

PFAFF

3811

Instruction manual

-11/33

-11/35

-13/35



Notes on safety

- The machine must only be commissioned in full knowledge of the instruction book and operated by persons with appropriate training.
- The machine must only be used for the purpose intended.
- Use of the machine without the safety devices belonging to it is not permitted.
- When gauge part are exchanged (e.g. needle, presser foot, needle plate, feed dog and bobbin) during threading, when the workplace is left, and during service work, the machine must be isolated from the mains by switching off the main switch or disconnecting the mains plug.
On mechanically operated clutch motors without start inhibitor it is necessary to wait until the motor has stopped.
- General servicing work must only be carried out by appropriately trained persons.
- Repairs, conversion and special maintenance work must only be carried out by technicians or persons with appropriate training.
- For service or repair work on pneumatic systems the machine must be isolated from the compressed air supply system.
Exceptions to this are only adjustments and function checks made by appropriately trained technicians.
- Work on the electrical equipment must only be carried out by electrical engineers or appropriately trained persons.
- Work on parts and systems under electric current is not permitted, except as specified in regulations DIN 57105 or VDE 0105.
- Conversions or changes to the machine must be authorized by us and only be made on adherence to all safety regulations.
- For repairs, only replacement parts approved by us must be used.



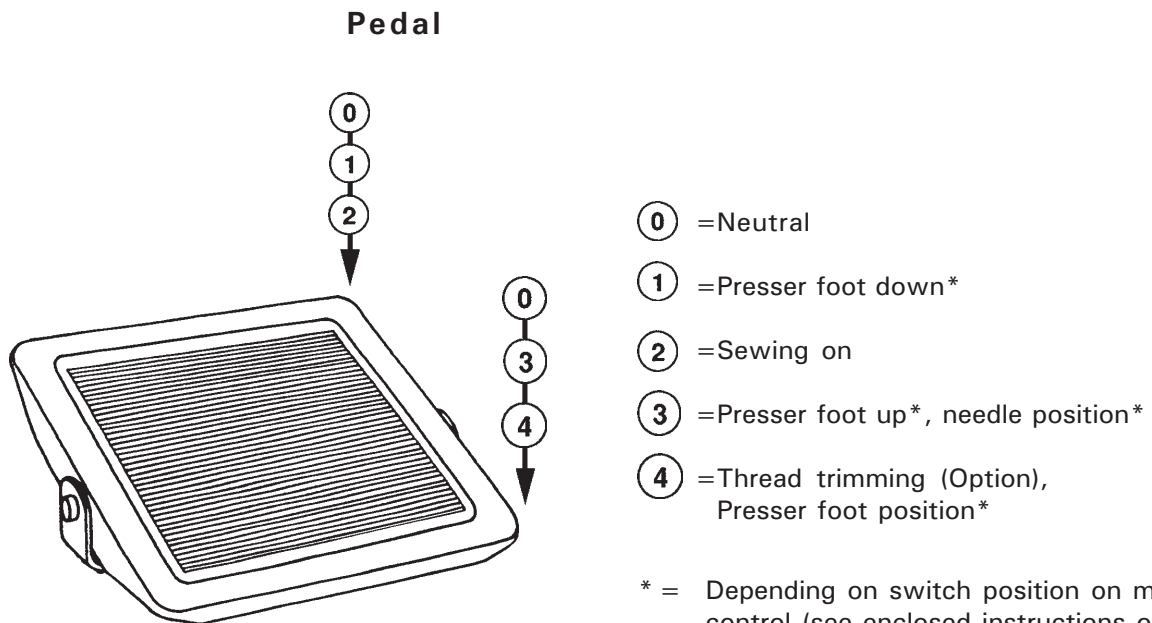
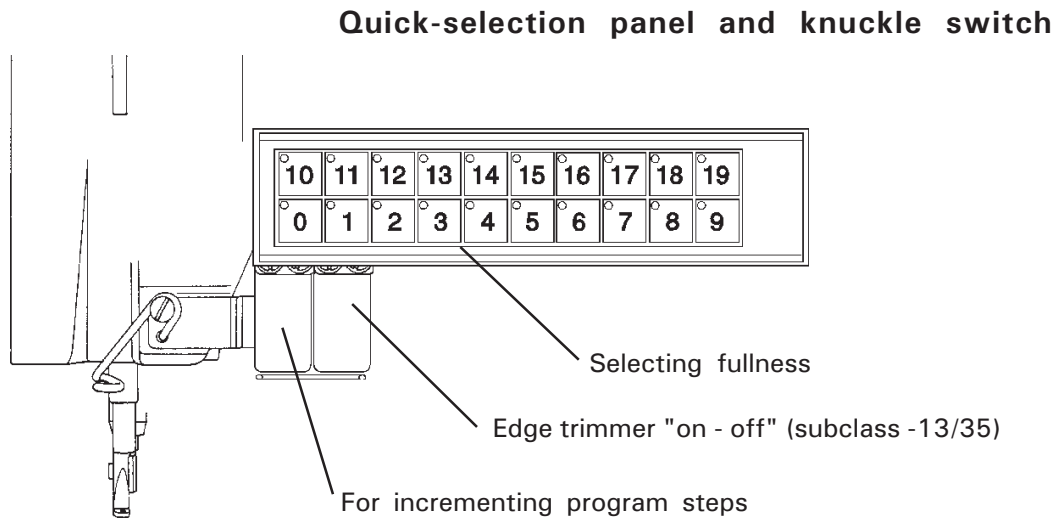
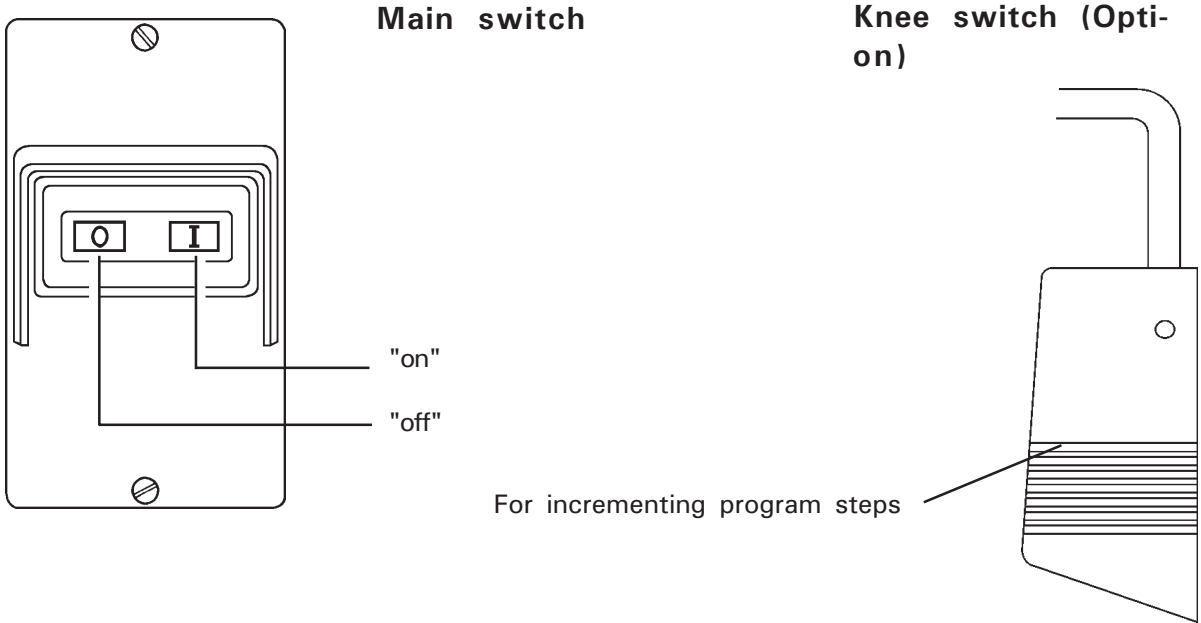
This symbol draws attention to special danger of injury.

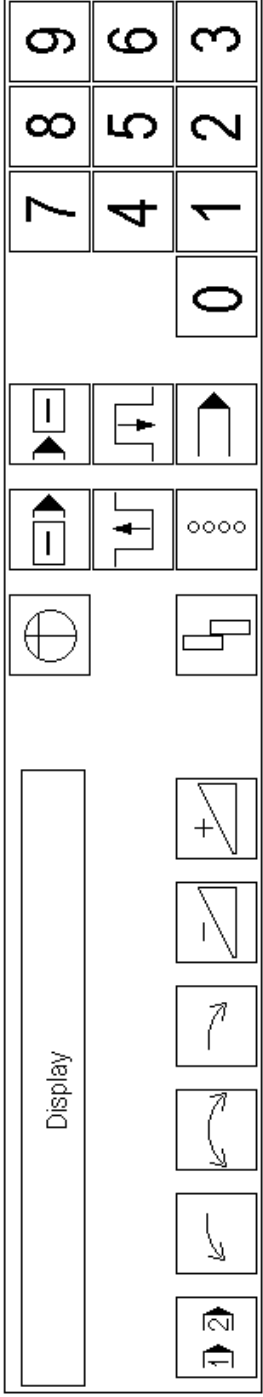
It is imperative to read and adhere to these notes and all generally applicable safety regulations.

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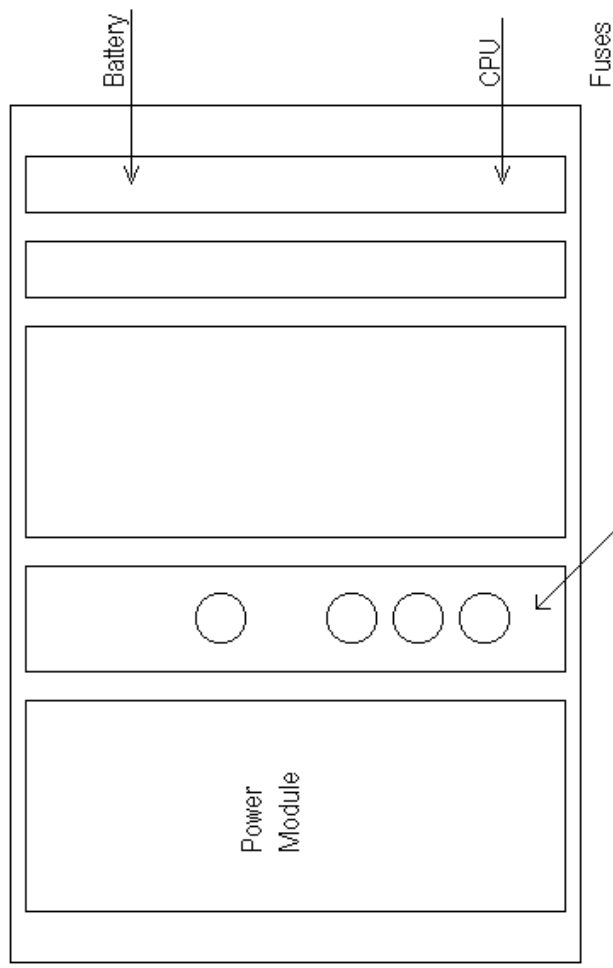
1 Controls and their functions

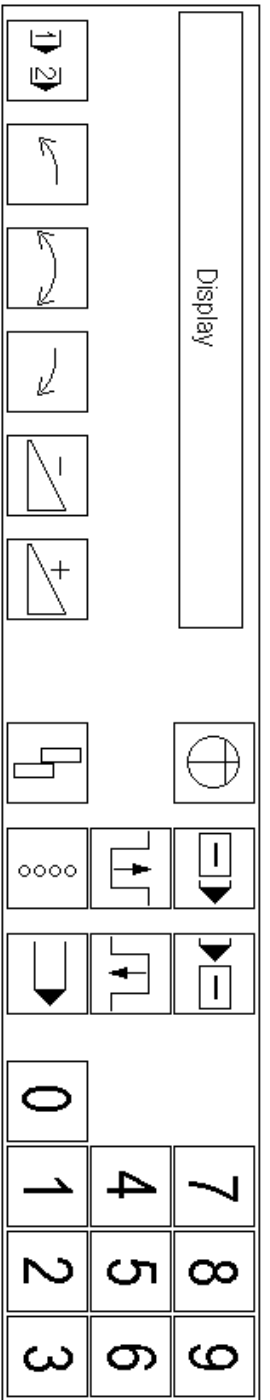




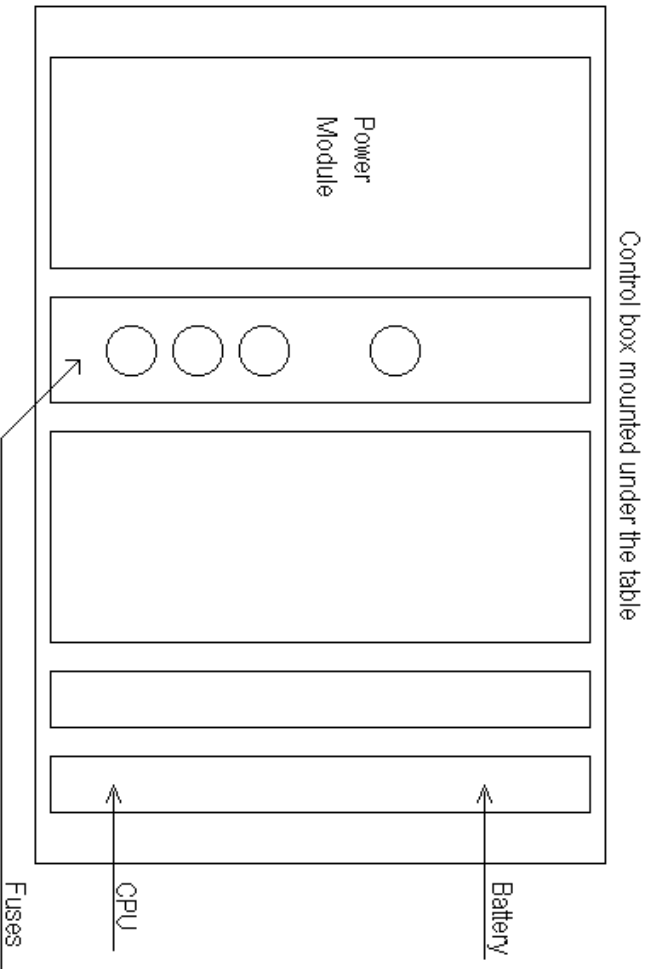
3811-11/35 Operator Input Control Panel

Control box mounted under the table

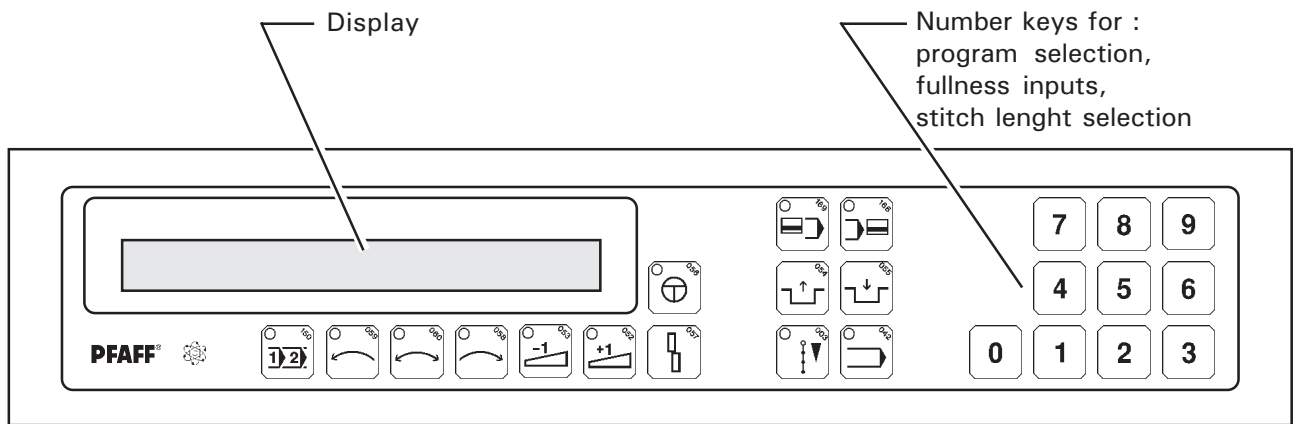




3811-11/35 Operator Input Control Panel

















Control box mounted under the table



Explanation of displayed abbreviations:

PNR.	= Programmnummer	= Program number
STL.	= Stichtlänge	= Stitch length
BA:	= Betriebsart	= Operating mode
MW	= Mehrweite	= Fullness
SCHRITT		= Seam segment
SCHECKKARTE	LESEN	= Reading memory card
SCHECKKARTE	SCHREIBEN	= Writing memory card
TASTE		= Key

-  Selecting operating modes 1, 1a or 2a
Automatic stitch-length change (only in modes 1a and 2a) *
-  Operating mode 3 (left parts only) *
-  Operating mode 5 (right parts only) *
-  Operating mode 4 (left and right parts alternately) *
-  Set feed intensity (gather amount) reduced by one step *
-  Set feed intensity (gather amount) increased by one step *
-  Reset ,
Enable reading or writing of magnetic data card
-  Reading a memory card (optional) *
-  Writing a memory card (optional) *
-  Resetting end of segment
-  Setting end of segment
-  Working *
-  Programming *
-  Selecting stitch length *

* = Function active when diode lights up

2 Description of function

The control is designed so that several seam patterns can be programmed and re-called. The input fullness settings and stitch lengths can be separately programmed and re-called for the individual modes.

A seam pattern is divided into 15/30 seam segments.

The keypad is equipped with 24 keys, and the data is indicated on a two-line LCD.

Within a seam pattern, the fullness settings are re-called by the knee switch or knuckle switch.


The fullness setting is adjusted by a stepping motor at a certain ratio to the set stitch length. The reference position of the stepping motor is signalled by a sensor.


The stitch length is adjusted by a pneumatic cylinder controlled by solenoid valves. Three different stitch lengths can be selected.

3 Operating modes

The control has the following operating modes:


3.1 Operating modes 1, 1a, 2a - key (150)

Key  150 is a multi-function key, i.e. it is used for selecting different operating modes. The selectable modes have the following functions:

- Press key  (150) once: the LCD indicates:

PNR . . .	:	4	STL . . .	:	3	BA: 1
SCHRITT	:	1	MW	:	0	


This means that fullness settings can be re-called on the quick-selection and/or 10-key input panel. The stitch length is pre-set (to adjust, see item 3.4).


- Press key  (150) again: the LCD indicates:

PNR . . .	:	4	STL . . .	:	3	BA: 1A
SCHRITT	:	1	MW	:	0	

This means that fullness settings can be re-called on the quick-selection and/or 10-key input panel. In this case the stitch length is automatically varied. The stitch lengths for different fullness settings are:

5 mm for fullness settings 0 to 6
3 mm for fullness settings 7 to 12
2 mm for fullness settings 13 to 19


The LED in key  150 indicates that the automatic stitch-length change is activated.

- Press key  (150) again: the LCD indicates:


PNR . . .	:	4	STL . . .	:	3	BA: 2A
SCHRITT	:	1	MW	:	0	

In this mode it is possible to program two fullness settings. The stitch length is selected automatically according to mode 1A by the knee switch and/or knuckle switch when the step is selected.

If step 2 is selected, fullness settings can be selected on the quick-selection and/or 10-key panel. The fullness setting last input is saved, and output when step 2 is selected the next time. The fullness setting saved in step 1 is not variable in working mode.

The LED in key  (150) indicates that the automatic stitch length change is active. (For programming fullness settings, see item 6).


3.2 Operating mode 5: right parts only, key (058)

Press key  (058): the LCD indicates:

PNR . . .	:	4	STL. . .	:	3	BA: 5
SCHRITT	:	1	MW	:	0	

- In this mode, up to 15 fullness settings can be programmed and re-called. Any required stitch length can be assigned to each fullness setting.
(For programming fullness settings and stitch lengths, see items 6 and 7.4.)


3.3 Operating mode 3: left parts only, key (059)

Press key  (059): the LCD indicates:

PNR . . .	:	4	STL. . .	:	3	BA: 3
SCHRITT	:	1	MW	:	0	

- In this mode, up to 15 fullness settings can be programmed and re-called. Any required stitch length can be assigned to each fullness setting.
(For programming fullness settings and stitch lengths, see items 6 and 7.4.)

3.4 Operating mode 4: left and right parts alternately, key (060)

Press key  (060): the LCD indicates:

PNR . . .	:	4	STL. . .	:	3	BA: 4
SCHRITT	:	1	MW	:	0	

- In this mode, workpieces can be sewn alternately, i.e. the programmed fullness settings and stitch lengths for left and right parts are re-called alternately.





Owing to the fact that right and left parts are called alternately, it is possible to re-call up to 30 fullness amounts and stitch lengths in sequence.

4 Selecting operating modes

The following operating modes are available:

- Mode 1:** Direct re-calling of a fullness setting
- Mode 1a:** Direct re-calling of a fullness setting with automatic stitch length change.
- Mode 2a:** Re-calling of two fullness settings with automatic stitch length change.
- Mode 3:** Left parts only
- Mode 4:** Right and left parts alternately
- Mode 5:** Right parts only

The different operating modes are selected with the following keys:


- Mode 1:**  (150) Fullness, manual,
or:
Mode 1a: Fullness, manual, and automatic stitch length change
or:
Mode 2a: Re-calling of two fullness settings with automatic stitch length change
- Mode 5:**  (058) Right parts only
- Mode 4:**  (060) Alternately
- Mode 3:**  (059) Left parts only

An LED in the key indicates which operating mode is active.

If the alternating mode is selected, the LED "alternating" and the LED for right or left parts light up. The active mode is also indicated on the LCD.

5 Selecting a program number

Selection of the program number is made on keys 0 to 9.

For this, the function - *WORKING* -, key  (003), must be activated. The selected program number is indicated on the LCD. Any leading noughts are suppressed.

Program numbers from 0 to 240 can be entered. Make sure that the entered numbers are placed at the far right.

Example:

Program number 101 is activated.
The next program to be selected is number 12.

- The LCD indicates 101

PNR .	:	101	STL.	:	3	BA:	1
SCHRITT	:	1	MW	:	0		

- Press key 1

- The LCD indicates 11

PNR .	:	11	STL.	:	3	BA:	1
SCHRITT	:	1	MW	:	0		

- Press key 2

- The LCD indicates 112


PNR .	:	112	STL.	:	3	BA:	1
SCHRITT	:	1	MW	:	0		

- Non-valid program number

This is why a program number should always be entered beginning with 0-0 (= 2x 0).

6 Activating a program

In order to program fullness settings the function - *PROGRAMMING* - must be activated.

- *PROGRAMMING* - is activated by pressing key  (042).

An LED in the key shows that the - *PROGRAMMING MODE* - is activated.

6.1 Entering a fullness setting

Using the 10-key panel or quick-selection panel you can now input the fullness settings. If these are entered using the 10-key panel (keys 0 to 9), the input must be made in two digits. If entry is made using the quick-selection panel, however, it is only necessary to press one of keys 0 to 19. The fullness amount input and saved is shown in the LCD.

PNR . . . :	101	STL. . . :	3	BA: 1
SCHRITT :	1	MW	14	

The column - *SCHRITT* - in the LCD also shows which seam segment is active at present. The re-calling key can be used for selecting the required seam segment, and the segment programmed by inputting a fullness setting if required.


PNR . . . :	101	STL. . . :	3	BA: 1
SCHRITT :	3	MW	0	

Up to 15 seam segments can be programmed, each of them separately for right and left parts. If fewer than 15 segments per seam are required, the end of the segment can be saved

using key  (055).


For more details, see Item 6.2.

6.2 Setting/resetting end of program

By pressing key  (055)

- *SETTING END OF PROGRAM* - the segment now active will be marked as the end of program.

After saving of the end of program, segment 1 is activated and also the corresponding fullness setting.


By pressing key  (054)

- *RESETTING END OF PROGRAM* - the segment counter for a maximum of 15 segments is enabled.

The segment now indicated and the corresponding fullness setting remain active.

6.3 Reading/writing a memory card

This function can only be activated if a memory card reader is installed.


The software of this control allows reading and writing of a data medium (memory card). In order to read or write on a memory card, the function - *PROGRAMMING* -, key  (042) must be activated.

To enable reading of a memory card

press key  (169)

The LCD indicates:

SCHECKKARTE LESEN TASTE -- > RESET
--


Reading of the memory card, press key RESET  (057)

To enable writing on a memory card

press key  (168)

The LCD indicates:

SCHECKKARTE SCHREIBEN TASTE -- > RESET
--

Writing on the memory card, press key RESET  (057)

After the reading/writing action the LCD indicates:

PNR . : 4 STL . : 3 BA: 1
SCHRITT : 1 MW 0

The following are available as on option:

Part No.:	91-093965-93	pc board
	91-094266-75	front panel
	71-6400-0332	memory card

7 Fullness


7.1 Fullness setting, manual

Operating mode 1

is activated by pressing key  (150)

A fullness setting can now be input using the 10-key panel or the quick-selection panel. The stitch length is freely selectable (see item 7.4).

Operating mode 1a

is activated by pressing key  (150) again.

A fullness setting can be input using the 10-key panel or the quick-selection panel and the stitch length is changed automatically.


At fullness setting:	0	to	6:	stitch length 5 mm
	7	to	12:	stitch length 3 mm
	13	to	19:	stitch length 2 mm

Operating mode 2a


is activated by pressing key  (150)

In this mode, two fullness settings can be programmed. The stitch length is changed, the same as in mode 1a, when the segment is selected with the knee-switch or knuckle switch.


If segment 2 is pre-selected, fullness settings can be input on the quick-selection panel or the 10-key panel. The last input fullness setting is saved, and output when segment 2 is selected again. The fullness setting saved in segment 1 is not variable in working mode.

The LED in key  (150) shows that the automatic stitch length change is active. (For programming fullness settings see item 6.)


Operating mode 1

is activated by pressing key  (150) again, etc.

7.2 Fullness setting -1 / -1

By pressing key  (052)

or

key  (053)

all fullness settings can be increased or decreased by one to three increments.

The LCD indicates :


PNR .	:	4	STL .	:	3	BA:	1
SCHRI TT	:	1	MW	:	12+1		


or

PNR .	:	4	STL .	:	3	BA:	1
SCHRI TT	:	1	MW	:	12- 1		

If the difference +/- is "0", no prefix is indicated following the fullness setting in the LCD and no reading is indicated.

7.3 Selecting a seam segment

The required seam segment can be selected with the re-calling key (knee-switch or knuckle switch) or with the RESET key  (057).


If the RESET key  (057) is pressed, the previous segment (segment -1) will be selected.

The corresponding data will also be shown (segment, fullness setting, difference, stitch length).

In special cases it will be necessary to press the knuckle switch and knee switch simultaneously. This requires the use of an adapter which connects the two switches.

Part number: 91-094486-91 Adapter
91-094548-91 Knee switch
91-094275-71/798 Knuckle switch

7.4 Adjusting the stitch length


The stitch length input function is enabled by pressing key  (056)

The stitch length is selected using keys 2, 3 or 4 on the 10-key panel. A flashing LED in a key shows which stitch length is active.

The stitch length input is reactivated by pressing key  (056) again.

If operating mode 1a or 2a is active, the stitch length cannot be changed (automatic stitch length change).

8 Activating the working mode

The function - *WORKING* - is activated by pressing key  (003)


The LCD indicates:

PNR . . . :	4	STL. . . :	3	BA: 1A
SCHRITT :	1	MW	12	

The program is set at the beginning of seam according to the selected operating mode.
The stepping motor sets the machine to the present fullness setting.

It is now not possible to input data.

9 Re-setting (RESET key 057)

Each time key  (057) is pressed, the seam segment-counter will be moved back by one step, when function -*WORKING* - or -*PROGRAMMING* - is active.

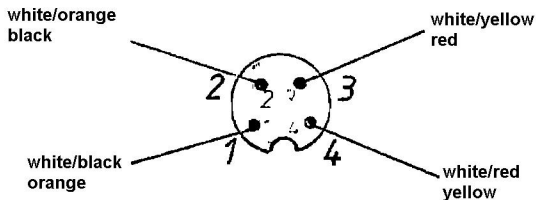
This is only in operating modes 3, 4 and 5

10 Quick-selection panel

The quick-selection panel allows quick input of fullness settings, both during programming and during re-sewing.

Typ: HY 200 - 2232-160 B8

Firma: MAE



Stepper motor for 3811-11/35 is #91-093 059-91

Stepper motor for 3811-11/55 or 11/65 is # 71-52 00-0056

Anschlußbild

(Auf Anschlüsse gesehen)

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