tighten the circuit board (4) to the bracket (1) using screw (2).



Assembling the circuit board (PREMIUM)

Fig. 12: Connecting the needle area cover interrogator (2)



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

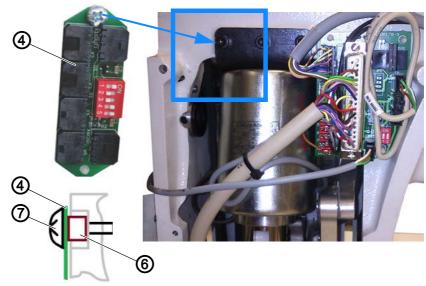


- 4. Position the socket (6) on the plastic housing (behind the cover on the side and next to the sewing motor).
- 5. Position the circuit board (4) over top.
- 6. Tighten the circuit board (4) through the plastic housing using the screw (7) and the socket (6).



Assembling the circuit board (shoe machines)

Fig. 13: Connecting the needle area cover interrogator (3)



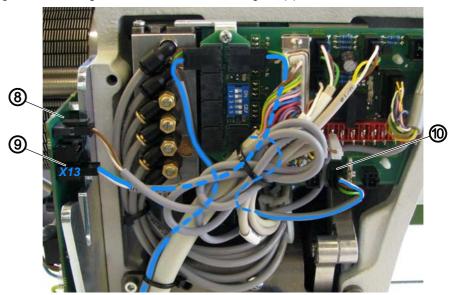
(4) - Circuit board



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

Connecting the needle area cover interrogator

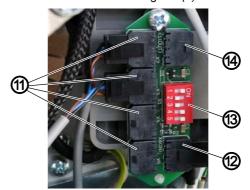
Fig. 14: Connecting the needle area cover interrogator (4)



- (8) Circuit board
- (9) Plug connection X13
- (10) Slot on the machine distributor



Fig. 15: Connecting the needle area cover interrogator (5)



(11) - Plug connection X2-X5

(12) - Plug connection X6 (IN)

(13) - DIP switch 1-5

(14) - Plug connection X1



- 8. Connect the cable of the needle area cover 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 area cover interrogator has been successfully assembled and connected.

Proceed by testing the functionality of the needle area cover interrogator $(\square p. 19)$.



2.4 Testing the functionality



Order

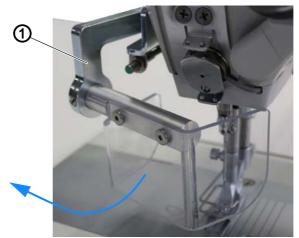
- 1. Prepare assembly (\square *p. 6*).
- 2. Assemble the needle area cover interrogator (\square *p. 10*).
- 3. Connect the needle area cover interrogator (\square *p. 14*).
- 4. Test functionality.



To test the functionality of the needle area cover interrogator:

- 1. PREMIUM: Place the cover on the side and the handwheel.
- 2. Place the valve cover.
- 3. Place the arm cover.
- 4. PREMIUM: Connect the control panel.
- 5. Connect the machine to the power supply.
- 6. Set the main switch on the control to position 1.
- ♥ The machine is switched on.
- 7. Press the pedal to position **1** with the needle area cover interrogator closed.
- ♦ The machine sews.

Fig. 16: Testing the functionality



(1) - Needle area cover interrogator



- 8. Open the needle area cover interrogator (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 needle area cover interrogator (1).





DÜRKOPP ADLER GmbH Potsdamer Str. 190 33719 Bielefeld, Germany Germany

Phone: +49 (0) 521 925 00

Email: service@duerkopp-adler.com

www.duerkopp-adler.com