1 Parts set components

The electronic handwheel makes it easier for the operator to make the first stitch in thick material. In addition, the electronic handwheel is directly mounted on the sewing head, making it easier to reach than the normal handwheel.

First check that the scope of delivery is correct!

The parts set comprises the following components:

Material number	Quantity	Description
9850 H66703	1	Rotary encoder, complete
H667 110050	1	Adjusting wheel
0867 110570	1	Mounting plate
9204 201647	2	Pan-head screws
9840 121001	2	Cable ties

Figure 1: Electronic handwheel attachment set

2 Attaching the electronic handwheel

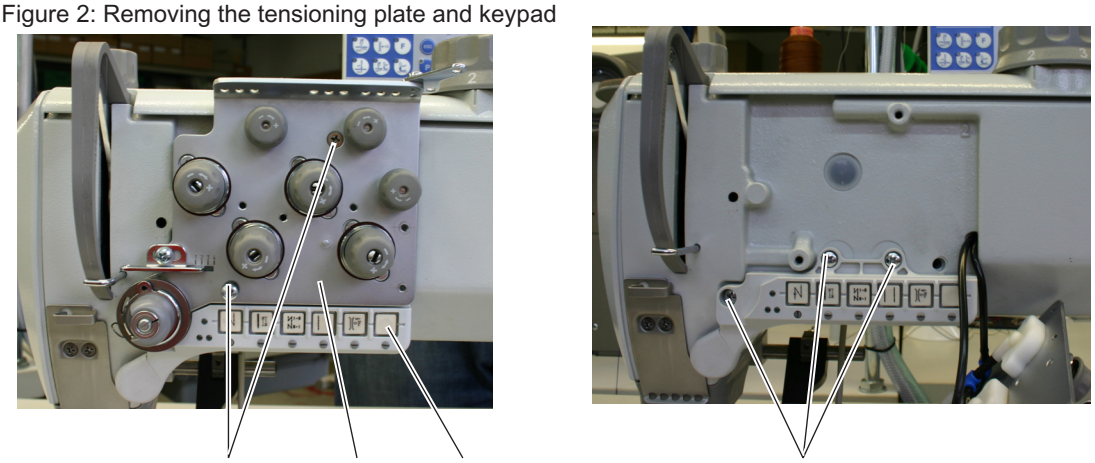
DANGER

Risk of death from electric shock!

The electronic handwheel may only be attached by a trained specialist.
Switch off the sewing machine and disconnect the power plug before attaching the electronic handwheel.
Make sure the power plug cannot be accidentally plugged back in.

2.1 Removing the tensioning plate and keypad

Figure 2: Removing the tensioning plate and keypad

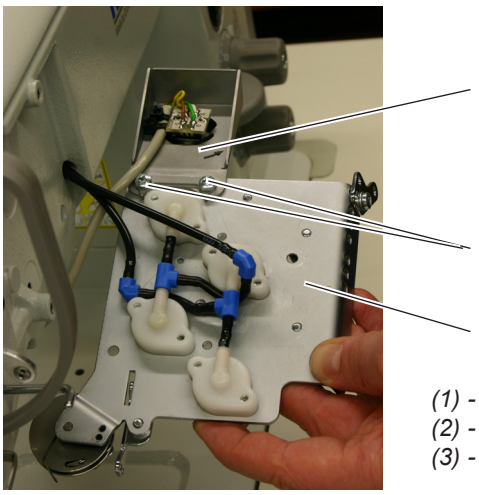


(1) - Tensioning plate screws
(2) - Tensioning plate
(3) - Keypad
(4) - Keypad screws

1. Release 2 screws (1) on the tensioning plate (2).
2. Remove the tensioning plate (2) towards the front, while taking care to ensure that the cables are not pulled out.
3. Unscrew the 3 screws (4) on the keypad (3).
4. Remove the keypad (3) , while taking care to ensure that the cables are not pulled out.

2.2 Attaching the handwheel

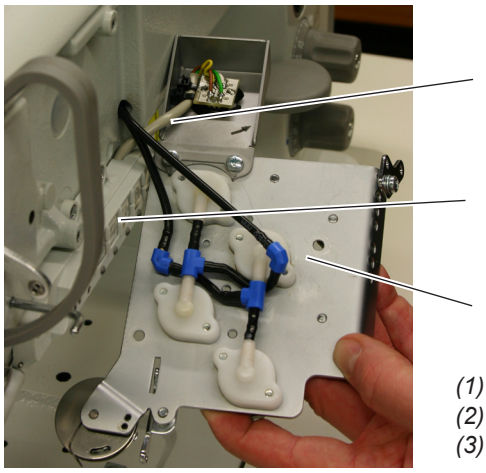
Figure 3: Handwheel attached to the tensioning plate



(1) - Mounting plate
(2) - Screws
(3) - Tensioning plate

1. Place the mounting plate(1) with the PCB on the tensioning plate (3) from the rear and ensure that the holes line up correctly.
2. Push the pan-head screws (2) from the rear, through the holes in the mounting plate and tensioning plate and screw in place.
3. Feed the cable from above, downwards through the rear cutout in the keypad.

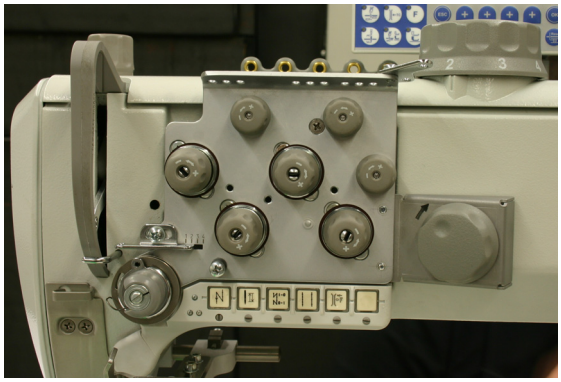
Figure 4: Lay the cable to the rear



(1) - Handwheel cable
(2) - Keypad
(3) - Tensioning plate

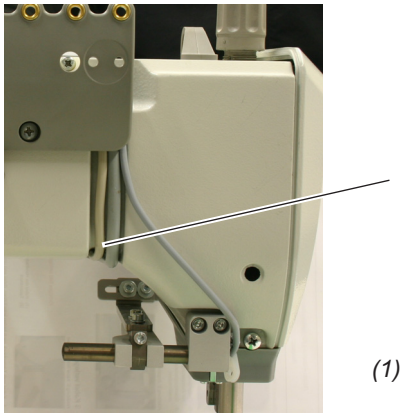
4. Screw the keypad (2) to the arm using 3 screws, while taking care to ensure that the cable (1) is not crushed in the cutout.
5. Screw the tensioning plate (3) and connected handwheel onto the arm using 2 screws.

Figure 5: Mounted handwheel



3 Lay the cable

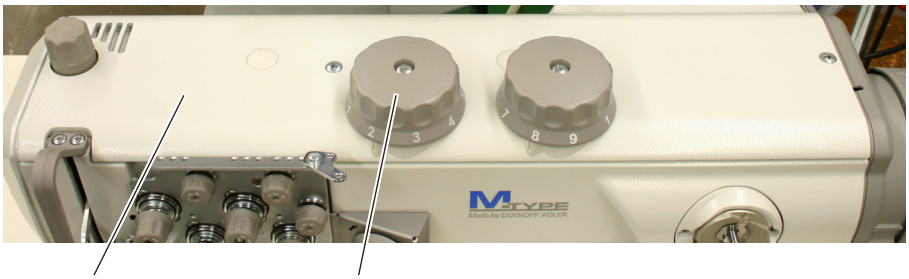
Figure 6: Lay the cable at the rear side of the machine



(1) - Handwheel cable

1. Feed the cable (1) from the keypad to the left rear of the machine, while keeping it as close as possible under the arm.

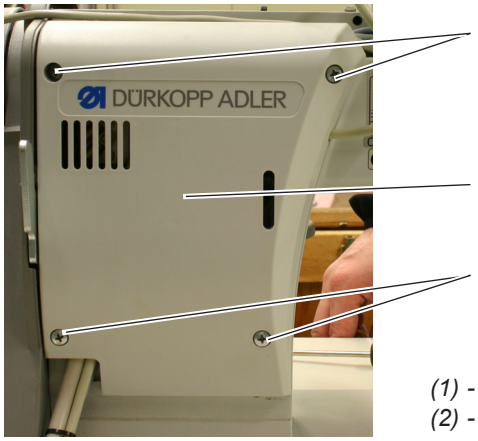
Figure 7: Remove the upper arm cover



(1) - Upper arm cover
(2) - Presser foot stroke adjusting wheel

2. Release the 4 screws on the upper arm cover (1).
3. Turn the left adjusting wheel (2) for the presser foot stroke to the value 2.
4. Remove the upper arm cover (1).

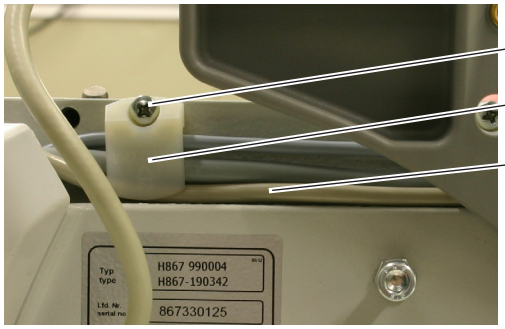
Figure 8: Remove the rear arm cover



(1) - Rear arm cover screws
(2) - Rear arm cover

5. Release the 4 screws (1) on the rear arm cover (2).
6. Remove the rear arm cover (2).

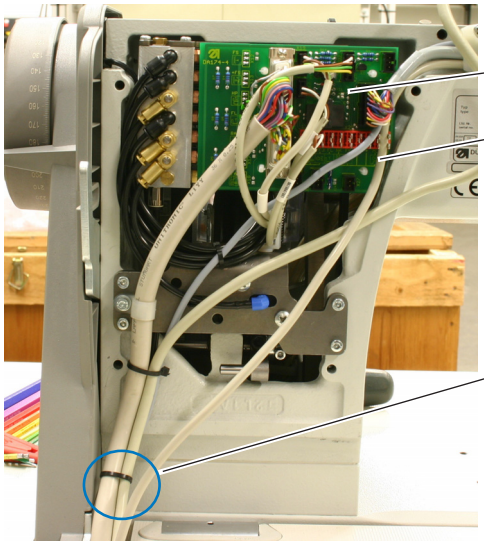
Figure 9: Lay the cable in the machine



(1) - Cable clamp screw
(2) - Cable clamp
(3) - Handwheel cable

7. Loosen the cable clamps (2) in the arm by releasing the cable clamp screws (1).
8. Feed the handwheel cable (3) parallel to the other cables behind the cable clamps (2).
9. Fasten the cable clamps (2) again using the screws (1).

Figure 10: Lay the cable to the PCB



(1) - PCB
(2) - Handwheel cable
(3) - Fastening area

10. Now feed handwheel cable (2) past the PCB (1), as shown in the illustration above, and fasten it to the existing cables using cable ties (3).
11. Mount the rear arm cover again using the 4 screws.
12. Mount the upper arm cover again using the 4 screws.

4 Connection to the DAC controller

ATTENTION

Material damage due to incorrect handling!

The electronic handwheel may only be attached by a trained specialist.

Switch off the sewing machine and disconnect the power plug before attaching the electronic handwheel.

Make sure the power plug cannot be accidentally plugged back in.

Connect the handwheel cable to the DAC as follows:

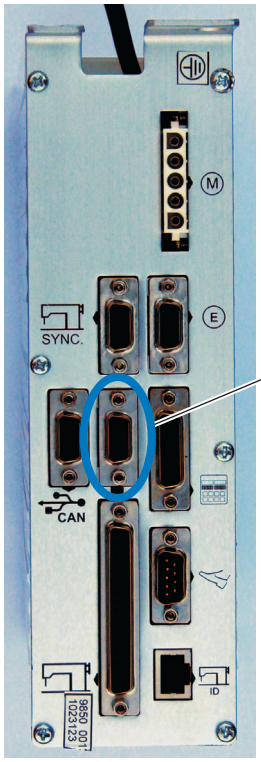
With knee button

1. Release the knee button connector at the control unit and pull it out of the socket.
2. Plug the knee button connector into the free socket on the adapter.
3. Plug the adapter into the socket marked with a circle in Figure 11.
4. Fasten the connector using the attached screws to prevent it from slipping out.

Without knee button

1. Plug the handwheel cable into the socket marked with a circle in Figure 11.
2. Fasten the connector using the attached screws to prevent it from slipping out.

Figure 11: Connection to the DAC



Socket for the electronic knee switch

The electronic knee button and the electronic handwheel can both be connected at the same time using the electronic handwheel adapter.

Software

The electronic handwheel requires at least Version B02.3 of the controller software, or newer. A once-only activation procedure must be performed before the handwheel is used for the first time, 🕮 5 Operating principle of the handwheel.

You must perform an update if your controller software is not the latest version. The update is available from our Homepage at www.duerkopp-adler.com.
The update can be installed via a Dongle (9835 901005).

5 Operating principle of the handwheel

The electronic handwheel must first be activated. The electronic handwheel cannot be used until it has been activated.

5.1 Activating the electronic handwheel

The electronic handwheel must be activated via a once-only procedure before being used for the first time.

You activate the electronic handwheel as follows:

1. Install the electronic handwheel according to the Installation Manual.
2. Switch on the machine.
3. Use the control panel to enter the parameter t 17 00 (🕮 DAC classic Operating Manual).
4. Exit the parameter menu.
   The electronic handwheel is now activated.

5.2 Using the electronic handwheel

The electronic handwheel has a number of different functions, as explained below.

Using the handwheel

1. Switch on the machine.
2. First allow the sewing motor to run once, so that the handwheel can detect its position.
3. Turn the handwheel clockwise in the normal sewing direction until the desired needle position is reached.
   The needle can be moved by more than one turn in the normal sewing direction.
4. Turn the handwheel counter-clockwise against the normal sewing direction until the desired needle position is reached.
   The needle will only move back to the point just before it sinks into the throat plate.

Setting the step size

The step size represents the distance moved by the sewing motor when the handwheel is moved by a certain amount.

- Use the control panel to enter the parameter t 17 01 (📖 DAC classic Operating Manual).
- The step size can be entered in degrees.

Key function

The electronic handwheel can also execute a key function. This has exactly the same effect as the corresponding key on the keypad.

- Any desired function can be assigned to the handwheel.
- Use the control panel to assign a function to the handwheel (📖 Operating Manual for DAC classic).

Setting an initial alignment stitch

If you assign the initial alignment stitch key function to the handwheel then you can adjust the initial alignment stitch as follows:

1. Press the handwheel for a longer period of time.
   The display shows the current position of the needle.
2. Set the desired position of the needle by turning the handwheel or electronic handwheel – the +/– keys on the control panel can also be used.
   The setting must be made individually for each different material to be sewn.
3. Press the handwheel briefly to exit the settings menu.
4. Then press the handwheel to use the initial alignment stitch function.