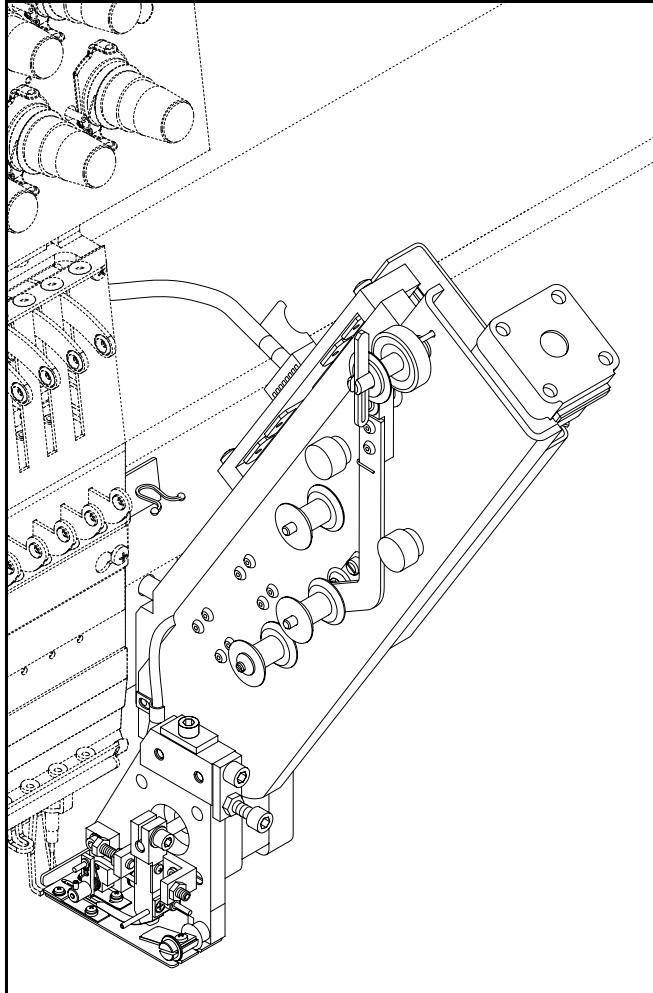


Operator's Guide



Sequin Device

Version 1.3

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1. Function

1.1 Intended use

The ZSK sequin device is used for embroidery with commercially available sequins. It must be used in conjunction with special sequin designs containing special functions that actuate the sequin device.

1.2 Materials

1.2.1 Embroidery material

Sequins can be attached to all materials that are suitable for conventional embroidery.

1.2.2 Yarn

NOTE

Avoid using cotton yarns as far as possible because they fray easily on the sharp edges of the sequins.

High-strength polyester and monofilament yarns are particularly suitable for sequin embroidery.

1.2.3 Sequins

Commercially available sequin tapes on reels can be used with the ZSK sequin device. One suitable sequin head is required for each sequin diameter.

Range of sequin diameters:	4-9 mm
Standard sequin diameters:	5 mm, 7 mm
Sequin hole diameter:	1.5 mm
Sequin thickness:	0.2 mm
Reel diameter:	180 mm



2. Overview

2.1 General view

NOTE

The illustration shows the right-hand version of the sequin device. The left-hand version is identical, but with the elements arranged as a mirror image.

Figure 2,1:
General view

Connector
(differs depending on
version)

Reel holder

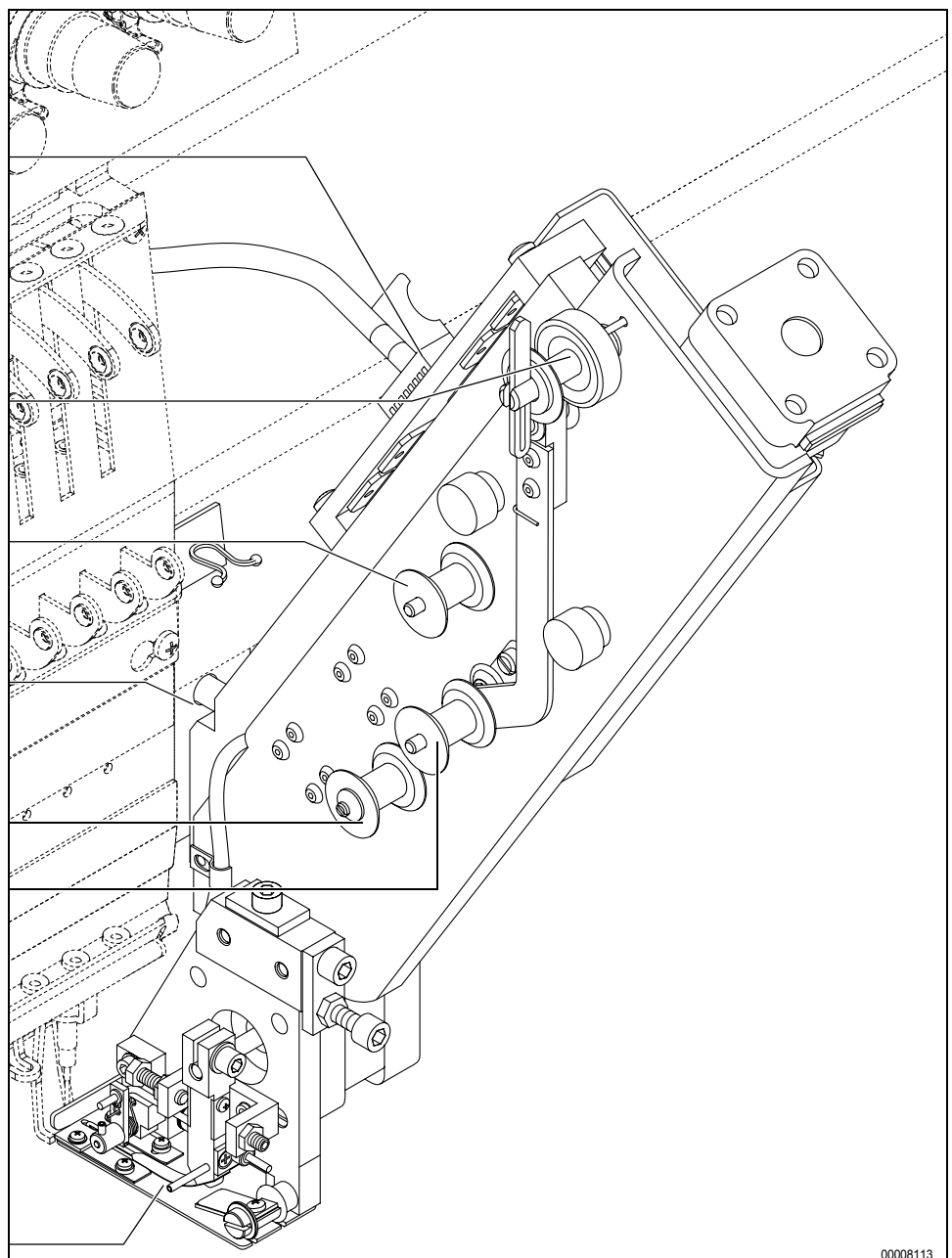
Guide roller, top

Adapter

Guide roller, bottom

Tensioning roller

Sequin head

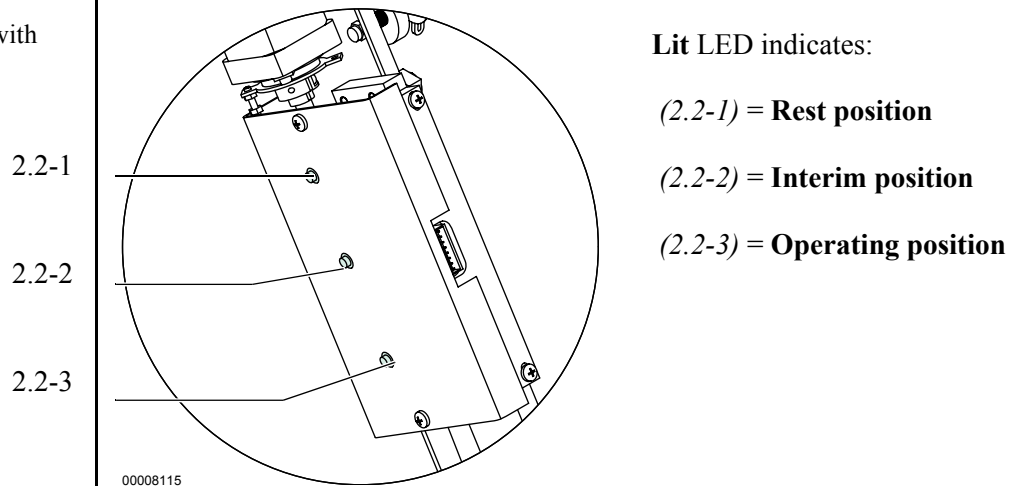


2.2 Partial view: LEDs

NOTE

Some sequin devices are equipped with light-emitting diodes (LEDs) that indicate the device's current position.

Figure 2,2:
View of right side with
LEDs



Lit LED indicates:

(2.2-1) = **Rest position**

(2.2-2) = **Interim position**

(2.2-3) = **Operating position**

The **operating position** is adopted as soon as sequins are to be attached to the design or parts of the design.

The sequin device adopts the **interim position** when individual parts of the design are not to be embroidered with sequins.

The **rest position** is adopted once the design is finished.

2.3 Partial view: sequin head

Figure 2,3:
Partial view, sequin head

Sequin head connecting
cable

Sequin head mounting

Feed lever

Positioning wire

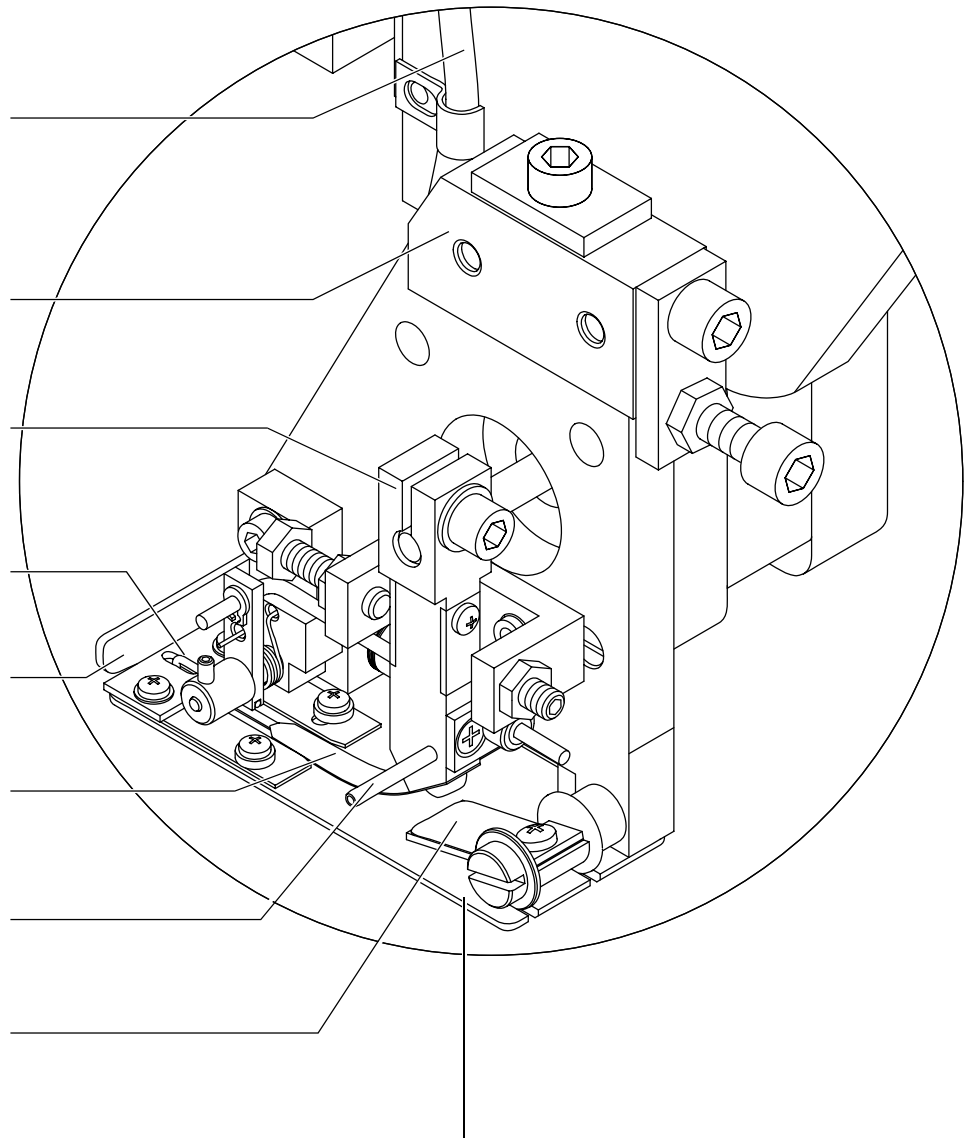
Hinged blade

Slide

Control bar

Leaf spring

Blade plate



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3. Assembling

3.1 Erstmontage

CAUTION

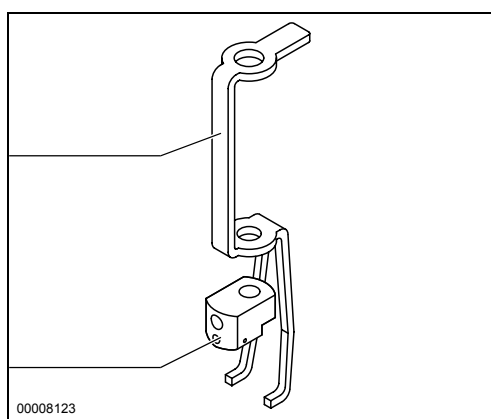
The initial installation of sequin devices is to be performed only by service personnel trained specifically to carry out this task by ZSK.

The ZSK sequin device is available in two different versions for mounting either on the left or right of the embroidery head. If sufficient space is available, two sequin devices can be attached to each head; one on the left and one on the right.

Figure 3,1:
Presser foot and needle
holder for sequin device

3.1-1

3.1-2



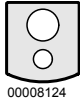
When the sequin device is installed for the first time, a special presser foot (3.1-1) and needle holder (3.1-2) are attached at the relevant outermost needle of the embroidery head.

NOTE

Once it has been made ready for sequins, the needle can still be used for conventional embroidery without sequins as well, but the quality is likely to be impaired. If you wish to resume conventional embroidery to the usual quality standard, you are advised to have the machine set up again accordingly by ZSK service engineers trained to performed this work.

3.2 Needle holder

NOTE



Depending on the version, two different needle holders are available for the sequin device. If you wish to embroider caps with the sequin device, you need the needle holder with the rounded underside. It can be obtained subsequently from ZSK under order number: 270 022 204.

3.2.1 Exchanging needle

NOTE

Before reinstalling the needle holder, make sure that the thread guide is correctly positioned. Depending on the version of the sequin device (e.g. right-hand sequin device = right-hand thread guide) the thread guide is inserted in the right or left side of the needle holder. See *Fig. 3,2*.

Figure 3,2:
Needle holder
with thread guide

Right

Left

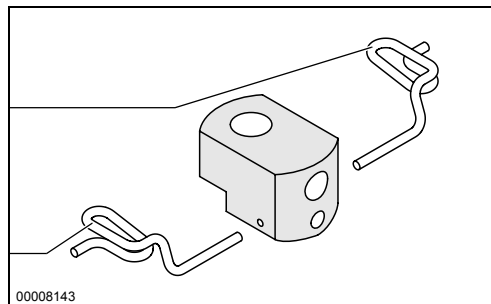
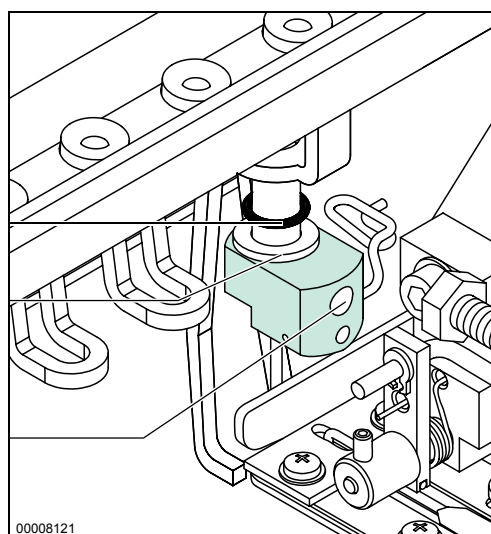


Figure 3,3:
Exchanging needle holder

3.3-1

3.3-2

3.3-3



- Slacken off screw (3.3-3).
- Remove needle.
- Grip O-ring (3.3-1) and washer (3.3-2).
- Remove needle holder.
- Attach new needle holder.
- Tighten screw.

Figure 3,4:
Overview, clearance
between blade plate and
stitch plate

Blade plate, bottom edge

Stitch plate, top edge

3.3 Clearance between blade plate and stitch plate

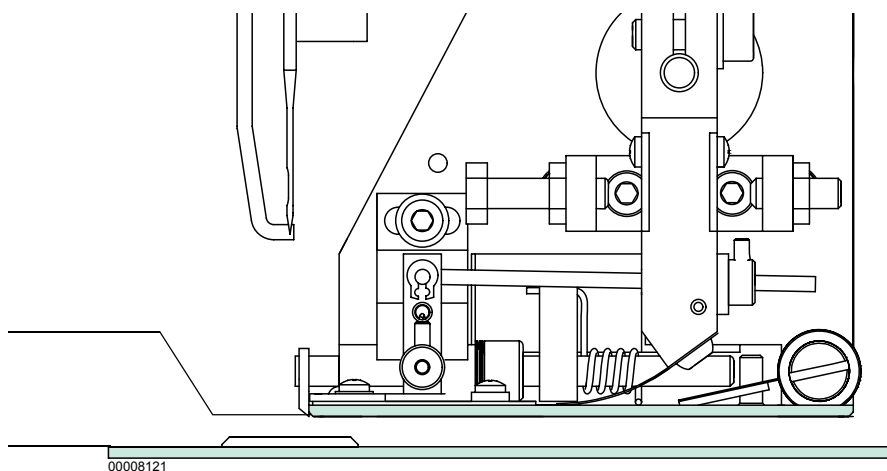


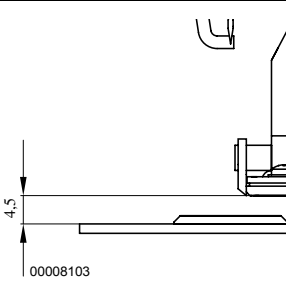
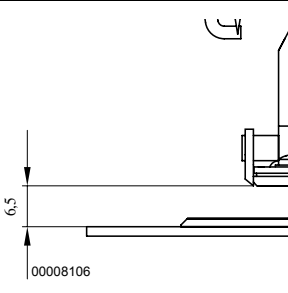


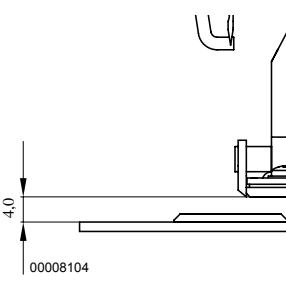
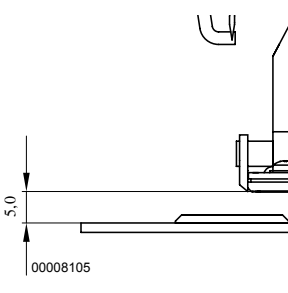


Figure 3,5:
Table, adjustment range
for clearance between
blade plate and stitch plate

3.3.1 Adjustment range

Clearance between blade plate and stitch plate		
Needle holder	 	
Suitable for all embroidery applications essential for cap embroidery	Minimum (mm)	Maximum (mm)
		
Needle holder	 	
Suitable for all embroidery applications except cap embroidery	Minimum (mm)	Maximum (mm)
		

CAUTION

3.3.2 Adjusting clearance

When adjusting the clearance between the blade plate and stitch plate, *always* observe the values in table *Fig. 3,5* otherwise *mechanical damage* can occur. Realign the sequin head once you have adjusted the clearance. See “*Aligning sequin head*”.

NOTE

The clearance from the bottom edge of the blade plate to the top edge of the stitch plate is accurately adjusted at the factory for most embroidery applications. If you wish to embroidery very thick materials or designs containing appliqués with the sequin device, you can increase the clearance up to the maximum value indicated. Consult table *Fig. 3,5* for the available adjusting range.

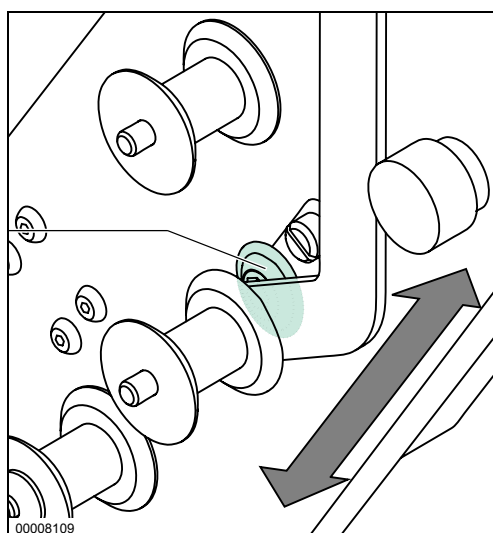


00380832

- Use the control unit to move the sequin head to the **operating position**. See “*Changing position manually*” under TFT or LCD.

Figure 3,6:
Adjusting clearance

3.6-1



00008109

- Slacken off adjusting screw (3.6-1).
- Adjust the clearance by sliding the sequin device in the appropriate direction.
- Tighten the adjusting screw.

3.4 Removing/installing

CAUTION

Switch off the machine and pull out the mains plug before removing or reinstalling the sequin device.

You can detach the sequin device if you do not intend to use it for an extended period. You can reinstall the head easily yourself because no adjustments need to be made.

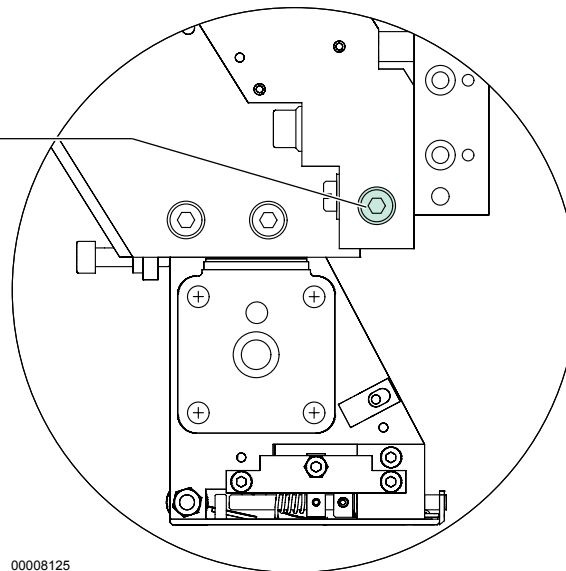
3.4.1 Removing

CAUTION

When detaching the sequin device, *never* slacken off fastening screw (3.7-1). Slackening off this screw readjusts the entire sequin device.

Figure 3,7:
Do not slacken off
fastening screw

3.7-1



00008125

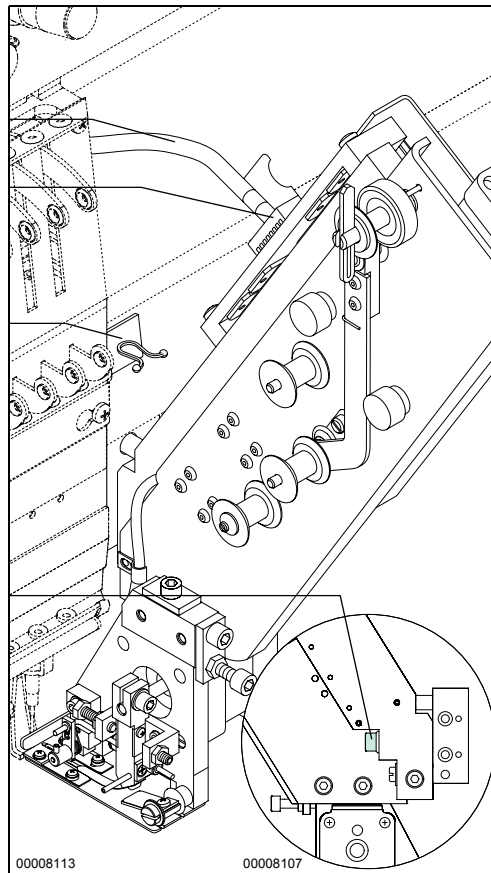
Figure 3,8:
Removing

3.8-1

3.8-2

3.8-3

3.8-4



- Move the sequin device to the rest position.
- Slacken off screws (3.9-1) (depending on sequin device version).
- Pull out connector (3.8-2).
- Place connecting cable (3.8-1) in plastic clip (3.8-3) on the front of the machine.
- Remove retaining screw (3.8-4) while gripping the sequin device; pull off the device to the front.

Figure 3,9:
Connector,
variant with screws

3.9-1

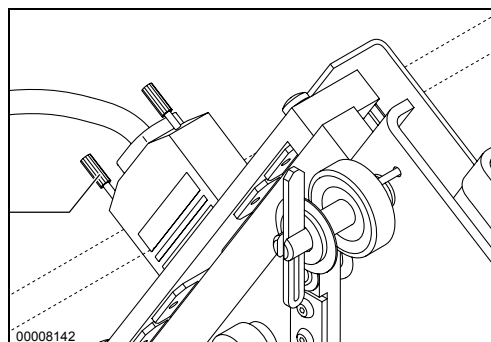
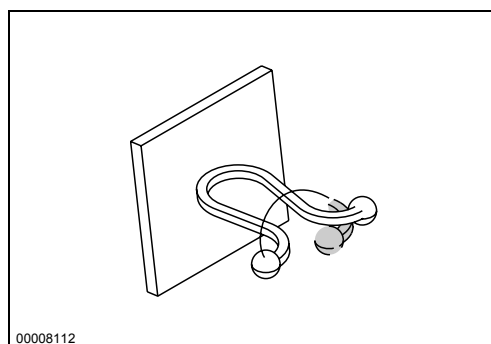


Figure 3,10:
Plastic clip



- Twist the ends of the clip to secure the connecting cable.

3.4.2 Installing

NOTE

The sequin devices are consecutively numbered. Always install them in the prescribed sequence. In compliance with the embroidery head numbering, start on the right of the machine with sequin device No. 1.

Figure 3,11:
Installing

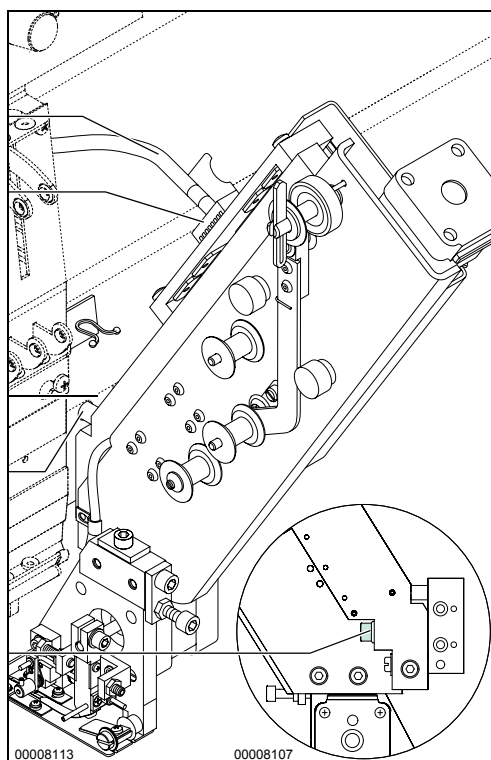
3.11-1

3.11-2

3.11-3

3.11-4

3.11-5



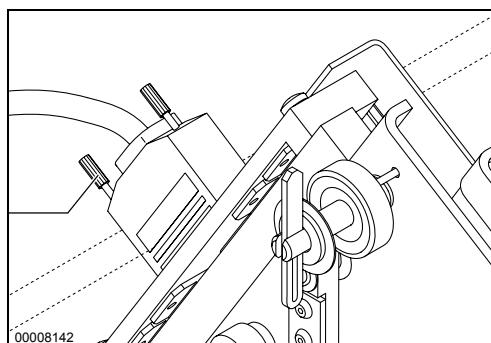
- Insert the sequin device with pin (3.11-4) in matching adapter (3.11-3).
- Tighten retaining screw (3.11-5).
- Release connecting cable (3.11-1) from the plastic clip.
- Insert connector (3.11-2) in the mating socket.

NOTE

Insert the connector in the mating socket without exerting any force – it is designed to prevent insertion the wrong way round.

Figure 3,12:
Connector with screws

3.12-1



Depending on the version of the sequin device:

- Turn screws (3.12-1) to make them hand-tight.

3.5 Changing sequin head

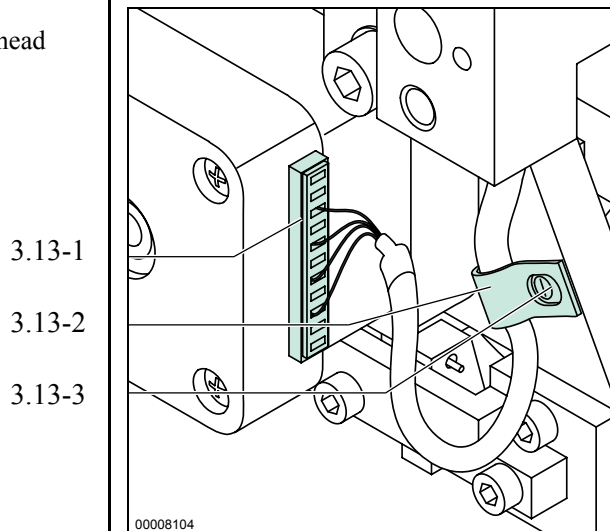
The sequin head has to be changed if you wish to work with a different sequin diameter.

NOTE

After changing the sequin head, adjust the sequin feed. See “Adjusting sequin feed”.

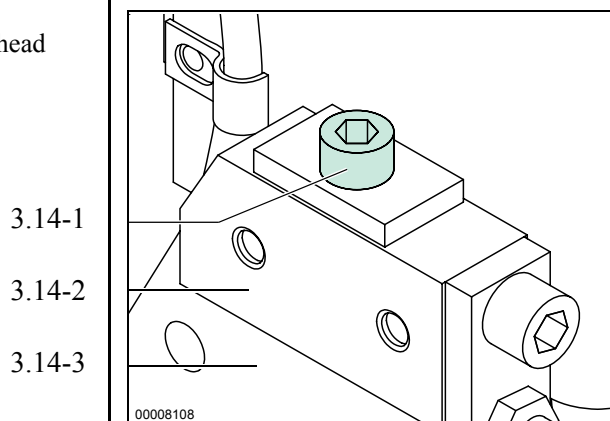
3.5.1 Detaching sequin head

Figure 3,13:
Detaching sequin head



- Disconnect the machine from the power supply.
- Pull out sequin head connector (3.13-1).
- Unscrew and remove cable clamp screw (3.13-3).
- Release the cable from cable clamp (3.13-2).

Figure 3,14:
Detaching sequin head



- Unscrew and remove retaining screw (3.14-1) while gripping sequin head (3.14-3).
- Lower the sequin head and remove it from mounting (3.14-2).

3.5.2 Installing sequin head

Figure 3,15:
Installing sequin head

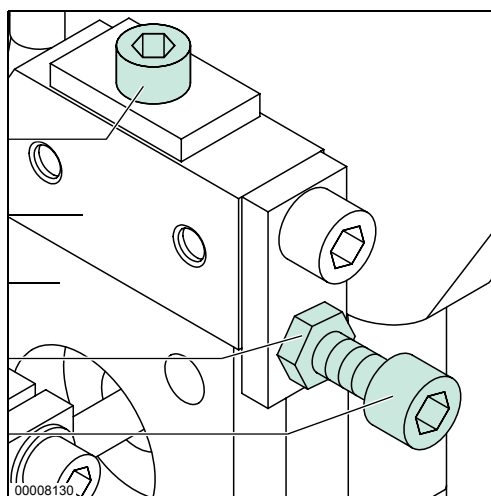
3.15-1

3.15-2

3.15-3

3.15-4

3.15-5



- Slacken off locknut (3.15-4).
- Slightly slacken off stop screw (3.15-5).
- Insert sequin head (3.15-3) pin mounting (3.15-2) and push it against the stop pin.
- Lightly tighten retaining screw (3.15-1).

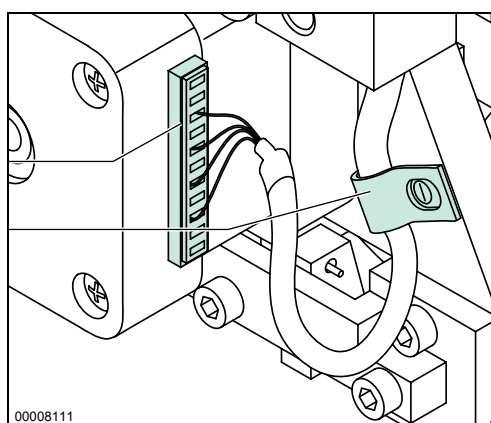
NOTE

Insert the connector in the mating socket without exerting any force – it is designed to prevent insertion the wrong way round.

Figure 3,16:
Installing sequin head

3.16-1

3.16-2



- Insert connector (3.16-1) in the mating socket.
- Secure the cable with cable clamp (3.16-2).
- Insert sequin tape. See "Embroidery preparations".
- Switch on the machine.

- Execute a manual color change. Consult the operator's guide for the control unit.
- Lower the sequin device to the operating position. See "Embroidery preparations".

3.5.3 Aligning sequin head

CAUTION

Switch on manual pantograph positioning before working on the machine, while it is stationary, with the main switch on. In this setting, you can operate the pantograph manually, but cannot start the machine inadvertently.

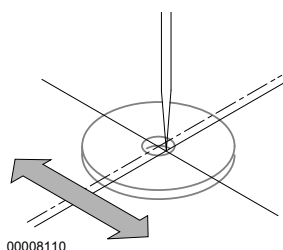


Figure 3,17:
Aligning front to back

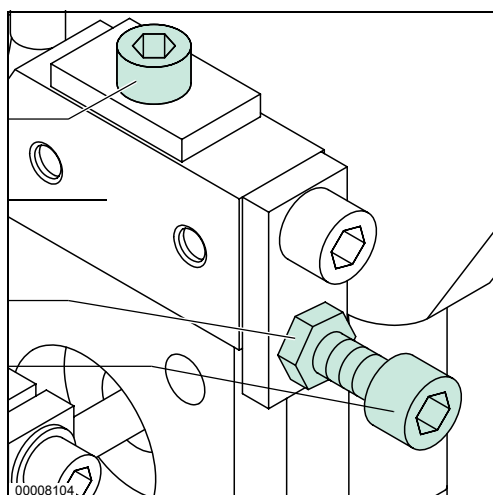
- Aligning front to back

3.17-1

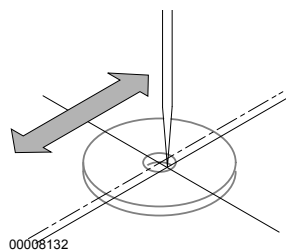
3.17-2

3.17-3

3.17-4



- Slightly slacken off retaining screw (3.17-1).
- Slacken off locknut (3.17-3).
- Turn adjusting screw (3.17-4) to position the sequin head in mounting (3.17-2) so that the needle is located towards the back of the sequin hole. See Fig. 3,19.
- Tighten the retaining screw.
- Tighten the locknut.



NOTE

Figure 3,18:
Side view

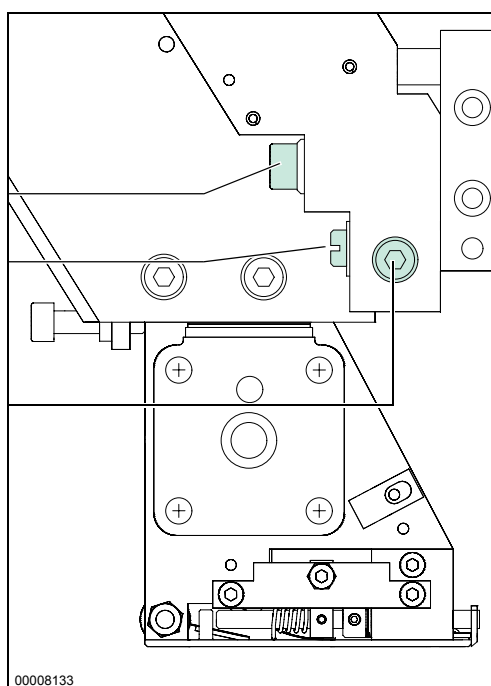
- Aligning side to side

Manufacturing tolerances can make it necessary for you to align the sequin head in the side-to-side direction.

3.18-1

3.18-2

3.18-3

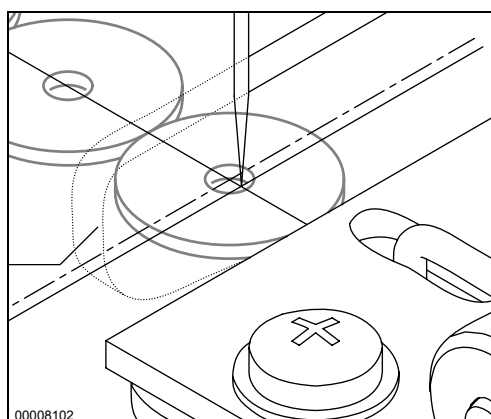


- *Slightly* slacken off retaining screw (3.18-1).
- Slacken off fastening screw (3.18-3).
- Align the sequin head with the needle by means of eccentric bolt (3.18-2).
- Tighten the retaining screw.
- Tighten the fastening screw.

Checking alignment

Figure 3,19:
Needle position

Hinged blade





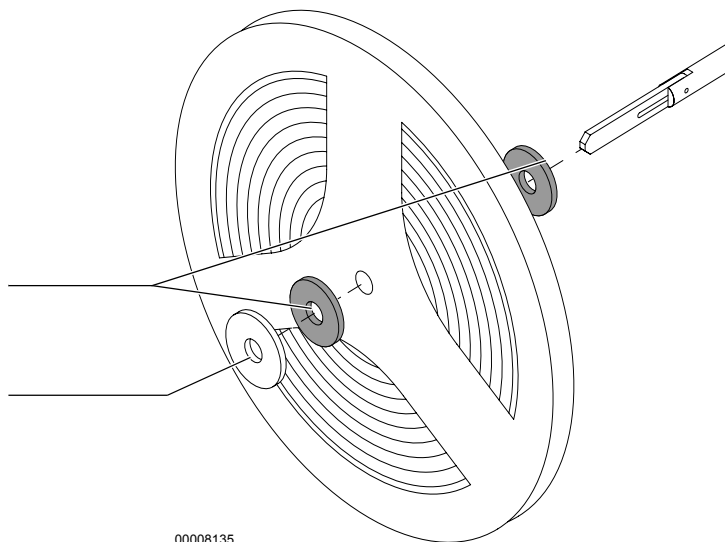
4. Embroidery preparations

4.1 Installing reel

Figure 4,1:
Installing reel

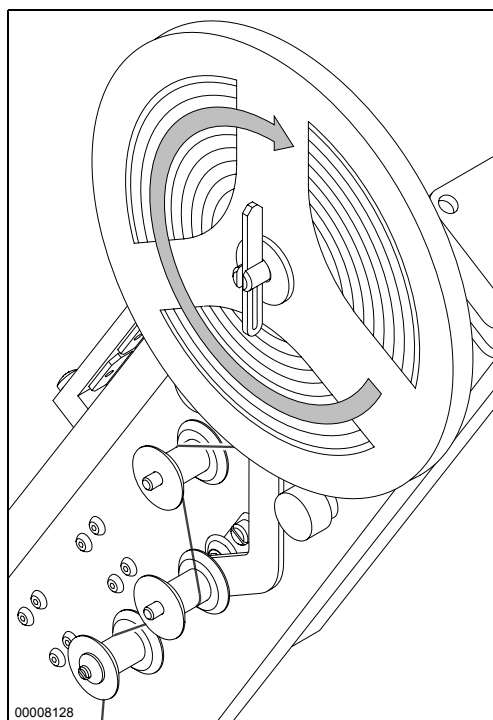
Felt washers

End washer



4.2 Threading sequin tape

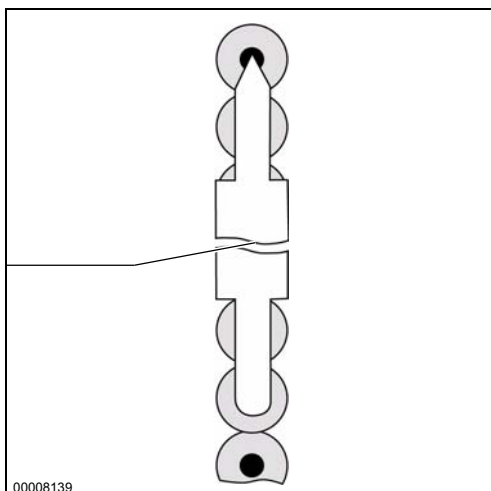
Figure 4,2:
Threading sequin tape at
top



- Thread the sequin tape around the rollers. See *Fig. 4,2*.

Figure 4,3:
Insertion aid

4.3-1



- With insertion aid (4.3-1) attached, push the sequin tape into the sequin head.

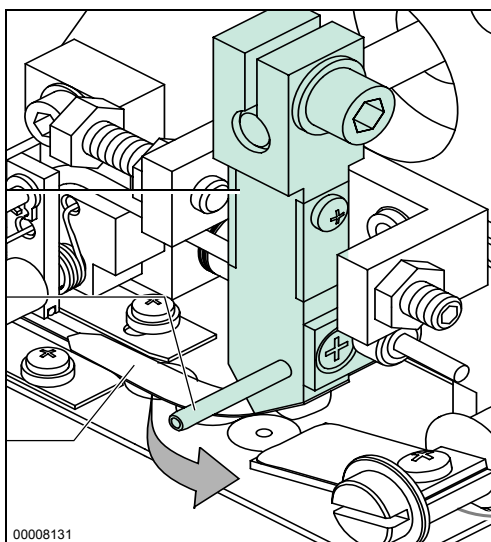
⇒ The insertion aid raises slide (4.4-3).

Figure 4,4:
Feed lever

4.4-1

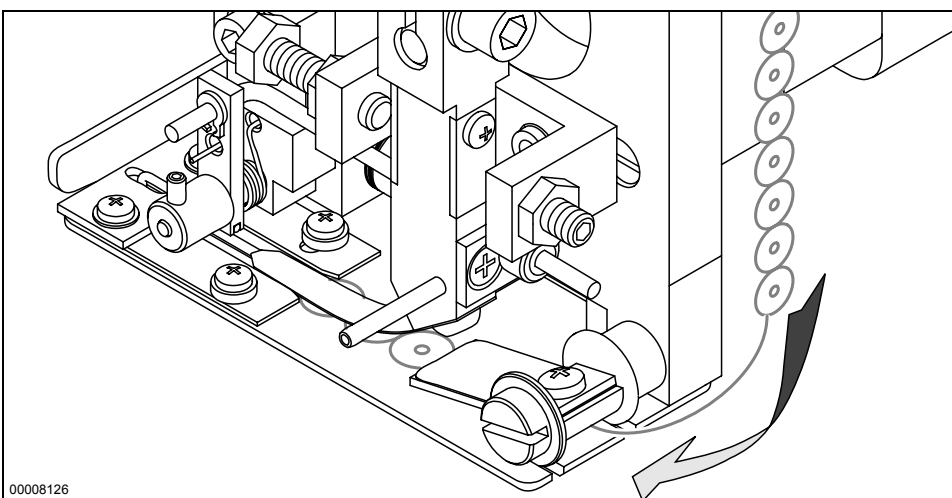
4.4-2

4.4-3



- Pull back feed lever (4.4-1) with control bar (4.4-2) and hold it in position.

Figure 4,5:
Threading sequin tape at
bottom



- Pull the insertion aid out of the sequin head towards the sequin feed Fig. 4,5.

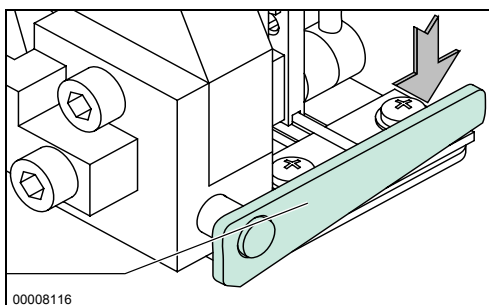
NOTE

With the aid of control bar (4.4-2) on the feed lever you can operate the sequin feed manually and thus check that the sequin tape is being advanced correctly.

4.2.1 Manual trimming

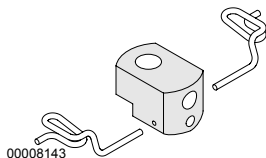
Figure 4,6:
Trimming sequin tape

4.6-1



- Trim any surplus tape by pressing down hinged blade (4.6-1).

NOTE



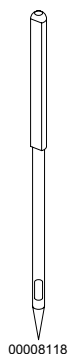
4.3 Threading yarn

Pass the thread that attaches the sequin tape to the work through the thread guide before threading the appropriate needle.

4.4 Exchanging needle

4 mm dia. sequin tape

NOTE



If you wish to embroider *4 mm dia. sequin tape*, you must use a special needle with a flat side. This needle is supplied together with the sequin head for embroidering 4 mm dia. sequin tape. It can be reordered from ZSK under order number: 574 687. Change the needle in the same way as you would change a conventional one. When inserting the needle, it is essential to ensure that the flat side *faces the hinged blade*.

4.5 Changing position

NOTE

The sequin device is actuated automatically by means of special functions in the design or by special machine operations.

The sequin device is automatically returned to the rest position in the event of a malfunction, e.g. a thread break. Once the fault has been remedied, it is lowered again when the machine is next started up.

You can also move individual sequin devices to the rest position manually by pressing the appropriate embroidery head button – the embroidery head and thus the sequin device are *switched off*, and the sequin device moves to the *rest position*.

4.5.1 Operating, rest and interim positions

The table below describes the various positions of the sequin device and the situations in which they can occur.

Figure 4,7:
Table of sequin device
positions

Position	Sequin device <u>without</u> LEDs	Sequin device <u>with</u> LEDs
Rest position (raised)	e.g. Head off Thread break Special functions: Raise sequin Trimming Needle change End of design	e.g. Head off Thread break Special functions: Needle change End of design
Interim position (middle)	not available	e.g. Special functions: Raise sequin Trimming
Operating position (lowered)	Embroidering	Embroidering

Sequin device without LEDs

The sequin head is lowered to the **operating position** for embroidering sequins and raised again afterwards to the **rest position**.

Sequin device with LEDs

The sequin head is lowered to the **operating position** for embroidering sequins and raised again afterwards to the **rest position**. Once the design is finished, the sequin device adopts the **rest position**. The adopted position is indicated by the relevant LED. Also see “*Partial view: LEDs*”.

4.5.2 Changing position manually

You can trigger a position change manually from the control unit for **testing purposes** as well.

TFT control unit

Starting from the “*ZSK machine control*” menu:



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E Service

00461015

A Tests / diagnostics

00461051

X Start testing

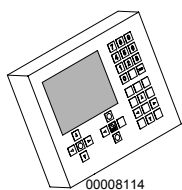
00461315



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- Press button **E** Service.
- Press button **A** Tests / diagnostics.
- In the menu “*Test machine devices*” press the appropriate button for the installed version of the sequin device, e.g. button **D** Sequin right (if the device is installed on the right).
- Press button **X** Start testing.
- Depending on the machine type, either press the reverse embroidery key or push the operating lever back to the left and hold.

⇒ The sequin device moves to the **next** position.



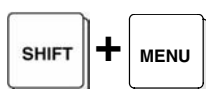
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00380829



00380815



00380809



00380820

00380823



00380808



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LCD control unit

Starting from the “Machine” basic screen:

- Press MENU key.
- Press key 5 “Service”.
- Hold down SHIFT and press MENU.
- Press key 9 “More service functions”.
- Press key 3 “Test machine attachment”.
- In the selection menu use the cursor keys to select the appropriate option, e.g. “Sequin right”.
- Press key 2 “Start testing”.
- Depending on the machine type, either press the reverse embroidery key or push the operating lever back to the left.

⇒ The sequin device moves to the **next** position.

NOTE

You can employ the same method to initiate a single sequin feed for test purposes – at the time the sequin device must be in the *rest position* (raised). Mark the SEQUIN LEFT or SEQUIN RIGHT item. Then press the STOP key or move the lever to the left as appropriate.

4.6 Control unit settings

4.6.1 Switching embroidery device on and off

TFT control unit

Starting from the “ZSK machine control” menu:



00008136

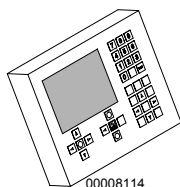
D Machine setup

00461014

- Press button **D** *Machine setup*.
- In the menu “*Embroidery machine setup data*” under **B** *Tools*, switch the embroidery device on or off as required. To do so, activate/deactivate the box alongside **C** *Sequins*. Consult the operator's guide for the control unit.

LCD control unit

Starting from the “*Machine*” basic screen:



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00380810



00380809



00380816

or



00380807

- Press MENU key.
- Press key 4 “*Machine setup*”.
- Press key 4 “*Tools*”.
- Press key 3 “*Sequins*”.
- Press key 0 “*Deactivate*” or 1 “*Activate*”.



NOTE

- Press the RETURN key to confirm your selection.
- Press the RETURN key again to accept the tools setup.

Individual sequin devices can also be switched on and off, together with the heads to which they are attached, with the embroidery head buttons. If the embroidery devices are switched off in the *Tools* menu, designs containing sequins cannot be embroidered.

4.6.2 Adjusting speed

NOTE

A maximum speed of 700 rpm is recommended for embroidering sequins. The speed is automatically set to 700 rpm when the sequin device is activated.



TFT control unit

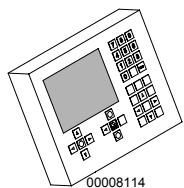
Starting from the “ZSK machine control” menu:

- Press key **D** *Machine setup*.

In the menu “Embroidery machine setup data” under **A** *Speeds setup*, you can set the sequin embroidery speed under **E** *Sequins*. Consult the operator's guide for the control unit.

- Enter the desired speed alongside menu item **E** *Sequins*.
- Confirm the speed with **X** *Confirm*.





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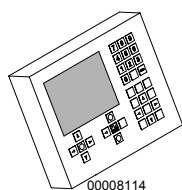
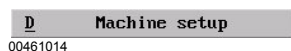
00380830

LCD control unit

Starting from the “*Machine*” basic screen:

- Press MENU key.
- Press key 4 “*Machine setup*”.
- Press key 1 “*Speeds setup*”.
- Press key 5 “*Sequins*”.
- Enter the desired speed on the control unit's number keypad.
- Press the RETURN key to confirm your selection.
- Press the RETURN key again to accept the speed.

NOTE



4.6.3 Adjusting sequin feed

Adjust the sequin feed only if you have changed to a sequin head for a different sequin size.

TFT control unit

Starting from the “ZSK machine control” menu:

- Press button **D** *Machine setup*.

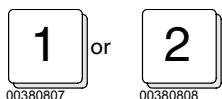
Set the feed with *Motor for sequin feed ...* in the menu “Embroidery machine set-up data” under **C** *Sequins setup*.

- Enter the nominal sequin size (e.g. “7” for an outside diameter of 7 mm) in the *Motor for sequin feed ...* box.
- Confirm the setting with **X** *Confirm*.

LCD control unit

Starting from the “Machine” basic screen:

- Press MENU key.
- Press key 4 “Machine setup”.
- Hold down SHIFT and press MENU.



- Press key 9 “*More service functions*”.
- Depending on the installed device, press key 1 or 2.
- Enter the nominal sequin size (e.g. “7” for an outside diameter of 7 mm) in the box.
- Press the RETURN key to confirm.

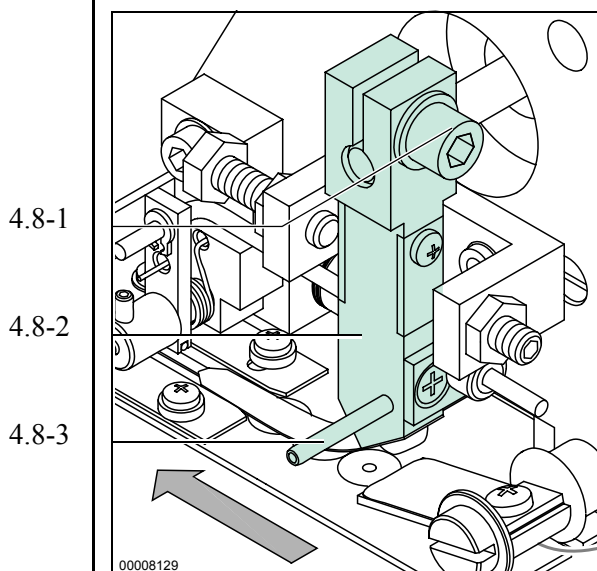
TFT and LCD control units

NOTE

Once you have adjusted the sequin feed, perform a feed motor reset in order to return the motor to its 0 position.

Initiating a reset

Figure 4,8:
Reset



- Use control bar (4.8-3) to move feed lever (4.8-2) to the travel limit in the feeding direction of the sequin tape.
- Slacken off screw (4.8-1).

Figure 4,9:
Start key



- Press start key
 - ⇒ A whistle sounds.
 - ⇒ The reset is initiated.

- Tighten screw (4.8-1).

Figure 4,10:
Stop key



- Press stop key
 - ⇒ The reset is terminated.

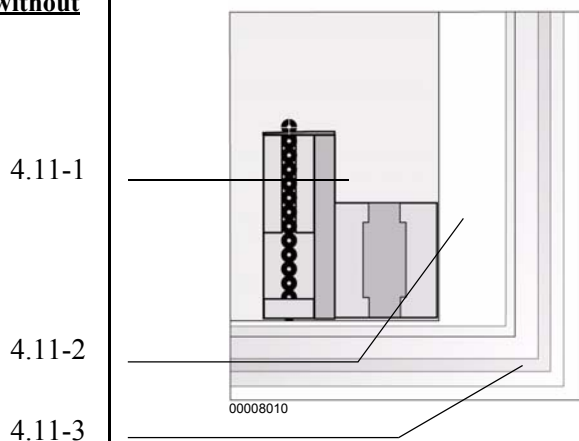
4.7 Reduction in embroidery field size

NOTE

When in the operating position, the sequin device reduces the size of the available embroidery field (4.11-1).

Depending on the machine type, the safety area (4.11-2) inside the border frame (4.11-3) is of various sizes or entirely absent. This area determines the extent of the lateral restriction of the embroidery field (dimension A in table Fig. 4,13).

Figure 4,11:
Embroidery field **without**
use of sequins



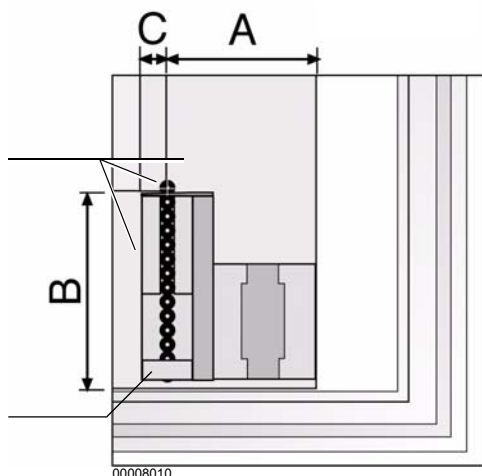
NOTE

Before embroidering, check that the motif fits inside the available embroidery field when the sequin devices are lowered. To avoid additional restrictions, use only flat border or side clamps to secure the work at the side.

Figure 4,12:
Restricted embroidery field
with sequin device
installed on right

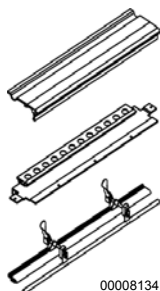
4.12-1

4.12-2



Restricted embroidery field (4.12-1) with sequin device (4.12-2) installed on right. If the sequin device is mounted on the left, the embroidery field is accordingly reduced on the left (mirror image).

Figure 4,13:
Table of embroidery field
restrictions



Embroidery field restriction for border frame embroidery (device on right)	A [mm]	B [mm]	C [mm]
Flat border clamp left/right	≤ 60	90	15
Flat side clamp left/right	≤ 40	90	15
Toggle-joint clamp left/right	≤ 60	100	15

NOTE

Special note must be taken of the reduced embroidery field in case of single frame embroidery.

Switch off the sequin device (SEQUINS OFF) once you no longer need it. The sequin device does not reduce the size of the embroidery field when it is in the rest position.

With the sequin device lowered (in the operating position), no other special functions can be executed apart from sequin functions and jump stitches.

5. Sequin designs

5.1 Editing

CAUTION

Do not use the HEIGHT, WIDTH and ANGLE editor functions with sequin designs.

The lengths of certain stitches are matched to the sequin diameter and **must not** be modified globally with the HEIGHT and WIDTH functions.

The final stitch before inserting a sequin must always be positioned **after** the sequin (see 'Punching' below). It **must not** come out in front as a result of rotating the design with ANGLE.

5.2 Punching

NOTE

Sequin designs should always be created by experienced punchers familiar with the peculiarities of sequin embroidery.

To help non-punchers understand design-related embroidery problems, we have outlined a number of important basic rules that must be observed when punching sequin designs. **These basic rules are not envisaged as a substitute for a punching manual.** Punchers will find detailed information on creating sequin designs in the manuals provided with their punching software and in the relevant specialist literature.

ZSK sequin designs contain special functions for sequins:

- The **SEQUINS ON** function advances the sequin and inserts a stitch in the sequin hole. The sequin device is lowered automatically the first time SEQUINS ON occurs.
- **SEQUINS OFF** raises the sequin device to the **rest position**.
- Before embroidering sequins, execute a **needle change** to the needle to which the sequin device is assigned.

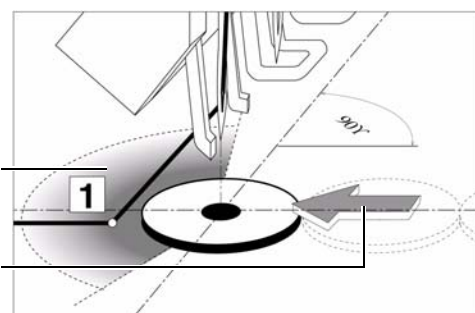
CAUTION

If the needle misses the sequin hole (*Fig. 5,1*) because the sequin is incorrectly placed, this may result in damage to the embroidery material, needles or stitch plates.

Figure 5,1:
Sequin advance and final
stitch before sequin is
attached

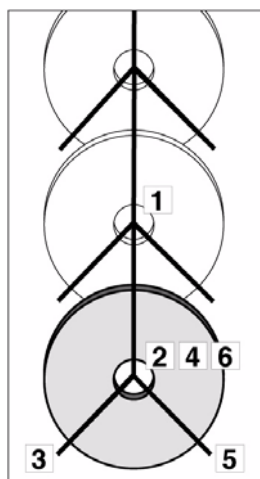
5.1-1

5.1-2



- Sequins are fed from the **front** (5.1-1). The last stitch before a sequin is inserted must be located **behind** the position envisaged for the sequin (5.1-2), otherwise the sequin will be deflected by the taut upper thread and placed in the wrong position.

Figure 5,2:
Applying sequins



- You are recommend to apply the sequins with a sequence of stitches forming a star. In the illustration the SEQUINS ON function is initiated by the stitch from 1 to 2.

6. Troubleshooting

The following tables are designed to help you rectify faults caused by incorrect operation or minor damage.

Fault	Possible cause	Remedy
No sequin advance	Connector not inserted properly	<ul style="list-style-type: none"> Check that all the sequin device connectors are properly inserted
	Sequin tape incorrectly inserted	<ul style="list-style-type: none"> Insert the sequin tape again
Individual sequin heads not being raised/lowered	Connector not inserted properly	<ul style="list-style-type: none"> Check that all the sequin device connectors are properly inserted
	Embroidery head is switched off	<ul style="list-style-type: none"> Switch on embroidery head
Needle break when attaching sequins	Error in design: the final stitch before the sequin was outside the permitted area	<ul style="list-style-type: none"> Edit the design
	Incorrect sequin head	<ul style="list-style-type: none"> Insert the correct sequin head for the sequin diameter
	Sequin tape incorrectly inserted	<ul style="list-style-type: none"> Insert the sequin tape again
	Sequin feed incorrectly set	<ul style="list-style-type: none"> Reset in the EMBROIDERY MACHINE SETUP DATA menu
Thread break when attaching sequins	Yarn too weak	<ul style="list-style-type: none"> Use polyester or monofilament yarn
	Needle positioned in front half of sequin hole	<ul style="list-style-type: none"> Adjust front-to-back alignment of sequin head

Fault	Possible cause	Remedy
Sequins trimmed at the incorrect place	Incorrect sequin head	<ul style="list-style-type: none"> Insert the correct sequin head for the sequin diameter
	Sequin feed incorrectly set	<ul style="list-style-type: none"> Reset in the EMBROIDERY MACHINE SETUP DATA menu
	Sequin tape incorrectly inserted	<ul style="list-style-type: none"> Insert the sequin tape again
Sequin device colliding with embroidery frame	Design does not fit inside the available embroidery field	<ul style="list-style-type: none"> Choose a different design Bear in mind that the embroidery field is reduced by the footprint of the sequin head
	Start point of design was not chosen correctly	<ul style="list-style-type: none"> Align the pantograph carefully before starting the design. Bear in mind that the embroidery field is reduced by the footprint of the sequin head
Screen message: END POSITION SEQUIN	Sequin head has not been moved to its top or bottom end position	<ul style="list-style-type: none"> Check all connections Check whether the spindle is adequately lubricated and - if necessary - apply a little grease. If the message continues to be issued, contact the ZSK service department

7. Maintenance

7.1 Monthly

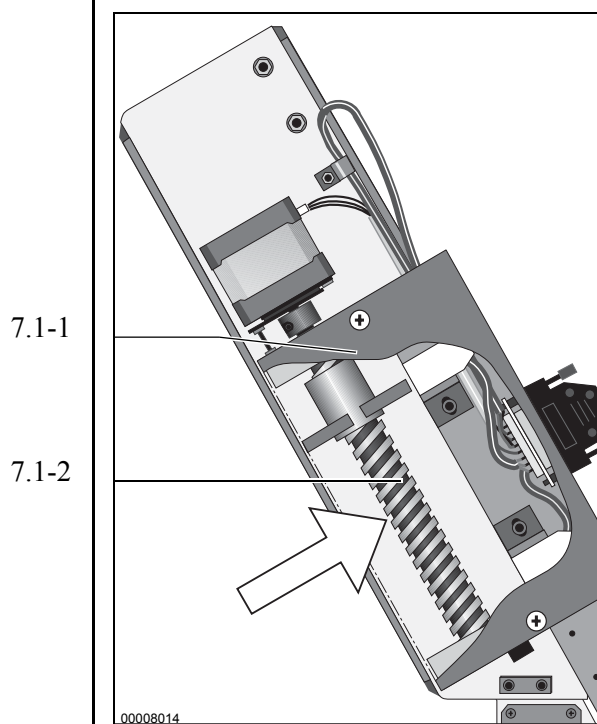
DANGER

As a general rule, cleaning and maintenance work are to be carried out only with the mains plug removed from the socket.

Lubricate the spindles of all sequin devices **every month** with the grease provided with the machine accessories.

7.1.1 Greasing spindle

Figure 7,1:
Greasing spindle



- Detach cover (7.1-1) from the rear of the sequin device.
- Apply a **light coating** of grease with a brush along the entire length of spindle (7.1-2).
- Attach the cover.

CAUTION

On no account is the machine to be restarted before you have re-installed all covers properly.

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