Gauge for setting the zero point plus the needle position.
#95-730 242-75/993

3568-2/11

Service Handbook

Input - brief description

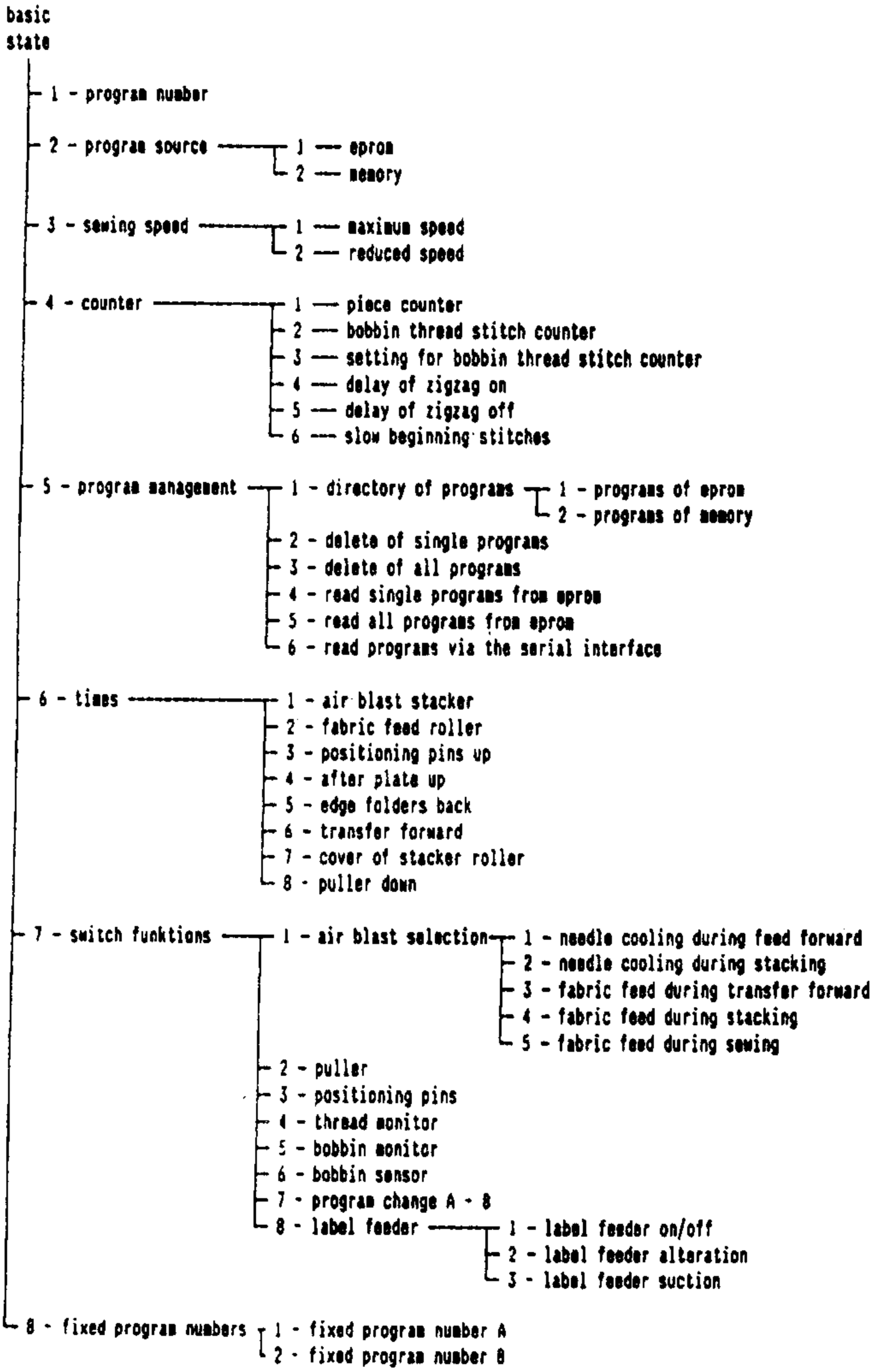
1/14, 2/11, 3/11, 4/16
1/17, 2/13, 3/15
2/15, 3/16
2/16

19 99	Datum	Name		Typ 3568 -
Erstellt	05.07.	Schulz	Ersatz für	PFAFF
Gepr./Genehm.			Ersetzt durch	
Normgepr.			Ausf. lt. Änd.-Nr.	
Automatic pocket setter				Zeichnungs-Nr. 91-191 119-95
				Blattzahl: 11 / Blatt: 1

Table of contens,index

Page

Automatic pocket setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 2



Automatic pocket setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 4

Input - Brief Description

In the basic status, all main functions can be indicated together with their function numbers by pressing the key "ENTER" several times. If a valid function number is actuated, the corresponding input function is selected. Main functions may be devided into several part functions, and part functions again into several further part functions. By the integrated operator guidance system selection is made simple.
The input is concluded by actuation of an operation mode key. If error messages occur, one of the operation mode keys must be pressed in order to continue work. In addition to the main functions listed below, there is a monitor function (byte, port) which, however, is only to be used by authorized service personnel.

Function numbers of the main functions:

1 - Program number
2 - Program source
3 - Sewing speeds
4 - Set/reset of counters
5 - Read, delete and directory of programs
6 - Manipulation of times
7 - Switch functions
8 - Fixed program numbers

Main funciton 1 - program number

The input of a program number is only possible when the machine is in its origin position. Otherwise an error message is indicated.
The new program number is accepted with "ENTER".
Furthermore it is important to point out, that a new selection of the program number has to be made after the change of the eprom even when the program number shall be kept on, so long as the actual program source is the eprom.

Main function 2 - program source

The input of the program source is only possible when the machine is in its origin position, otherwise an error message is indicated.

Main function 3 - sewing speed

The maximum sewing speed ("1") and the reduced sewing speed ("2") can be indicated and manipulated.
The selected sewing speed can be input in speed levels from 1 to 15, whereby each speed level is indicated with the percentage ratio in relation to the maximum possible speed.
The setting is accepted with "ENTER" if the value is permissible (otherwise error message).
Furthermore it is important that the sewing speed can be limited by the stitch length or the sewing program too.

Main function 4 - set/reset of counters

At first it is possible to turn over the different part functions by pressing "ENTER". The corresponding function numbers in each case are indicated too. When a valid function number is actuated,the chosen part function is selected.

Part function 1 - piece counter

The actual value is indicated. The piece counter can be reset by key "0".

Part function 2 - bobbin thread stitch counter

(Compare with part function 1)
the setting is indicated in units of 100 stitches.

Part function 3 - setting for bobbin thread counter

The actual value (units of 100 stitches) is indicated. After that, a new setting can be made and accepted with "ENTER".

Automatic pocket setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 6

Part function 4 - delay in zigzag "on"

The actual delay value is indicated in stitches. After that, a new setting can be made and accepted with "ENTER".

Part function 5 - delay in zigzag "off"

(Compare with part function 4).

Part function 6 - slow beginning stitches

The actual number of slow beginning stitches is indicated. After that, a new setting can be made and accepted with "ENTER".

Main function 5 - read, delete and directory of programs

At first it is possible to turn over the different part functions by pressing "ENTER". The function numbers to be operated in each case are indicated too. On actuation of a valid function number, the corresponding part function is selected.

Part function 1 - directory

It is possible to choose between the directory of the eprom and the memory. All existing program numbers are indicated. The list is concluded with "END". If one line is not sufficient to indicate all program numbers, the display can be continued with "ENTER". When all programs and "END" have been displayed, the display returns to the beginning again.

Part function 2 - delete of single programs

Deleting is only allowed in the origin position of the machine, otherwise an error message is indicated.
At first, the program number to be deleted is entered. The delete function is carried out with "ENTER" and confirmed afterwards. If the program number is not available an error message is indicated.

Automatic pocket setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 7

Part function 3 - delete of all programs

Deleting is only allowed in the origin position of the machine, otherwise an error message is indicated.
The delete function is carried out with "ENTER" and confirmed afterwards.

Part function 4 - read a program from eprom into the memory

First, the program number to be read is input. By pressing "ENTER" read-process begins. If the program to be read is not found in the eprom, a program with the same number in the memory already exists, or the storage space is not sufficient, this is indicated with a corresponding error message. After correct reading, a confirmation is indicated.

Part function 5 - read all programs from eprom into the memory

The part function is indicated at first. Reading begins by pressing "ENTER". If no eprom or an empty one is inserted in the reading unit, a program with the same number in the memory already exists or if the storage space is not sufficient, this is indicated with a corresponding error message. A confirmation is indicated after correct reading.

Part function 6 - read programs via the serial interface into the memory

A corresponding display is made. Then the system waits for data.
The following errors may be recognized and indicated:
- program with the same number in memory already exists
- storage space not sufficient
- wrong data transmitted
- transmission interrupted
- transmission mistake

Successful transmission is indicated by a message. Interrupt of transmission is possible by actuation of an operation mode key.

Automatic packet setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 8

Main function 6 - manipulation of times

At first it is possible to turn over the different part functions. The function numbers to be operated in each case are indicated too. By actuation of a valid function number, the corresponding part function is selected.

The following times can be manipulated:
- part function 1 - time for air blast stacker
- part function 2 - time for fabric feed roller
- part function 3 - time for positioning pins up
- part function 4 - time after plate up
- part function 5 - time for edge folders back
- part function 6 - time for transfer forward
- part function 7 - time for cover of stacker roller
- part function 8 - time for puller down

The input time is accepted with "ENTER".

Look out: If the time for cover of stacker roller is longer as the time for fabric feed, the function for cover of stacker roller do not work.

Main function 7 - switch functions

At first it is possible to turn over the different part functions. The function number to be operated in each case is indicated too. By actuation of a valid function number the corresponding part function is selected.

Part function 1 - air blast selection

By pressing "ENTER" the different part functions of air-blast selection can be turned over. If a part function is selected by its function number, the corresponding air blast can be enabled by "1" or disabled by "0".

Following part functions are possible:
- part function 1 - air blast needle cooling on during transfer forward
- part function 2 - air blast needle cooling on during stacking
- part function 3 - air blast auxiliary fabric feed on during transfer forward
- part function 4 - air blast auxiliary fabric feed on during stacking
- part function 5 - air blast auxiliary fabric feed on during sewing

Part function 2 - puller

The puller function can be enabled ("1") or disabled ("0").

Part function 3 - positioning pins

It is possible to choose between edge folder with positioning pins ("1") and edge folder without positioning pins ("0").

Part function 4 - thread monitor

The thread monitor can be enabled ("1") or disabled ("0").

Part function 5 - bobbin monitor

The bobbin monitor can be enabled ("1") or disabled ("0").

Part function 6 - bobbin sensor

The bobbin sensor can be enabled ("1") or disabled ("0"). If the bobbin monitor and the bobbin sensor are enabled, the bobbin is controlled by the sensor. If the bobbin monitor is enabled and the bobbin sensor is disabled, the bobbin is controlled by the stitch counter.

Part function 7 - program change A - B

The automatic change of program number can be enabled ("1") or disabled ("0").

Part function 8 - label feeder

At first it is possible to turn over the different part function numbers to be operated in each case are indicated too. By actuation of a valid function number, the corresponding part function is selected.

Part function 8.1 - label feeder on/off

The label feeder can be switched on ("1") or switched off ("0").

Automatic pocket setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 10

Part function 8.2 - label feeder alteration

It is possible to choose, if a label is put on each second pocket ("1") or on each pocket ("0").

Part function 8.3 - label feeder suction

The suction of the label feeder can be enabled ("1") or disabled ("0").

Main function 8 - fixed program numbers

At first it is possible to turn over the different part functions. The functions numbers to be operated in each case are indicated too. By actuation of a valid function number, the corresponding part function is selected.

Part function 1 - programming of fixed program number A
Part function 2 - programming of fixed program number B

An actual program number corresponding to the selected fixed program number can be chosen.

Automatic pocket setter	Zeichnungs-Nr. 91-191 119-95	
	Blattzahl: 11	Blatt: 11

Service - brief description

1/17, 2/11, 3/11, 4/16
1/14, 2/13, 3/15
2/15, 3/16
2/16

19 89	Datum	Name		Typ 3568 -
Erstellt	30.05.	Maue	Ersatz für	
Gepr./Genehm.			Ersetzt durch	P F A F F
Normgepr.			Ausf. lt. Änd.-Nr.	
Automatic pocket setter				Zeichnungs-Nr. 91-191 118-95
				Blattzahl: 7 / Blatt: 1

Table of contens,index	Page
General information	3
Set / reset of outputs	3,4,5
Stepping motor X ,Y axis	6
Sewing motor	6
Thread trimming sequence	6
Display of inputs	7

Automatic pocket setter	Zeichnungs-Nr. 91-191 118-95	
	Blattzahl: 7	Blatt: 2

Service - brief description

In the basic status all different functions with their function numbers can be indicated by pressing the key " enter ". If a valid function number is actuated, the corresponding service - function is selected.
By pressing an operation mode key, service is finished.

Function numbers:

1 - set / reset of outputs
2 - stepping motor for X axis
3 - stepping motor for Y axis
4 - sewing motor
5 - thread trimming sequence
6 - display of inputs

---

1 - set / reset of outputs

Outputs can be set or reset. Both the interlocks and the replies are checked. The output to be manipulated is characterized by a three-digit index. The most significant digit determines whether the output is to be set or reset (* = 1 for set, * = 0 for reset).

In the following list, the names of the outputs refer to the set outputs in each case.

Automatic pocket setter	Zeichnungs-Nr. 91-191 118-95	
	Blattzahl: 7	Blatt: 3

Output	Name	Index	Output	Name	Index
Y1	Presser foot down	*08	Y20.1	Pocket plate back	*12
Y2	Trimming (900) on	*09	Y20.2	Pocket plate forward	*11
Y3	Air blast needle cooling on	*10	Y21.1	Pocket holder up	*14
Y5	Thread puller function	*04	Y21.2	Pocket holder down	*13
Y10	OUT 1 (zig-zag) on	*40	X22	Retaining solenoid edge folder on	*15
Y11	OUT 2 (Thread tension ampl.) on	*41	Y23.1	Edge folder and plate up	*17
	OUT 3 on	*42	Y23.2	Edge folder and plate down	*16
	OUT 4 on	*43	Y24.1	Edge folders back	*19
	OUT 5 on	*44	Y24.2	Edge folders forward	*18
	OUT 6 on	*45	Y25	Positioning pin up	*20
	OUT 7 on	*46	Y26.1	Template down	*22
	OUT 8 on	*47	Y26.2	Template up	*21

Automatic pocket setter	Zeichnungs-Nr. 91-191 118-95	
	Blattzahl: 7	Blatt: 4

Output	Name	Index
Y27.1	Transport forward (to sewing pos.)	*00
Y27.2	Transport back (to edge folding pos.)	*23
Y28.1	Locating pin sewing on	*01
Y28.2	Locating pin feed on	*02
Y30	Clamping strip edge folder forward	*05
Y40	Fabric feed roller cover open	*32
Y41	Puller down	*33
Y42	Stacker forward	*34
Y43	Air blast stacker on	*35
K44	Fabric feed roller on	*36
Y45	Air blast auxiliary fabric feed on	*06
K60	Main contactor on	*37
H101	Start lamp on	*38
H102	Stop lamp on	*39
H103	Manuel lamp on	*24
H104	Automatic lamp on	*25
H105	Power on lamp on	*26
H106	Error reset lamp on	*27
H114	Lamp fixed progras key A on	*29
H115	Lamp fixed progras key B on	*30

Automatic pocket setter	Zeichnungs-Nr. 91-191 118-95	
	Blattzahl: 7	Blatt: 5

2 - Stepping motor for X - axis

The stepping motor of the X - axis can be moved in positive direction by pressing the key " forward ", in negative direction by pressing the key " backward ". The interlocks are respected.
If the thread is not cut, it can be cut by pressing the key " needle position ". If the needle is not in position 2, it can be positioned by pressing the same key too.

Remark: The passage of the needle has to be free, because thread trimming and positioning needs one rotation of the sewing machine. (Needle over the sewing slot) !

3 - Stepping motor for Y - axis

Same function as (2), but for the stepping motor of the Y - axis.

4 - Sewing motor

The sewing motor can be switched on with pre-selected speed with the key " start ". The key " stop " stops the movement and the sewing machine positions. A further selection of speed and start of machine is possible. During the movement, the presser foot is switched down and the measured actual speed is displayed.

Remark: The passage of the needle must be free
(Needle over the sewing slot) !

5 - Thread trimming sequence

By pressing the key " start " a thread trimming sequence is carried out.

Remark: The passage of the needle must be free
(Needle over the sewing slot) !

Automatic pocket setter	Zeichnungs-Nr. 91-191 118-95	
	Blattzahl: 7	Blatt: 6

6 - Display of inputs

24 inputs are illustrated at the same time on the display. Enabled inputs (LED on) are represented by " 1 ", disabled ones by " 0 ". Clamps, which are not used for inputs, are marked with " x ". The display is arranged in 3 groups of 8 inputs, beginning with clamp no. 1 at the left side. The status is displayed continuously, i.e. a change of status is shown at once.
When the function is required, the inputs of M-OX (A21) are indicated first of all. By pressing the key " enter " another pinboard can be selected. After M-OX (A21), M-IN (A25), M-OE (A26), M-OE (A27) and M-OE (A28) follow accordingly. The display of M-OE (A28) is also done if no label feeder is installed and the pin board A28 is not plugged in. Then this display can be ignored. After that the sequence starts form the beginning again, i.e. with display of the M-OX (A21).

Automatic pocket setter	Zeichnungs-Nr. 91-191 118-95	
	Blattzahl: 7	Blatt: 7

Important adjustments	1/14, 2/11, 3/11, 4/16 1/17, 2/13, 3/15 2/15, 3/16 2/16

19 89	Datum	Name		Typ 3568 -
Erstellt	02.08	Maue	Ersatz für	
Gepr./Genehm.			Ersetzt durch	PFAFF
Normgepr.			Ausf. lt. Änd.-Nr.	
Automatic pocket setter				Zeichnungs-Nr. 91-191 129-95
				Blattzahl: 7 / Blatt: 1

General inforeation !

The following adjustaents are already done in our factory.
You only have to check the aachine if it dosen't work the correct sequence.
Please do these aeasureaents for elialnation of disturbance (chapter 6) on aachines, that aere delivered foraer.

Table of contents

Automatic pocket setter	Zeichnungs-Nr. 91-191 129-95	
	Blattzahl: 7	Blatt: 2

1. Power supply 220/380V 50/60Hz

1.1 380V

Bridge on main panel X17.13 to X17.N (look for STP main panel no. 91-191 064-95).

Sewing motor type Quick 880 M
- clamp motor box connector to star.
- change motor protection switch F2 (1.6-2.5A) !

Sewing motor type Quick Synchro
- no changes necessary !

Additional units
- look for seperate description of these additional units.

1.2 220V

Bridge on main panel X17.13 to X17.11 (look for STP main panel no. 91-191 064-95).

Sewing motor type Quick 880 M
- clamp motor box connector to delta.
- change motor protection switch F2 (2.5-4A) !

Sewing motor type Quick Synchro
- no changes necessary !

Additional units
- look for seperate description of these additional units.

1.3 50/60 Hz

Sewing motor type Quick 880 M
- pulley at 50 Hz .....
- pulley at 60 Hz .....

Sewing motor type Quick Synchro
- no change of pulley necessary.

Additional units
- look for seperate description of these additional units.

Automatic pocket setter	Zeichnungs-Nr. 91-191 129-95	
	Blattzahl: 7	Blatt: 3

2. Sewing motor

2.1 Motor type Quick 880 M

Manipulations at the motor control board
a) additional board
- change R59 to 15 kOhms

b) basic board
- change R18 to 18 kOhms
- solder additional capacitor 100 nF at IC 14 between PIN 2 and PIN 5.

Adjustment:
a) switch in middle position (n-pos.)
b) turn potentiometer P4 to left end-position, looked from the solder side.
c) set positioning speed to 180 upm; potentiometer P1.
d) turn P4 clockwise till LED1 starts lighting.

e) if necessary, readjust position speed by P1.

f) turn P7 to max. position. (counter clockwise)
g) control cutting speed as follows and readjust, if necessary , to 180 upm by potentiometer P6.
- set the switch to the upper position.
- pull up the slider in the synchronizer.
- press the foot pedal.
- If necessary readjust the speed at P6.
- pull down the slider in the synchronizer.

h) choose the speed 100% in the mode "SER" at the control panel.
i) adjust 7V DC at the panel M-IN-1, between A25/4 and 0V. If necessary, readjust by means of R5 on M-IN-1.
j) adjust the speed to 4050 upm by means of the potentiometer P1 on the additional panel (Quick).
k) choose all other speed levels in the mode "SER" and control with a tolerance of +/- 50 upm. If necessary readjust P1.

2.2 Motor type Quick Synchro

Manipulations
- no manipulations necessary.

Adjustments
- adjust 4,75V DC at the panel M-IN-1A, between A25/4 and 0V. If necessary, readjust by means of R5 on M-IN-1A until the sewing head has 4050 upm (sewing-speed 100%).

Automatic pocket setter	Zeichnungs-Nr. 91-191 129-95	
	Blattzahl: 7	Blatt: 4

3. Stepping motors

3.1 Adjust the current to 5A
(look for description of stepping-motor-drive).

3.2 Adjust the reduced current to 60%
(look for description of stepping-motor-drive).

---

4. Coding inputs

4.1 folder with stationary or swivelly pocket plate (S39, A26/20).

A26/20 at 0V ... folder with stationary pocket plate chosen.

A26/20 open ... folder with swivelly pocket plate chosen.

4.2 continuous or intermitting carriage movement (KONTIN, A27/21).

A27/21 at 0V ... continuous carriage movement.

A27/21 open ... intermitting carriage movement.

4.3 cold start (KASTEN, A27/15).

A27/15 at 0V ... By means of switching on the main switch a cold start is done.

A27/15 open ... No cold start when switching on.

4.4 label feeder is installed (ET, A21/11).

A21/11 at 0V ... folder with label feeder is chosen.

A21/11 open ... folder without label feeder is chosen.

4.5 small parts stacker is installed (KTS, A21/12).

A21/12 at 0V ... small parts stacker is chosen.

A21/12 open ... normal stacker is chosen.

Automatic pocket setter	Zeichnungs-Nr. 91-191 129-95	
	Blattzahl: 7	Blatt: 5

5. Reference signal for start of carriage

Initiator at hand wheel (850.1).
The LED A21/13 (850.1) has to start lighting when the needle moves into the fabric.

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6. Measures for disturbance elimination

6.1 Line filters

Install one line filter for each phase next to the main switch. Type: 250V / 10A
Part no.: 71-48 00-0012

Install one line filter in the power pack N-NG-2 or use a power pack with a line filter.

6.2 Grounding

Connect the following parts to the frame by a wire.

control console of folder station - frame
switch cabinet left side - frame
switch cabinet right side - frame
stepping motors x,y - frame

sewing head - frame

control console - frame
(to save screw as el screen)

Control unit into switch cabinet - frame

No 0V level has to be grounded !
All connections must be free of lacquer !
Do not use blackened screws !

6.3 Screening

All screens have to be connected with the frame on both sides.
lines:
- control console
- control for sewing motor
- control for stepping motor drives
- stepping motors to stepping motor drives
- signal lines via X2 to sewing head

Automatic pocket setter	Zeichnungs-Nr. 91-191 129-95	
	Blattzahl: 7	Blatt: 6

6.4 Change of wiring

Connect the synchronizer directly to the Quick control unit.
Synchronizer part no.: 71-14 00-0025 (880 N)
Synchronizer part no.: 71-14 00-0041 (Synchro)

Replace the proxinity switch at the hand wheel B50.1 by a type with increased switching distance.
Proxinity switch part no.: 71-63 00-0197
Mounting angle part no.: 95-753 11-75/993

Modification on distribution box sewing head see drawing-no. 91-290 104-91.
Modification on X2 an d control unit see drawing no. 91-290 105-95 and 91-290 106-91.
Reaove conection for syncronizer from X2 to Quickcontrol.

Automatic pocket setter	Zeichnungs-Nr. 91-191 129-95	
	Blattzahl: 7	Blatt: 7

- 1/17, - 1/14
- 2/11, - 2/13, - 2/15, - 2/16
- 3/11, - 3/15, - 3/16
- 4/16

19 89	Datum	Name		Typ 3568 -
Erstellt	27.04	Maue	Ersatz für	P F A F F
Gepr./Genehm.			Ersetzt durch	
Norngepr.			Ausf. lt. Änd.-Nr.	
List of interlocks				Zeichnungs-Nr. 91 - 191 111 - 95
				Blattzahl: 21 / Blatt: 1

LIST OF INTERLOCKS FOR MACHINE: 3568 - 1/17, - 1/14
- 2/11, - 2/13, - 2/15, - 2/16
- 3/11, - 3/15, - 3/16
- 4/16

GENERAL INFORMATION : THE LABEL "I" ON LED SAY LED LIGHTING, "0" SAY LED NOT LIGHTING.

SOFTWARN-NO.: 79-0011-0037, 79-0011-0038, 79-0011-0039, 79-0011-0040

SOFTWARE-DATE : 08.11.88

Table of contents.index Page

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95
	Blattzahl: 21 / Blatt: 2

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y1 S - PRESS.FOOT DOWN NOT READY			A22/1 I	A26/1 0	
Y1 R - PRESSER FOOT UP NOT READY			A22/1 0	A26/1 I	
Y2 S - THREAD TRIMMING LOCKED	A25/14 I A25/13 0	POS.2 MOT.DR			
Y2 S - THREAD TRIMMING NOT READY			A22/2 I	A26/2 I	
Y20.1 - POCKET PLATE BACK LOCKED	A26/8 I A22/4 0	S23.1 Y20.2			FOLDER WITHOUT POS.PIN
Y20.1 -POCKET PLATE BACK N.READY			A22/5 I	A26/5 I	
Y20.2-POCKET PLATE FORM. LOCKED	A26/8 I A26/14 I A22/5 0 A28/1 0 A28/24 I A28/22 0 A28/23 I	S23.1 S27.1 Y20.1 B76.2 B76.1 B75.1 B75.2			FOLDER WITHOUT POS.PIN WITH LABEL FEEDER: A21/11 I

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 3

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y20.2-POKET PLATE FORM. N. READY			A22/4 I	A26/4 I (A26/19 I)	FOLDER WITH SWING IN POCKED PLATE
Y21.1 - POCKET HOLDER UP LOCKED	A26/10 I A22/6 O	S24.1 Y21.2			
Y21.1-POCKET HOLDER UP NOT READY			A22/7 I	A26/6 I	
Y21.2-POCKET HOLDER DOWN LOCKED	A26/14 I A26/10 I A22/7 O	S27.1 S24.1 Y21.1			
Y21.2-POCKET HOLDER DOWN N.READY			A22/6 I	A26/6 O	
Y23.1 - FOLDER UP LOCKED	A22/9 O	Y23.2			FOLDER WITHOUT POS.PIN
	A28/1 O	876.2			WITH LABEL FEEDER: A21/11 I

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 4

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y23.1 - FOLDER UP NOT READY			A22/10 I	A26/6 I A26/18 I	
Y23.2 - FOLDER/PLATE DOWN LOCKED	A26/14 I A22/10 O	S27.1 Y23.1			FOLDER WITHOUT POS.PIN
	A28/1 O	B76.2			WITH LABEL FEEDER: A21/11 I
Y23.2-FOLDER/PLATE DOWN N.READY			A22/9 I	A26/7 I A26/18 O	
Y24.1 - EDGE FOLDERS BACK LOCKED	A22/11 O	Y24.2			

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 5

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y24.2-EDGE FOLDERS FORW. LOCKED	A22/12 0	Y24.1			
Y24.2-EDGE FOLDERS FORW. N.READY			A22/11 I	A26/10 I	FOLDER WITHOUT POS.PIN
Y25 S -POSITIONING PIN UP LOCKED	A26/14 I	S27.1			
Y26.1 - TEMPLATE DOWN LOCKED	A26/14 I ODER,OR A26/13 I A22/14 0	S27.1 S27.2 Y26.2			
Y26.1 - TEMPLATE DOWN NOT READY			A22/15 I	A26/12 0 A26/11 I	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 6

MODE: AUT , MAN , SER					
DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y26.2 - TEMPLATE UP LOCKED	A25/14 I A25/13 0 A26/16 0 A26/3 I A26/24 I A26/17 I A27/2 I A23/21 I A22/15 0	POS.2 MOT.DR. B28.4 B28.5 B28.3 S28.2 S41.1 SGRD Y26.1			
	A28/1 0	B76.2			WITH LABEL FEED.:A21/11 I + A26/13 I
Y26.2 - TEMPLATE UP NOT READY			A22/14 I	A26/11 0 A26/12 I	
Y27.1 - TRANSFER FORWARD LOCKED	A26/17 I A26/4 0 A26/8 I A26/16 0 A26/3 I A26/24 I A27/2 I A27/3 0 A26/1 I A23/21 I A22/16 0	S28.2 S20.2 S23.1 B28.4 B28.5 B28.3 S41.1 S42 S1 SGRD Y27.2			
	A27/13 I	S98			SICHDI = I
Y27.1-TRANSFER FORWARD NOT READY			A22/17 I	A26/14 I	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 7

MODE: AUT , MAN , SEM

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y27.2 - TRANSFER BACKWARD LOCKED	A26/11 O A26/12 I A27/2 I A26/8 I A22/17 O	B26.2 B26.1 S41.1 S23.1 Y27.1			
	A28/1 O	B76.2			WITH LABEL FEEDER: A21/11 I
	A27/13 I	S98			SICHDI = I
Y27.2-TRANSFER BACKWARD N. READY			A22/16 I	A26/13 I	
Y28.1 - LOCATION PIN SEN. LOCKED	A26/14 I A26/12 O A26/11 I A23/21 I A22/19 O	S27.1 B26.1 B26.2 SGRD Y28.2			
Y28.1-LOCATION PIN SEN. N. READY			A22/18 I	A26/15 I A26/24 O A26/3 O A26/16 I	
Y28.2-LOCATION PIN TRAN. LOCKED	A26/14 I A26/12 O A26/11 I A23/21 I A22/18 O	S27.1 B26.1 B26.2 SGRD Y28.1			
Y28.2-LOCATION PIN TRAN. N.READY			A22/19 I	A26/16 O A26/17 I A26/3 I A26/24 I	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 8

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	INTERLOCKS SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y41 S - PULLER DOWN LOCKED	A26/14 0	S27.1			
Y41 S - PULLER DOWN NOT READY			A23/10 I	A27/1 I	
Y41 R - PULLER UP NOT READY			A23/10 0	A27/2 I	
Y42 S - STACKER FORWARD NOT READY			A23/11 I	A27/3 I	
Y42 R-STACKER BACKWARD NOT READY			A23/11 0	A27/3 0	
K60 S - MAIN CONTACTOR NOT READY			A23/14 I	A27/11 0	
Y70.1 - LABEL SLIDE UP LOCKED	A24/18 0	Y70.2			
Y70.1 - LABEL SLIDE UP NOT READY			A24/17 I	A28/17 I	
Y70.2 - LABEL SLIDE DOWN LOCKED	A24/17 0	Y70.1			

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 9

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y70.2-LABEL SLIDE DOWN NOT READY			A24/18 I	A28/18 I	
Y71.1 -LABEL CLAMP BACKW. LOCKED	A24/20 0	Y71.2			
Y71.2 - LABEL CLAMP FORW. LOCKED	A24/19 0	Y71.1			
Y73 S-LABEL FOLDER FORW. N.READY			A24/22 I	A28/19 I	
Y73 R-LABEL FOLDER BACK. N.READY			A24/22 0	A28/19 0	
Y74 S - LABEL TRANSFER UP LOCKED	A28/19 0	B73			WENN A28/24 I,A28/1 I NO INTERLOC. IF
Y74 S -LABEL TRANSFER UP N.READY			A24/23 I	A28/20 0 A28/21 I	
Y74 R-LABEL TRANSFER DOWN LOCKED	A28/19 0	B73			WENN A28/24 0,A28/1 I NO INTERLOC. IF
Y74 R-LAB. TRANSFER DOWN N.READY			A24/23 0	A28/20 I A28/21 0	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 10

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
Y75.1 -TRANSFER SWING OUT LOCKED	A28/21 O A28/20 I A24/1 O	B74.2 B74.1 Y75.2			
Y75.1-TRANSFER SWING OUT M.READY			A24/24 I	A28/22 O A28/23 I	
Y75.2 - TRANSFER SWING IN LOCKED	A28/21 O A28/20 I A26/5 I A24/24 O	B74.2 B74.1 S20.1 Y75.1			
Y75.2 -TRANSFER SWING IN M.READY			A24/1 I	A28/22 I A28/23 O	
Y76 S-LAB. TRANSFER FORW. LOCKED	A26/5 I A26/8 I A28/21 O A28/20 I A28/23 O A28/22 I A26/12 O A26/11 I	S20.1 S23.1 B74.2 B74.1 B75.2 B75.1 B26.1 B26.2			WENN A26/14 O ADITIONAL IF
Y76 S - L.TRANSFER FORW. LOCKED			A24/2 I	A28/24 O A28/1 I	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 11

MODE: AUT , MAN , SER

DISPLAY	INTERLOCKS LED		OUTPUT LED	REPLAY LED	NOTE
Y76 R - L.TRANSFER BACKW. LOCKED	A26/5 I	S20.1			
	A26/8 I	S23.1			
	A28/21 O	B74.2			
	A28/20 I	B74.1			
	A28/23 O	B75.2			
	A28/22 I	B75.1			
	A26/12 O	B26.1			WENN A26/14 O ADITIONAL
	A26/11 I	B26.2			IF
Y76 R -L.TRANSFER BACKW. N.READY			A24/2 O	A28/24 I A28/1 O	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 12

MODE: AUT , MAN , SER	
DISPLAY	NOTE LED
*ERR: POWER SUPPLY 12V EXT.	A 27/16 = I
*ERR: OVERLOAD SWITCH (SEW.MOT.)	Reset the circuit breaker
*ERR: NO PRESSURE	Check A27 / 12 S 97.1 switch controls input A27/12
*ERR: STEPPING MOTOR DRIVE	A27/22 = I
*ERR: NEEDLE DOES NOT GET TO POS	Check the fuse on the sewing motor control panel
*FEHLER: 900 NICHT IN GRUNDST. *ERR: 900 NOT IN ORG.-POSITION	
*ERR: SEWING MOTOR DOES NOT STOP	
*ERR: NO START OF CARRIAGE (MIS)	A21/13 should go on and off , (on) if sensor B50.1 is covered by flag and (off) if sensor B50.1 is uncovered.

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 13

MODE: AUT , MAN

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	NOTE
SMALL PARTS STACKER NOT READY!				A21/12 I A27/3 I	
*ERR: CAR. MOVEMENT LOCKED / ORG	A25/14 I A25/13 0 A26/15 I A26/24 0 A26/3 0 A26/16 I A26/12 0 A26/11 I A27/2 I A27/6 I A27/7 I A27/9 I A27/10 I	POS.2 MOT.DR. S28.1 B28.3 B28.5 B28.4 B26.1 B26.2 S41.1 B51.2 B51.3 B52.2 B52.3			
*ERR: ORG MOVEMENT LOCKED / ORG	A25/14 I A25/13 0 A26/1 I A27/6 I A27/9 I A27/10 I UND,AND A26/15 I A26/24 0 A26/3 0 A26/16 I ODER,OR A26/16 0 A26/3 I A26/24 I A26/17 I	POS.2 MOT.DR. S1 B51.2 B52.2 B52.3 S28.1 B28.3 B28.5 B28.4 B28.4 B28.5 B28.3 S28.2			LOCATING PIN AT SEWING (template locked in for sewing) LOCATING PIN TRANSPORT ON (template locked in for transfer

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 14

MODE: AUT , MAN

DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	REPLAY LED	MUTE
*ERR: FWD/BACK LOCKED / ORG	A26/15 I	S28.1			
	A26/24 O	B28.3			
	A26/3 O	B28.5			
	A26/16 I	B28.4			
	A26/12 O	B26.1			
	A26/11 I	B26.2			
	A27/2 I	S41.1			
	A27/6 I	B51.2			
	A27/7 I	B51.3			
	A27/9 I	B52.2			
	A27/10 I	B52.3			
*ERR: SEWING LOCKED / ORG	A26/15 I	S28.1			
	A26/24 O	B28.3			
	A26/3 O	B28.5			
	A26/16 I	B28.4			
	A26/12 O	B26.1			
	A26/11 I	B26.2			
	A27/2 I	S41.1			
	A27/6 I	B51.2			
	A27/7 I	B51.3			
	A27/9 I	B52.2			
	A27/10 I	B52.3			

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 15

MODE: AUT , MAN	
DISPLAY	NOTE LED
*ERR: BATERY EMPTY	The red LED of the board M-NX-1 (on) indicates an empty battery.
POWER OFF / EMERGENCY STOP	
STEPPING MOTORS NOT IN POSITION	
THREAD ERROR	
THREAD ERROR / CHANGE BOBBIN	
*ERR: THREAD NOT CUT	
*ERR: NEEDLE NOT IN UPPER POS.	Check the fuse on the sewing motor control panel
SAFETY GUARD	
COVER OF CARRIAGE OPEN !	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 16

MODE: AUT , MAN	
DISPLAY	NOTE LED
CHANGE BOBBIN	
*ERR: NO LABEL AT FOLDER	
*ERR: LABEL MAGAZINE EMPTY	
*ERR: CODING INPUT (ET)	
*ERR: LIMIT SWITCH OF CAR. / ORG	Check all slotted sensors
*ERR: WRONG SEWING DATA / ORG	Check flag setting on the handwheel
*ERR: CAR NOT IN ORG.-POS. / ORG	Check all slotted sensors
*ERR: CAR. MOVE. NOT READY / ORG	Check all slotted sensors
*ERR: THREAD TRIM. NOT READY/ORG	Check synchronizer setting, Check cam timming, Check flat spring for damage. B2 sensor must be covered when the machine stops at final trim position.

To brighten a faded screen adjust the pot on the inside of the input control panel.

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 17

MODE: AUT , MAN	
DISPLAY	**NOTE** **LED**
*ERR: NEEDLE NOT IN UP.POS / ORG	Check motor control panel. Check T1 transformer.
*ERR: RAMP NOT FINISHED / ORG	Check B50.1 sensor at the handwheel. Check supply voltage. Check machine RPM making sure it is 4020. Replace A5, also check X6 plug on A5 board.
*ERR: WRONG POS. AT END OF PROG.	Check flag setting on handwheel that covers B50.1 sensor.
*ERR: NO SUCH PROGRAM	
*ERR: SEWING MOTOR TOO FAST	Check RPM for 4020 and also check voltage between A25/4 and zero volt making sure it is 4.3 volts at 4020 RPM.

K-60-S main contactor not ready	Output A23/1 should be (1)	input A27/11 should be (0)

If a short circuit should occur on the 900 terminal strip, the C31 on the piggy back board might be damaged.
Also the C-4 or rectifier 17 on the main board might get damaged.

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 18

MODE: SER					
DISPLAY	INTERLOCKS LED	SIGNAL	OUTPUT LED	RÜCKMELDUNG REPLAY LED	BEMERKUNG NOTE
*ERR: CARRIAGE MOVEMENT LOCKED	A25/14 I A25/13 0 A26/1 I	POS.2 MOT.DR. S1			

MODE: SER	
DISPLAY	NOTE LED
*ERR: THREAD TRIMMING NOT READY	check synchronizer setting, check knife cam setting. this problem occurs when b2 sensor is NOT covered when the machine stops at finish trim position machine stops after the trimmer returns to home position

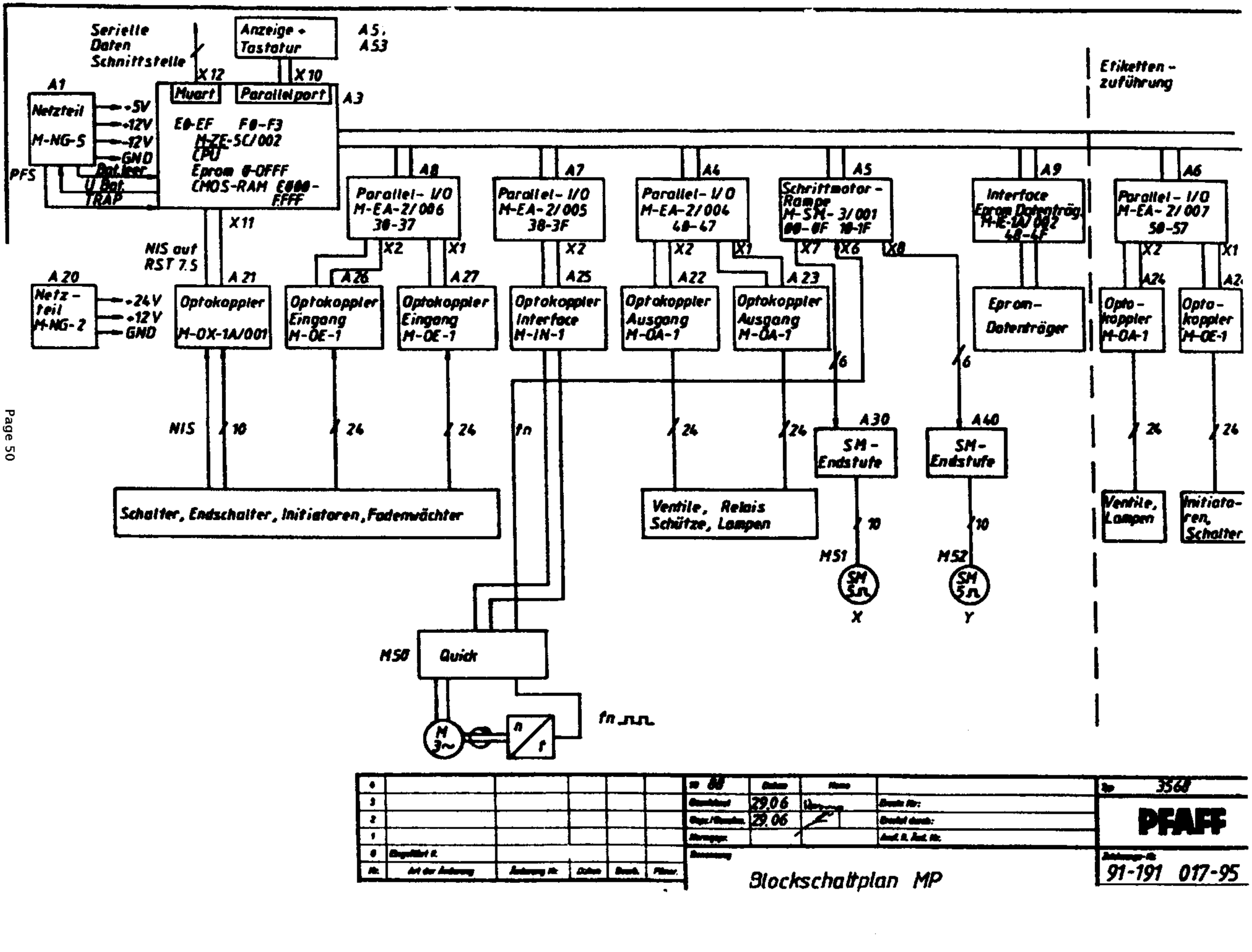
List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 19

MODE: INP	
DISPLAY	NOTE LED
*ERR: MACHINE IS NOT IN ORG-POS.	
*ERR: PROG. CHANGE A-B SELECTED	
*ERR: WRONG INPUT	
*ERR: NO SUCH PROGRAM (NR.)	
*ERR: EXISTING PROGRAM (NR)	
*ERR: LIMITED SPACE IN MEMORY	
*ERR: EMPTY OR WRONG EPROM	
*ERR: TRANSMISSION (WRONG DATA)	
*ERR: TRANSMISSION (MALFUNKTION)	

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 20

MODE: IMP,SER,MAN,AUT	
DISPLAY	NOTE LED
PF - SWITCH OFF MACHINE SHORTLY!	TURN POWER OFF AND ON AGAIN

List of interlocks	Zeichnungs-Nr. 91 - 191 111 - 95	
	Blattzahl: 21	Blatt: 21



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Nr.	Art der Änderung	Änderung Nr.	Datum	Name	Prüfvermerk			

Blockschaltplan MP

Nr. 3568

PFAFF

Zeichnungs-Nr. 91-191 017-95

PIN BOARD A28 *		Inputs PIN BOARD A27		Inputs PIN BOARD A26		Interface PIN BOARD A25		PIN BOARD A24 *		Outputs PIN BOARD A23		Outputs PIN BOARD A22		Inputs PIN BOARD A21	
24	B76.1	24	S115	24	B28.3	24		24	Y75.1	24		24		24	
23	B75.2	23	S114	23	S108B	23		23	Y74	23	H115	23	Y45	23	
22	B75.1	22	SHOK	22	S108A	22		22	Y73	22	H114	22	Y30	22	
21	B74.2	21	KONTIN	21	S107	21	+5V NM	21	Y72	21	SGRD	21	Y5	21	
20	B74.1	20	THERR	20	S39	20	FM.SCHN	20	Y71.2	20	H106	20		20	
19	B73	19	BOBERR	19	S38	19		19	Y71.1	19	H105	19	Y28.2	19	
18	S70.2	18	S113	18	S37	18		18	Y70.2	18	H104	18	Y28.1	18	
17	S70.1	17	S90	17	S28.2	17		17	Y70.1	17	H103	17	Y27.1	17	
16		16	SPGTST	16	B28.4	16		16		16	H102	16	Y27.2	16	S102
15		15	KASTEN	15	S28.1	15	POS.1	15		15	H101	15	Y26.1	15	
14		14	S99	14	S27.1	14	POS.2	14		14	K60	14	Y26.2	14	S101
13		13	S98	13	S27.2	13	MOT.DR.	13		13	K44	13	Y25	13	B50.1(NIS)
12		12	S97	12	B26.1	12		12		12	Y43	12	Y24.1	12	KTS
11		11	S60	11	B26.2	11		11		11	Y42	11	Y24.2	11	ET
10		10	B52.3	10	S24.1	10	FA + PFA	10		10	Y41	10	Y23.1	10	
9		9	B52.2	9	S24.2	9	EXT.DR.	9		9	Y40	9	Y23.2	9	
8		8	B52.1	8	S23.1	8	STOP	8		8		8	K22	8	S112
7		7	B51.3	7	S23.2	7		7		7		7	Y21.1	7	S111
6		6	B51.2	6	S21.1	6	STOP P.1	6		6		6	Y21.2	6	S110
5	S121	5	B51.1	5	S20.1	5	STOP P.2	5		5		5	Y20.1	5	S109
4	S120	4	S50	4	S20.2	4	N = F(U)	4	H120	4		4	Y20.2	4	S106
3	B81	3	S42	3	B28.5	3	-6V NM	3	Y77	3		3	Y3	3	S105
2	S80	2	S41.1	2	B2	2		2	Y76	2	Y11	2	Y2	2	S104
1	B76.2	1	S41.2	1	S1	1		1	Y75.2	1	Y10	1	Y1	1	S103

*nur bei Etikettenzufuehrung
only with label feeder

1/17 2/11 3/11 4/16
1/14 2/13 3/15
2/15 3/16
2/16

4						B 89	Datum	Name	
3						Gezeichnet	20.04.		Ersatz für
2						Gepr./Genehm.			Ersetzt durch
1						Vervielf.			Ausführung
0	Ergänzt lt.					Benennung			
Nr.	Art der Aenderung	Aenderung Nr.	Datum	Name	Ersatz für				

Page 51

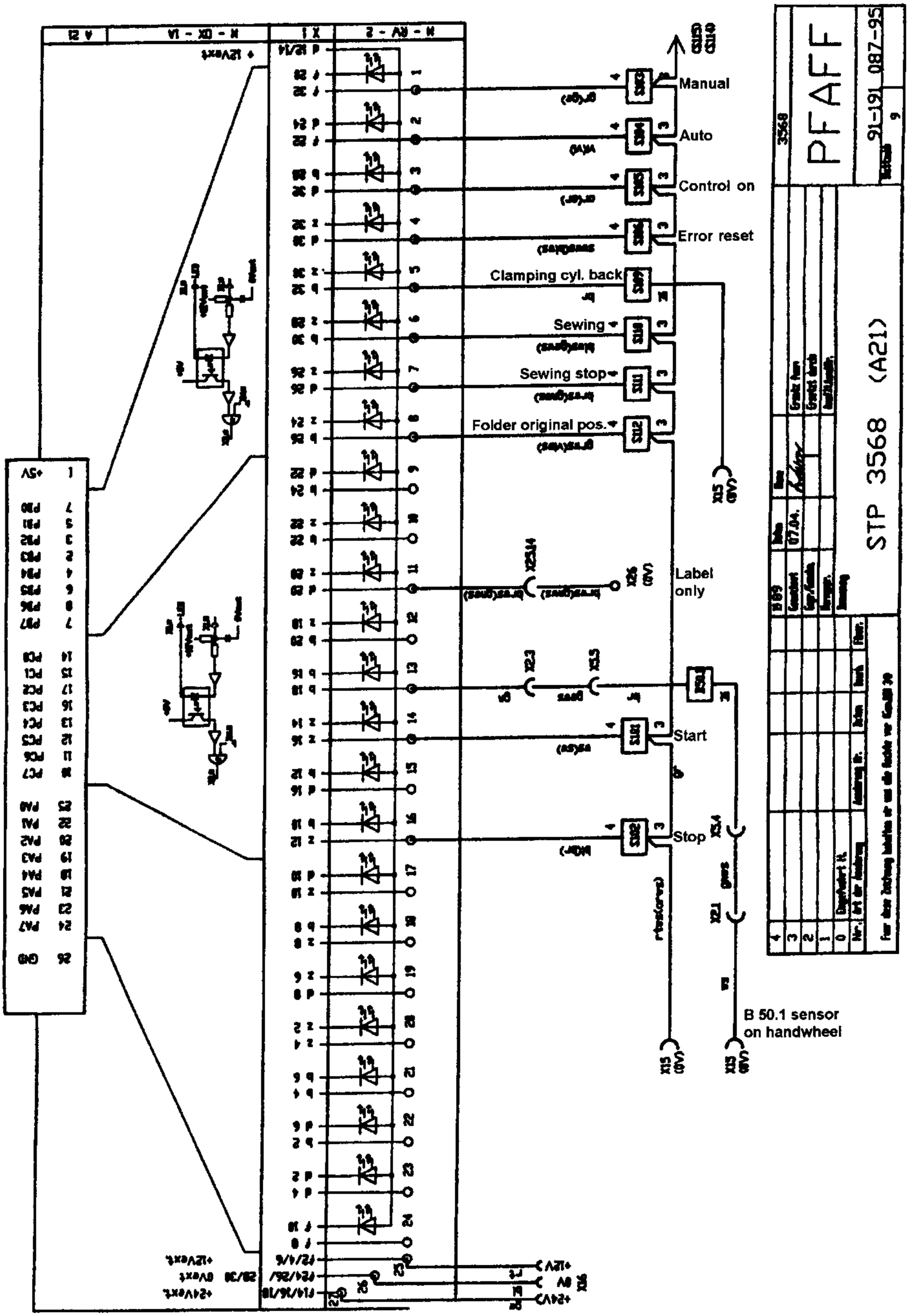
STP 3568

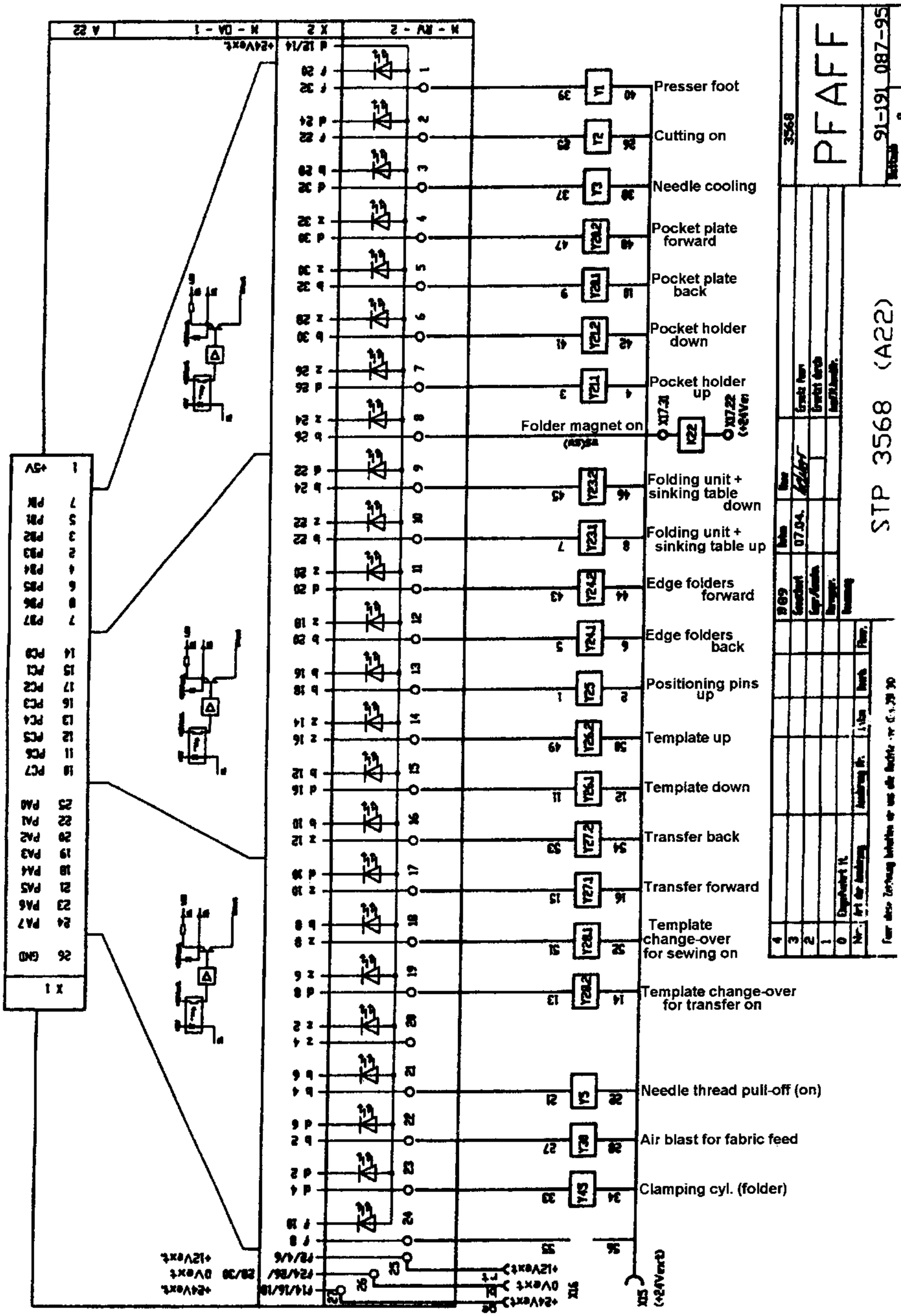
3568

PFAFF

91-191 087-95

Blatt 9


PFAFF
STP 3568
91-191 087-95
(A21)
Manual
Auto
Control on
Error reset
Clamping cyl. back
Sewing
Sewing stop
Folder original pos.
Label only
Start
Stop
B 50.1 sensor on handwheel
+12Vext.
+5V
+24Vext.
0Vext
+24V
0V


Presser foot
Cutting on
Needle cooling
Pocket plate forward
Pocket plate back
Pocket holder down
Pocket holder up
Folder magnet on
Folding unit + sinking table down
Folding unit + sinking table up
Edge folders forward
Edge folders back
Positioning pins up
Template up
Template down
Transfer back
Transfer forward
Template change-over for sewing on
Template change-over for transfer on
Needle thread pull-off (on)
Air blast for fabric feed
Clamping cyl. (folder)
PFAFF
91-191 087-95
STP 3568 (A22)

Zig Zag on

Extra tension on

Take off roller cover off

Puller down

Stacker forward

Air blast stacker

Take off roller on

Main contactor

Start

Stop

Manual

Auto

Control on

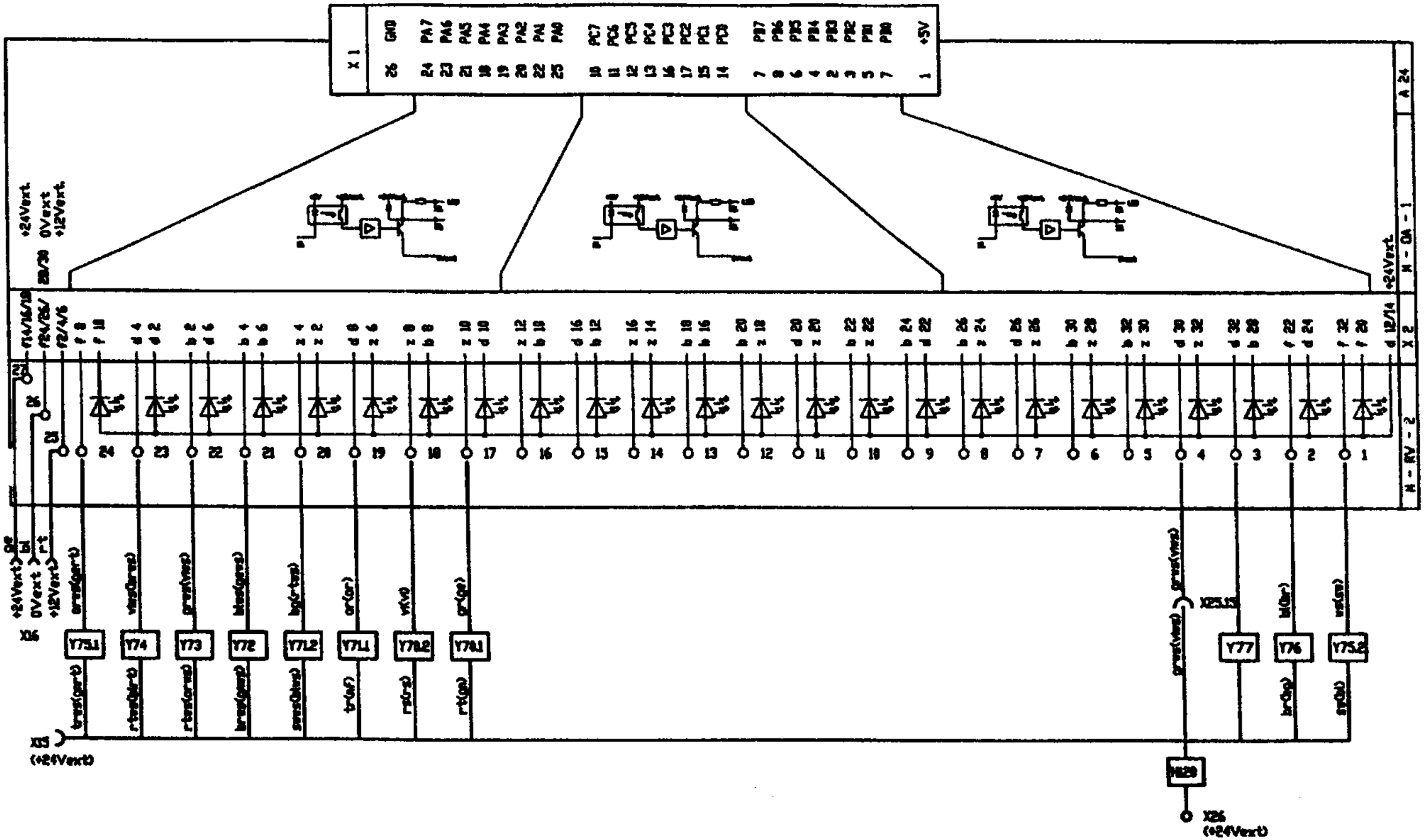
Error reset

Program A

Program B

PFAFF

STP 3568 (A23)



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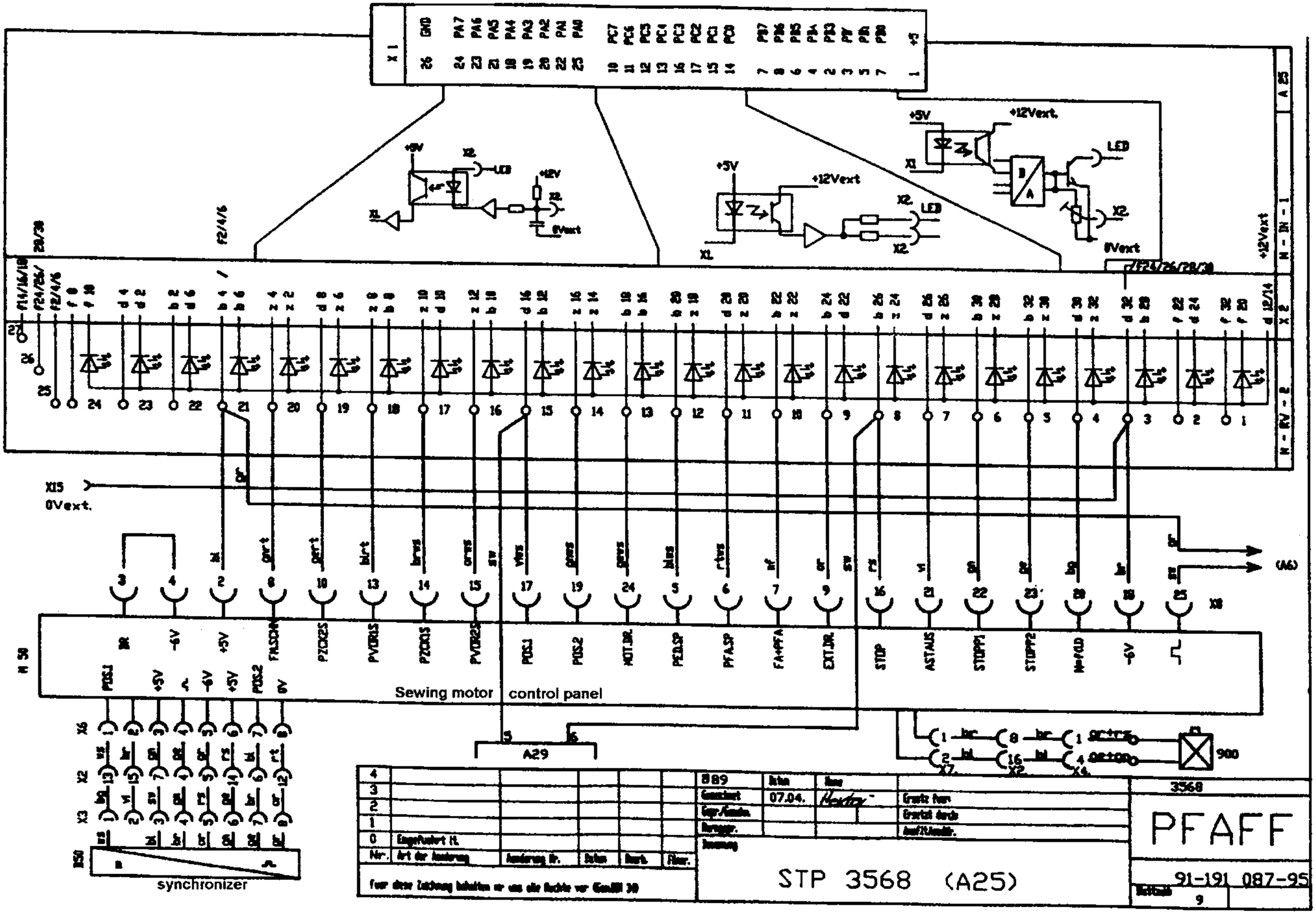
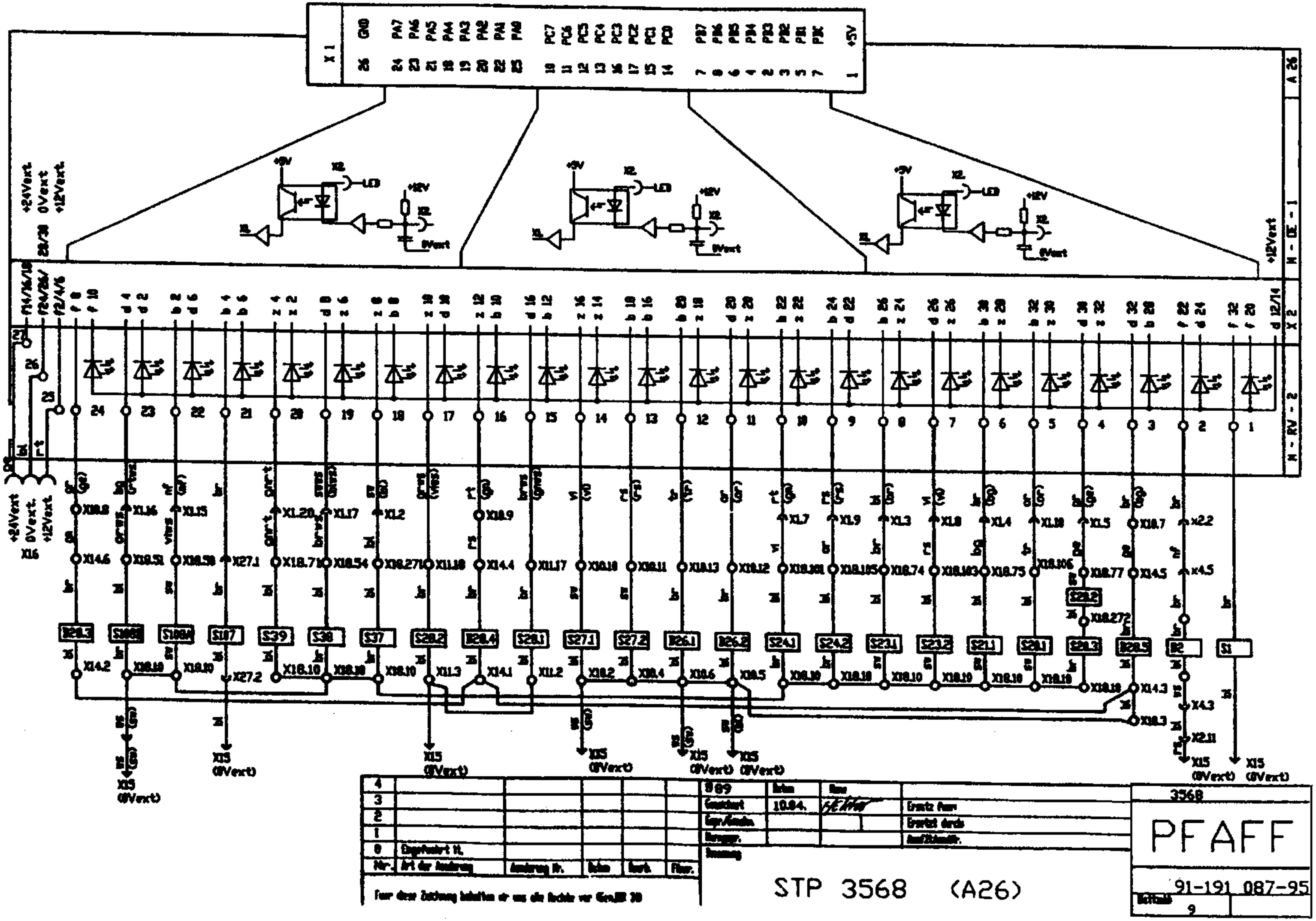
2						Ers./Ersatz			
1						Ersetzt			
0	Eingeführt N.					Benennung			
Nr.	Art der Änderung	Änderung Nr.	Datum	Name	Norm.	STP 3568 (A24)			91-191 087-95
Form dieser Zeichnung behalten wir uns alle Rechte vor Gemäß ISO									Blatt 9


X1
GND PA7 PA6 PA5 PA4 PA3 PA2 PA1 PA0 PC7 PC6 PC5 PC4 PC3 PC2 PC1 PC0 PB7 PB6 PB5 PB4 PB3 PB2 PB1 PB0 +5
26 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
+5V
X2
LED
+12V
X1
0Vext
+12Vext
+12Vext.
X2.
0Vext
/F24/26/28/30
A 25
N - IN - 1
X 2
N - BV - 2
+12Vext
F11/16/18/
F24/25/
F12/4/6
28/30
F2/4/6
X15
0Vext.
br
(A6)
X8
3 4 2 6 10 13 14 15 17 19 24 5 6 7 9 16 21 22 23 20 18 25
ws br gn/ge gn/ge bl/rt br/ws gn/ws gn/rt vi gr/ge gn/bl gn/rt ge/ro ro/gn sw rt vi gn ge bl br br
BR +5V +5V FASDR PZCR2S PVDR1S PZCR1S PVDR2S PDS1 PDS2 MOT.BR. PEDI.SP PFA.SP FA+PFA EXT.BR. STEP ASTAUS STEPP1 STEPP2 M+FLD +5V
N 50
PDS1 +5V +5V +5V PDS2 0V
Sewing motor
control panel
X6
X2
X3
150
synchronizer
A29
5 6
900
X7.
X2
X4.
4
3
2
1
0
Nr. Art der Änderung Änderung Nr. Datum Name Norm.
Eingeführt lt.
889 Datum Name
Gezeichnet 07.04.
Gepr./Kontr.
Normgepr.
Benennung
STP 3568 (A25)
3568
PFAFF
91-191 087-95
Blatt 9


X1
GND PA7 PA6 PA5 PA4 PA3 PA2 PA1 PA0 PC7 PC6 PC5 PC4 PC3 PC2 PC1 PC0 PB7 PB6 PB5 PB4 PB3 PB2 PB1 PB0 +5V
26 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
+24Vext
0Vext
+12Vext
28/30
+12Vext
A 26
M - DE - 1
X2
M - RV - 2
X16
X14.6
X18.51
X18.58
X27.1
X18.71
X18.54
X18.270
X11.18
X14.4
X11.17
X10.18
X18.11
X18.13
X18.12
X18.74
X18.75
X18.77
X14.5
X4.5
X18.272
X14.2
X18.10
X27.2
X18.10
X18.10
X11.3
X14.1
X11.2
X18.2
X18.4
X18.6
X18.5
X18.10
X18.10
X18.10
X18.10
X18.10
X14.3
X18.3
X4.3
X2.11
X15
(0Vext)
S107
S39
S38
S37
S28.2
S28.4
S28.1
S27.1
S27.2
S26.1
S26.2
S24.1
S24.2
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S28.1
S28.3
S28.5
R2
S1
3568
PFAFF
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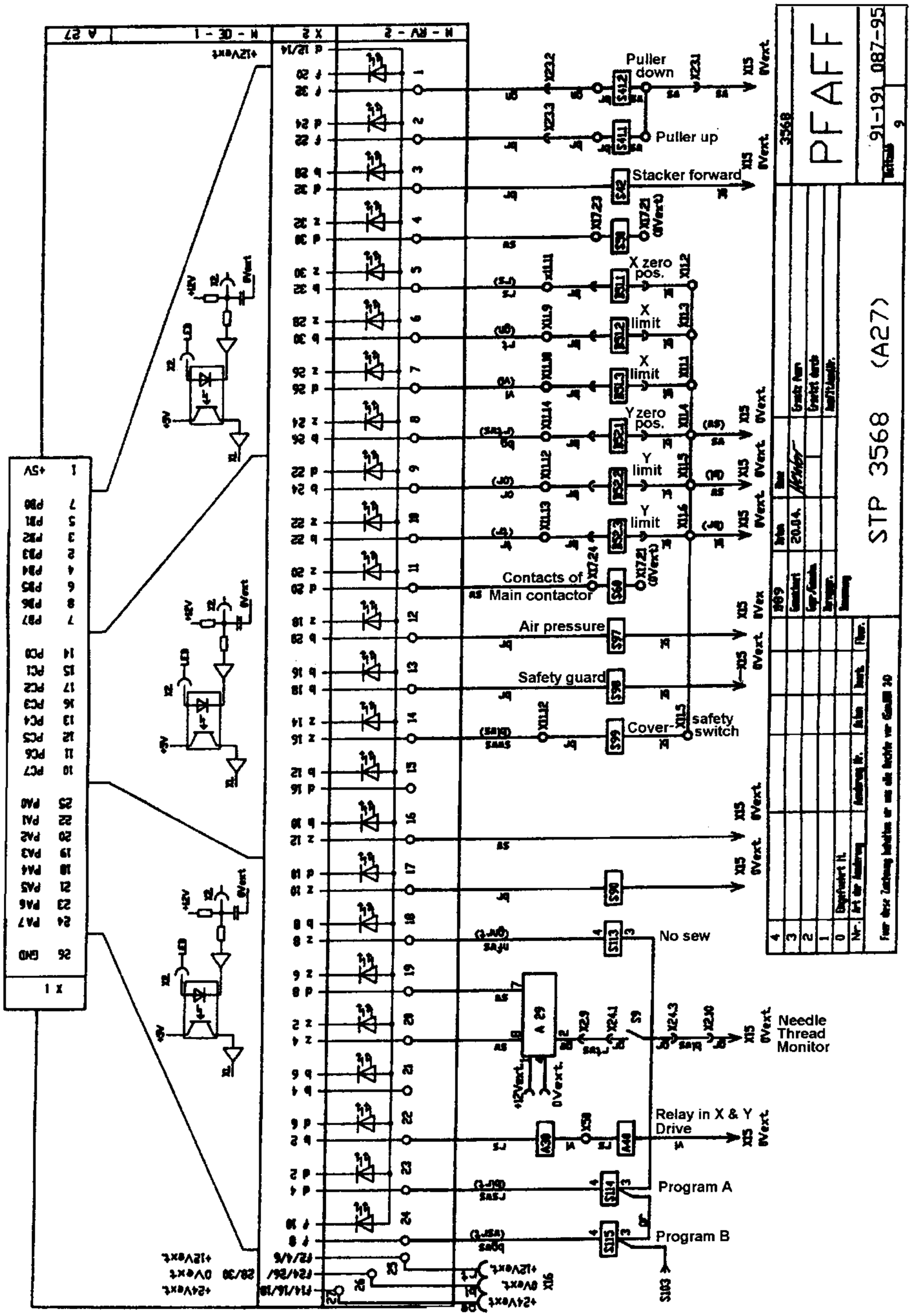
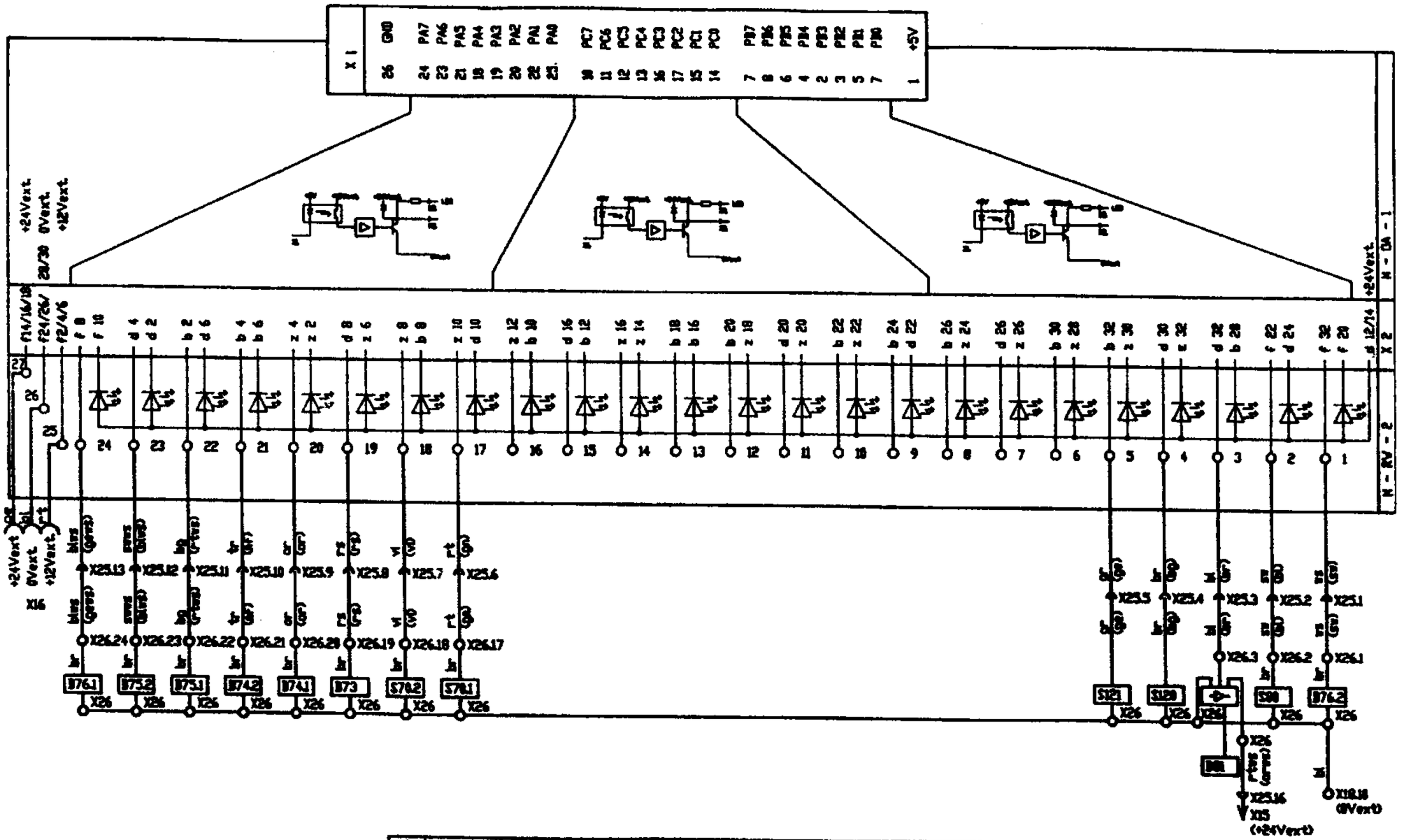
91-191 087-95
Blatt 9


PFAFF
STP 3568 (A27)
91-191 087-95
Puller down
Puller up
Stacker forward
X zero pos.
X limit
X limit
Y zero pos.
Y limit
Y limit
Contacts of Main contactor
Air pressure
Safety guard
Cover-safety switch
No sew
Needle Thread Monitor
Relay in X & Y Drive
Program A
Program B



4						BBS	Schm	Name	
3						Erstellt	10.04.		Erstellt Form
2						Expr./Kontr.			Erstellt Archiv
1						Übertrager.			Ausf./Ausdr.
0	Digitalisiert lt.					Benennung			
Nr.	Art der Änderung	Änderung Nr.	Schm	Name	Name				

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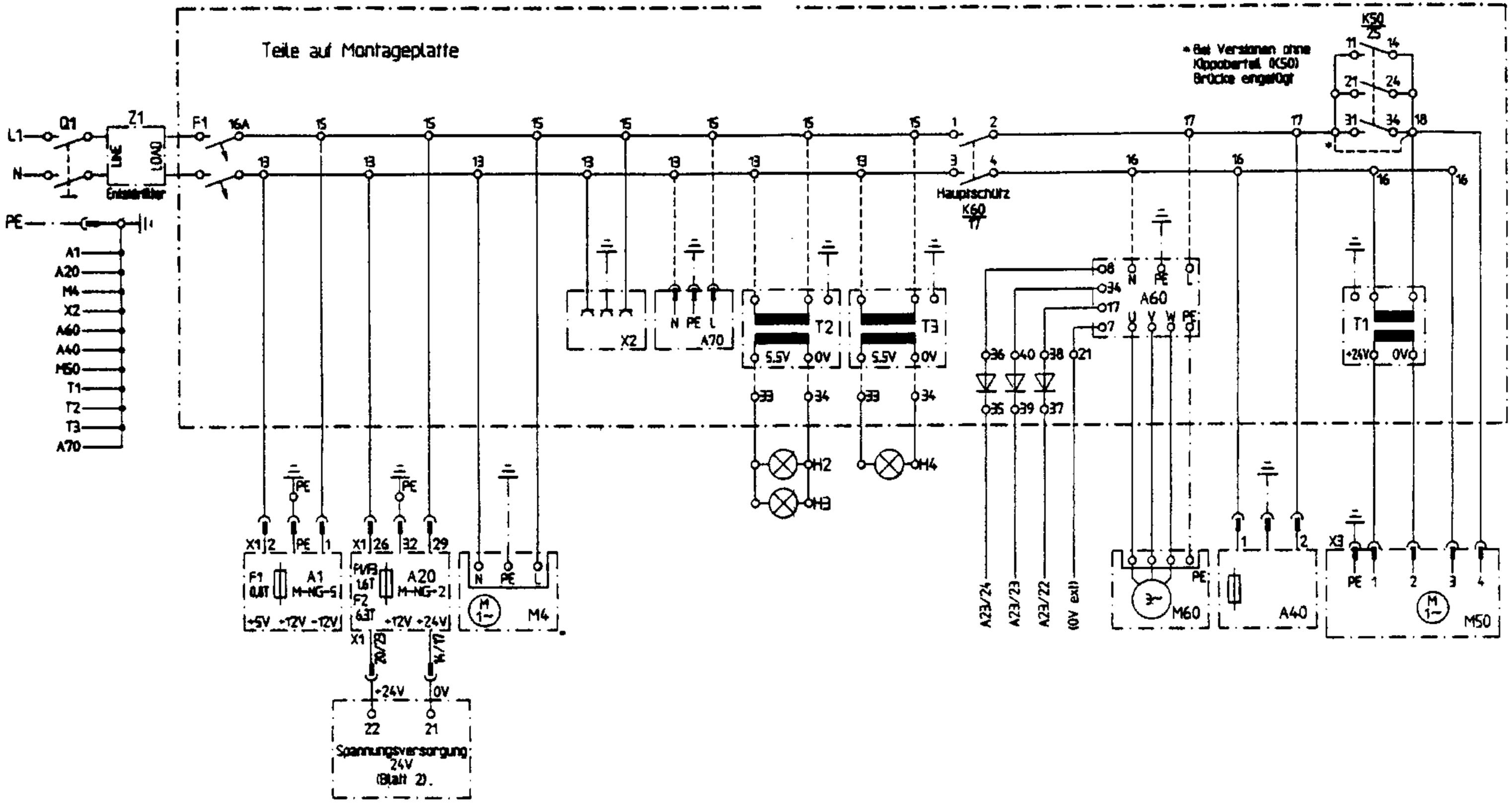
STP 3568 (A28)

3568

PFAFF

91-191 087-95

Blatt/Bl. 9



1	2	Netzteil +5V +12V 3	Netzteil 24V 4	Lüfter 5	Service-steckdose 6	Etiketten-zuführung (Option) 7	8	Trafo für Lichtmarkier-sender (Option) 9	10	Umrichter (Option) / Transportmotor 11	SM-Endstufen 2 Achsen 12	Trafo 24V 13	Synchro-motor 14

4					
3					
2					
1					
0	Eingeführt U.				
Nr.	Art der	arung	Änderung Nr.	Datum	Bearb.
For this					CAD

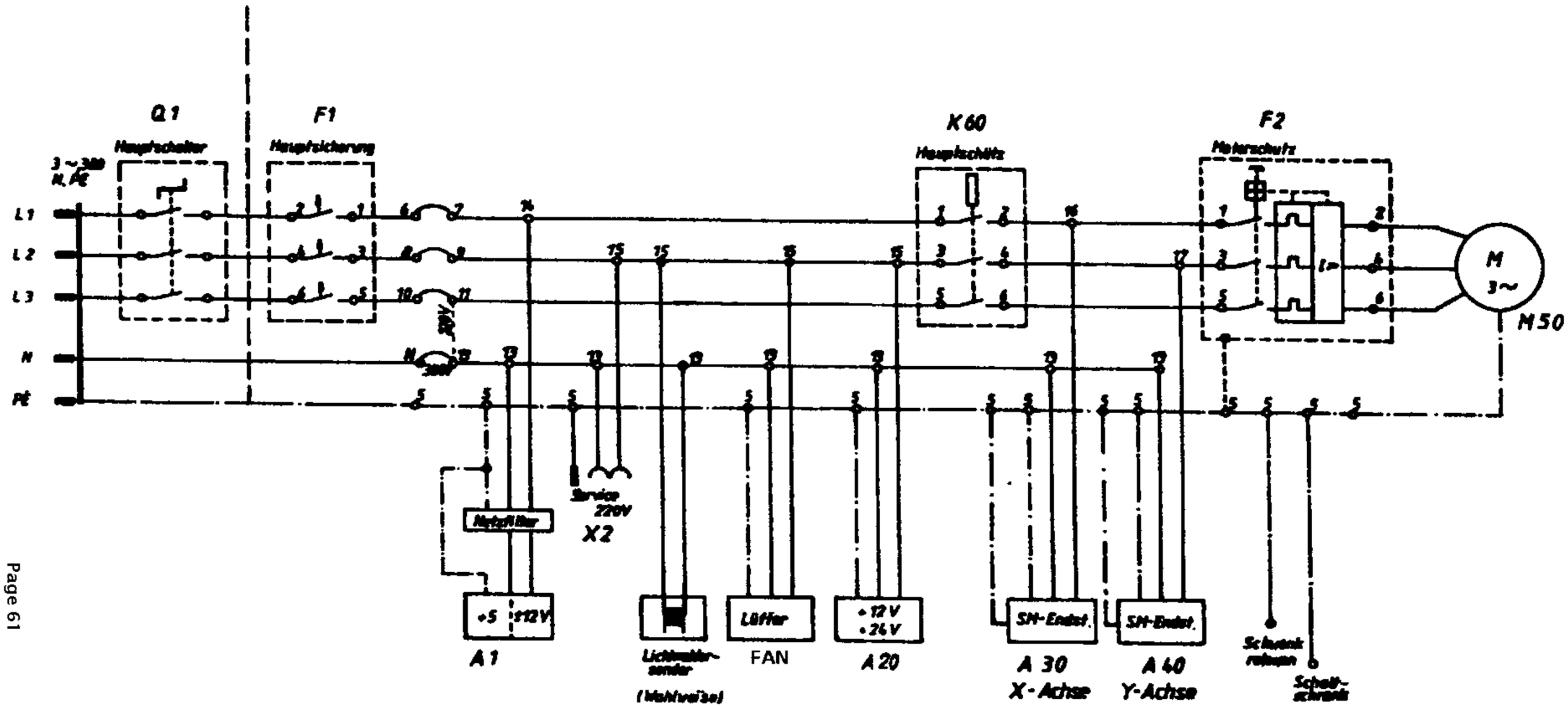
19 93	Datum	Name	
Gezeichnet	16.02.		Ersatz für:
Gepr./Genehm.	16.02.		Ersetzt durch:
Normgepr.			Ausf. lt. Änd.-Nr.
Benennung	Netzversorgung		

Typ 3568-2/12

PFAFF

Zeichnungs-Nr. 91-191 294-95

Blattzahl 2 | Blatt 1



4						87	Datum	Name	Typ 3568 zu CPL
3						Gezeichnet	24.06		
2						Dipl./Geprüft			PFAFF
1						Normgeprüft			
0	Eingeführt d.					Benennung			Zeichnungs-Nr.
Nr.	Art der Änderung	Änderung Nr.	Datum	Name	Visum	STP Netzversorgung KL 3568			91-190 829-95

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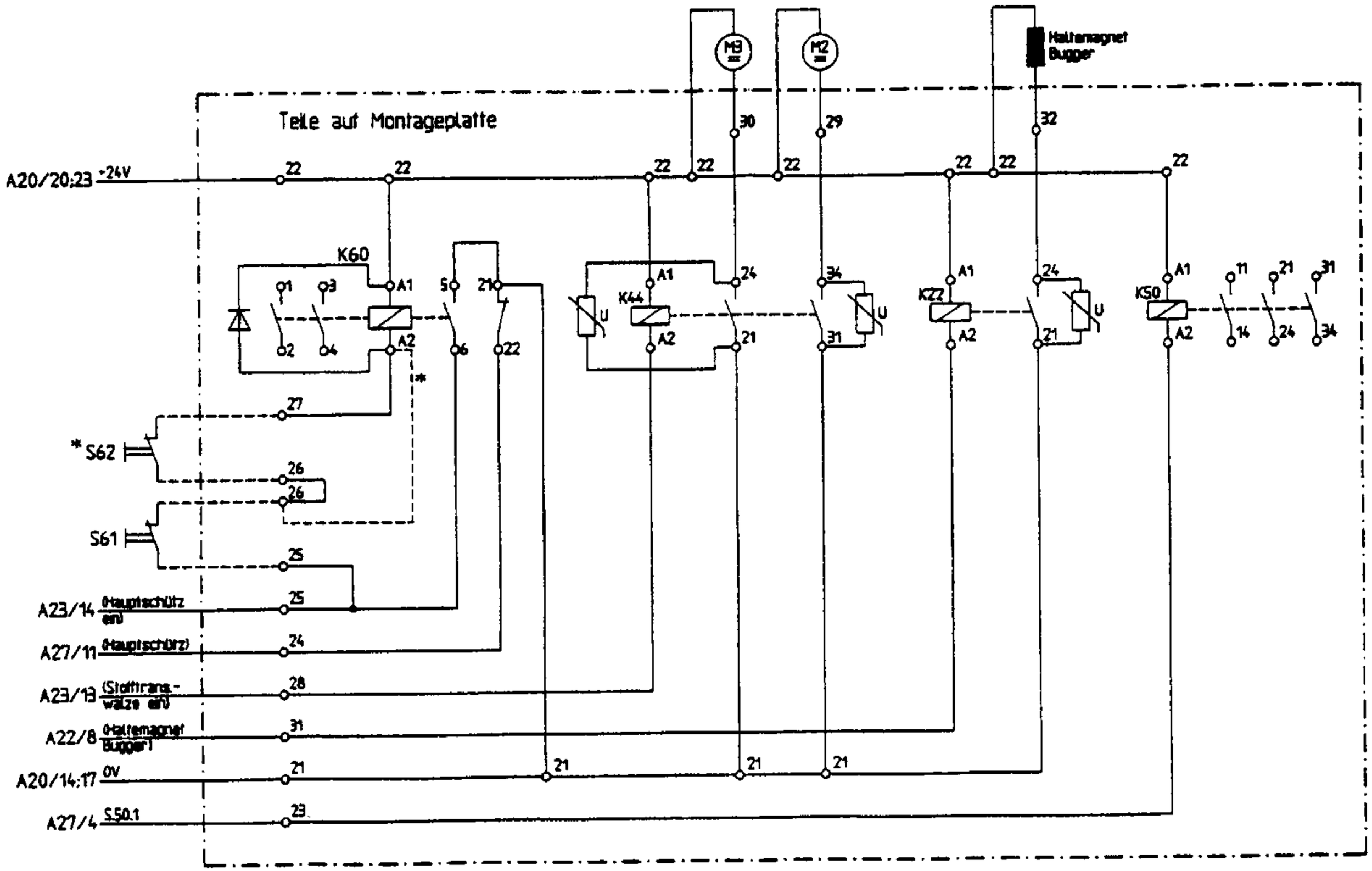


* S62 entfällt bei Version -2/12
Verbindung von K60.A2 nach X17.27)
in K60.A2 nach X17.26) ändern.

Nr.	Änderung	Änderung Nr.	Datum	Bearb.
4				
3				
2				
1				
0	Eingestellt			

Für diese Zeichnung behalten wir uns alle Rechte vor. DIN 34.

CAD

19 93	Datum	Name	
Gezeichnet	17.02.		Ersetzt für:
Gepr./Genehm.	17.02.		Ersetzt durch:
Herausgepr.			Ausst. u. Änd.-Nr.

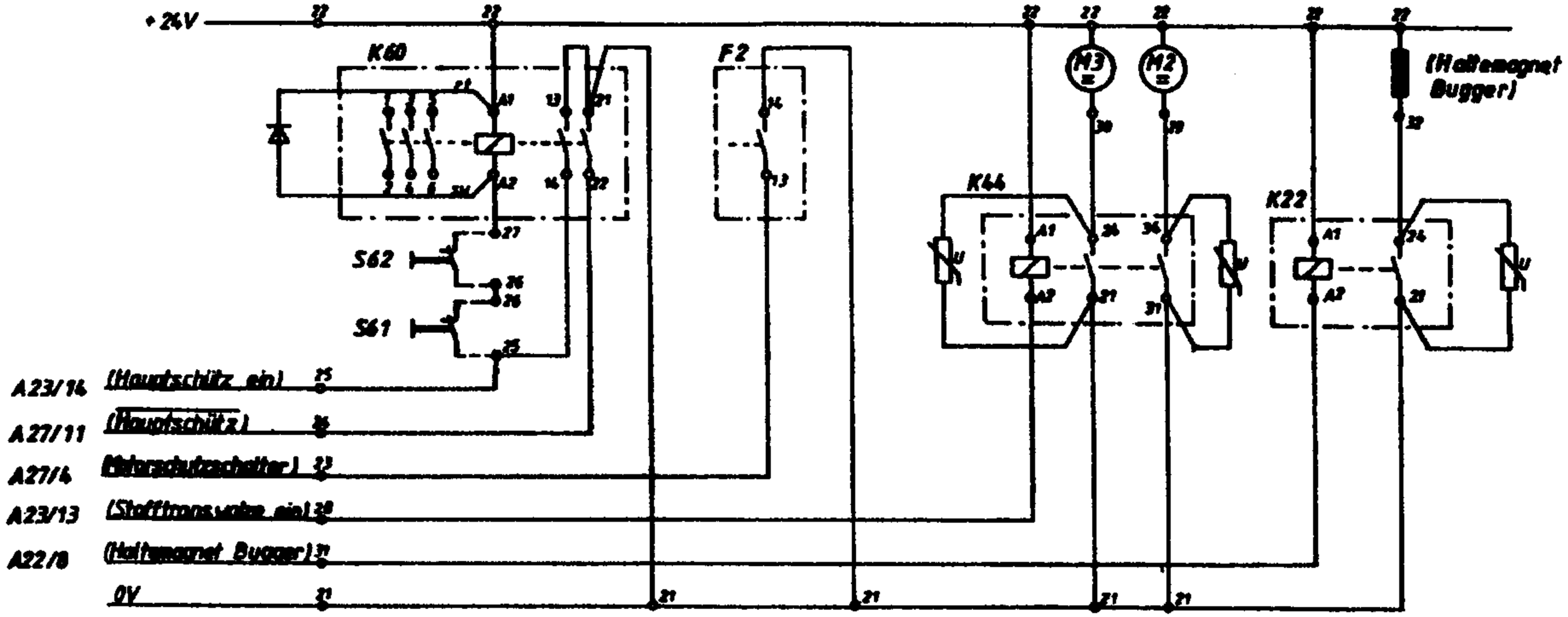
Benennung: S 24V Versorgung

Typ 3568-2/12

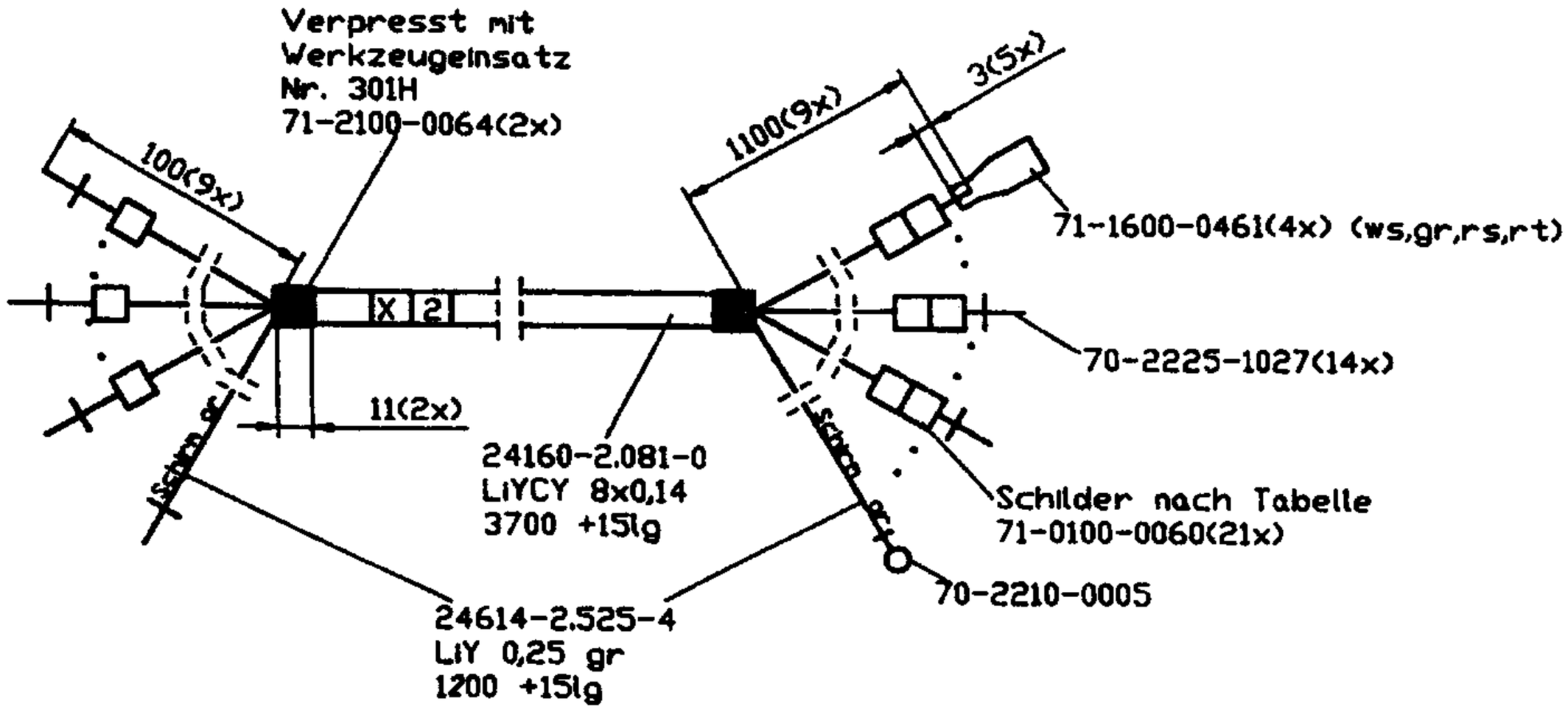
PFAFF

Zeichnungs-Nr. 91-191 294-95

Blattzahl 2 | Blatt 2



		4							
		3							
		2							
		1							
		0	Ersatz f.						
Prüfung	Anmeldg.	Nr.	Ersatz für:	Änderung Nr.	Datum	Name	Norm-Nr.	Gezeichnet am	Blatt 9
Allgemeintoleranzen:								Typ: 3568	
Bearb.	Datum	Name	Oberflächen: DIN ISO 1302		Werkstoff:			PFAFF	
Gepr.	17.11.87								
Norm	17.11.87		Werkstoffnummern: DIN 6784		Hergestellt aus:			Ersatz für:	
Freigabe								Ersatz durch:	
Änderung	17.11.							Anzahl d. Anschl.:	
Ersatz für:	Benennung							Zeichnungs-Nr.	
—	STP 24V Verdrahtung KL 3568							91-190 871-X5	



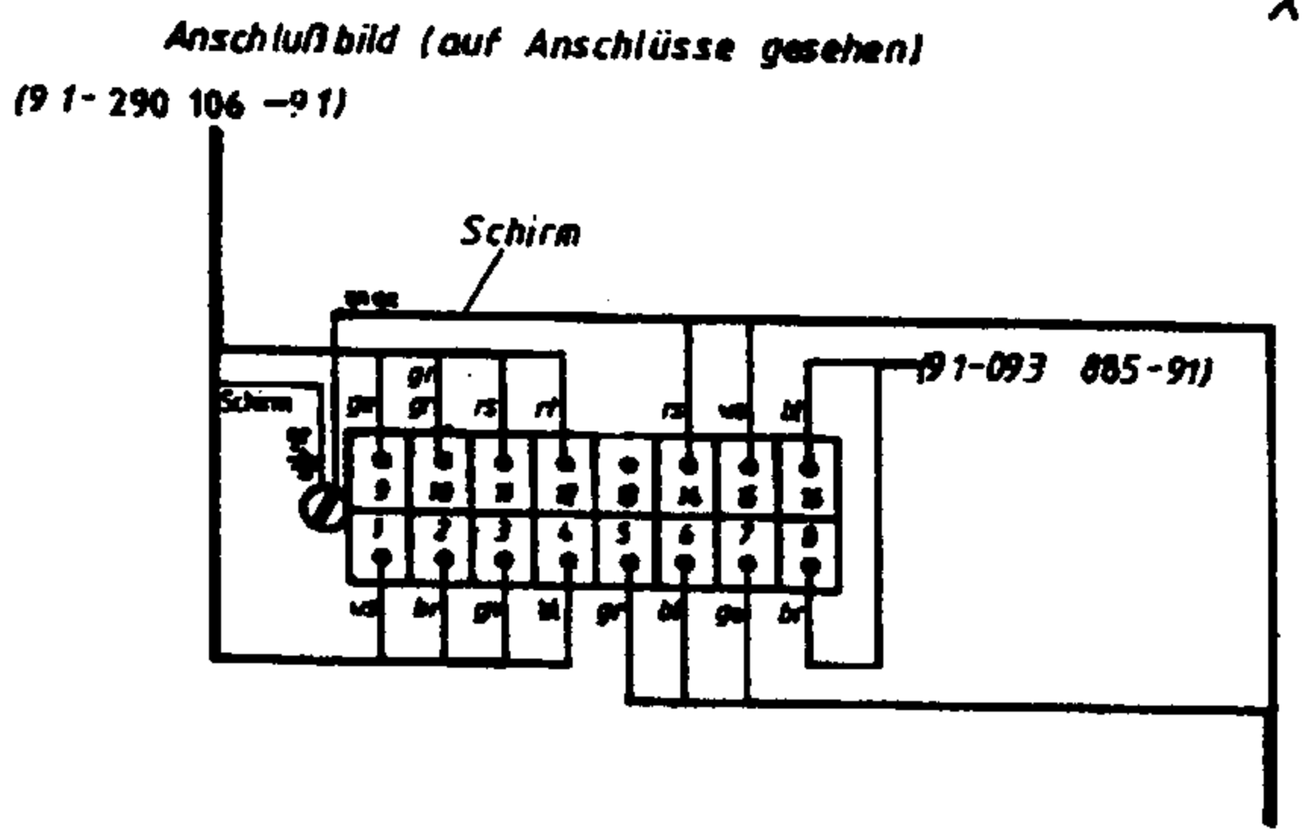
Farbe	Nr.	Anschlagart Flachst.	Aderendh.
ws	0V	X	
br	26/2		X
gn	21/13		X
ge	29/2		X
gr	0V	X	
rs	0V	X	
bl	29/3		X
rt	12V	X	

Farbe	Nr.
ws	1
br	2
gn	3
ge	9
gr	10
rs	11
bl	4
rt	12

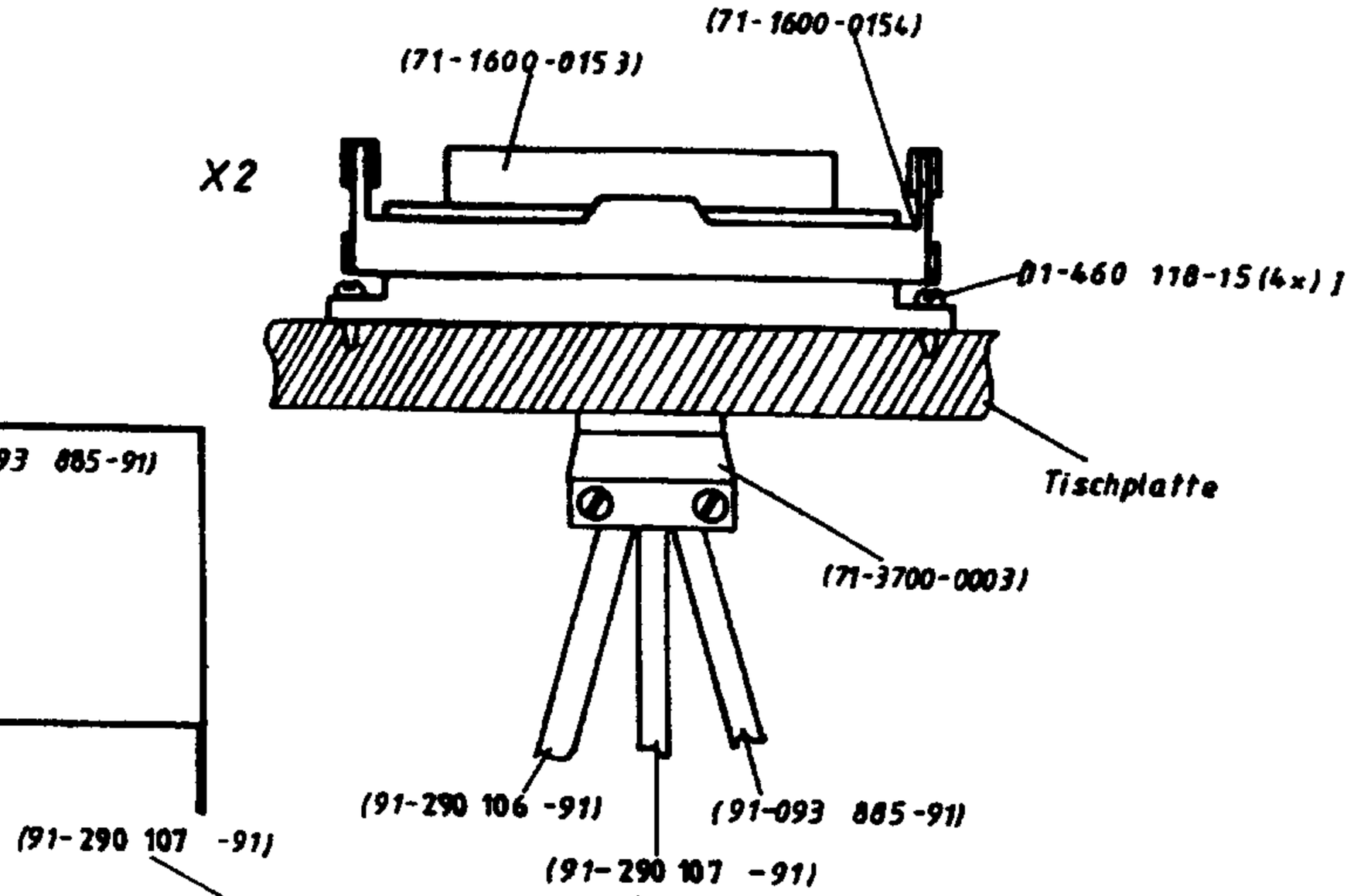
		4					Farbkenn.	9
		3						
		2						
		1						
		0	Eingef. lt.					
Passmass	Abmasse	Nr.	Zahl kennt vor	Aenderung Nr.	Datum	Bearb.	Oberflächenzustand	Sch.-Bl. 1
Allgemeintoleranzen +10%							Typ 3568	
19 89	Datum	Name	Oberflächen					
Gezeichnet	21.08.			Werkstoff			PFAFF	
Geprüft			Werkstuchkanten:					
Fkt. gen.				Hergestellt aus			Ersatz für: 91-093 880-91	
Normgepr.							Ersetzt durch	
Genehmigt			ISO 6784				Anf. lt. Anal-Nr.	
Massstab 1:1			Benennung Leitung				Zeichnungs-Nr. 91-290 106-X1	
Schutzvermerke nach DIN 34 beachten/Copyright reserved						CAD	Blattzahl	Blatt

ersetzt 91-093 880-91

Anschlußbild (auf Anschlüsse gesehen)



X2

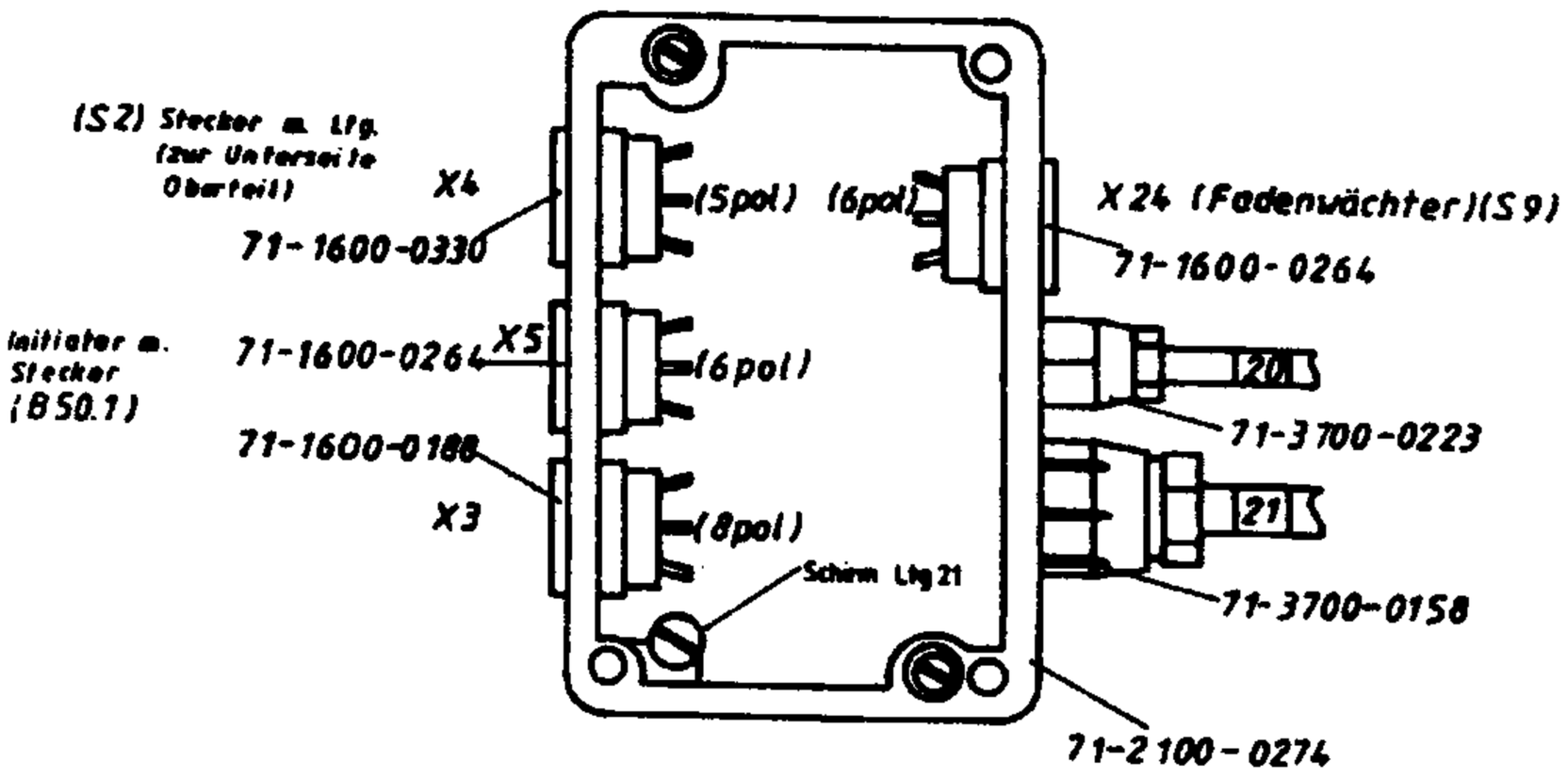


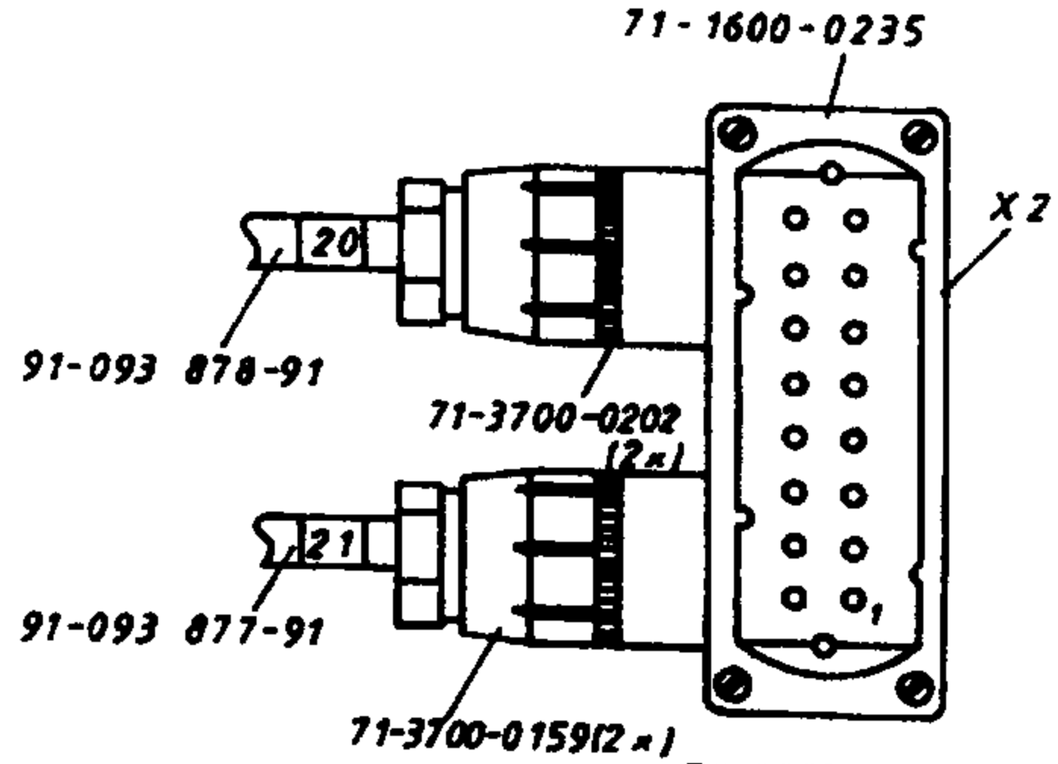
(nur wenn Unterfadensensor angebaut)

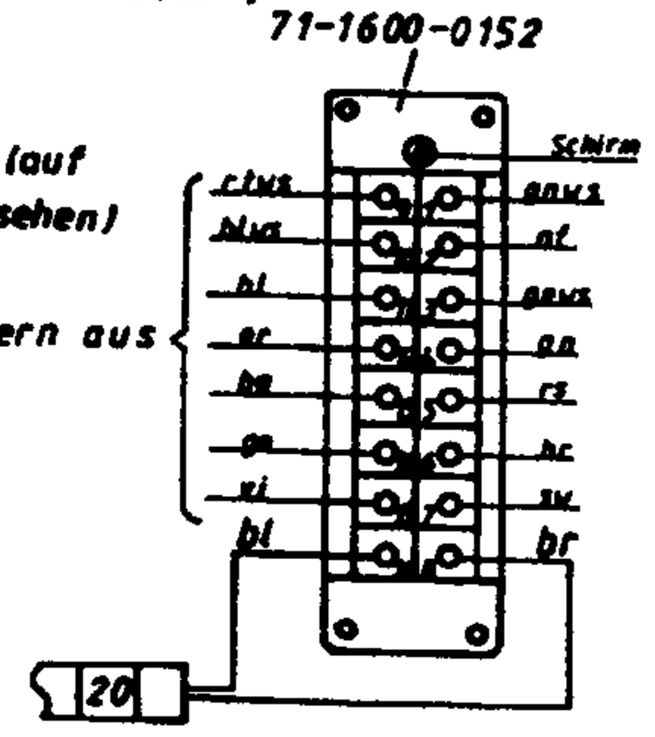
		4						
		3						
		2						
		1						
		0	Ersatz-Nr.					Farbkomb. 9
Format	Anmerkg.	Nr.	Zahl kommt vor	Änderung Nr.	Datum	Bearb.	Prüf-Nr.	Oberflächenausführung / Schl.-zahl x
Allgemeintoleranzen:								Typ: 3568
19 86	Datum	Name	Oberflächen: DIN ISO 1302		Werkstoff: s. Einzelteile			PFAFF
Gezeichnet	21.10.		Wärmebehandlungen: DIN 6784		Hergestellt aus:			Ersatz für: 91-096 033-95
Geprüft	3.11.							Ersetzt durch:
Fkt. gepr.								Ausf. u. Änd.-Nr. 29.8.89
Normgepr.								Zeichnungs-Nr. 91-290 105 -X5
Genehmigt	3.11.							
Maßstab 1:1	Benennung: Montageplan (Verbindung z. Oberteil)							

X4	Farbe	Leitung
4	bl,Schirm	20
1	br	20
3	bl	21
5	rt	21
2	Schirm	21

X24	Farbe	Leitung
1	rtws	21
3	blws	21
2	gn	21



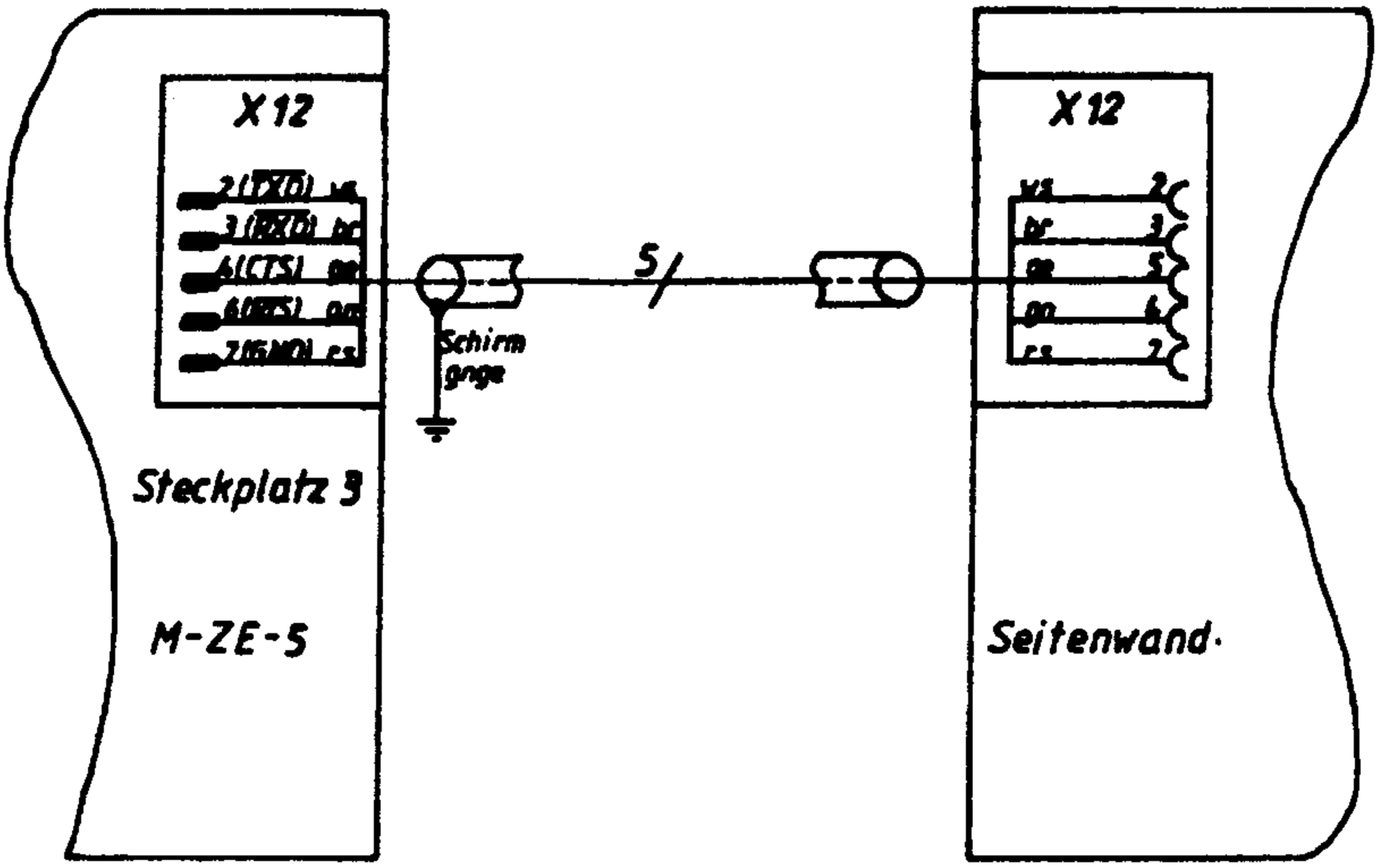




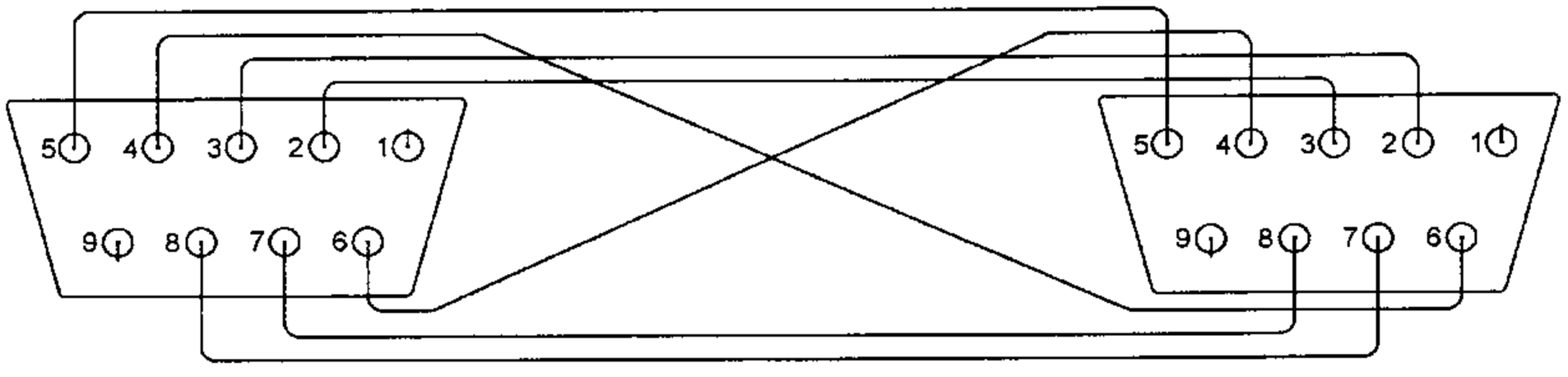
X3	Farbe	Leitung
1	vi	21
2	—	21
3	—	21
4	sw	21
5	rs	21
6	gn	21
7	br	21
8	—	21

X5	Farbe	Leitung
4	gnws	21
5	gnws	21
1	ge	21

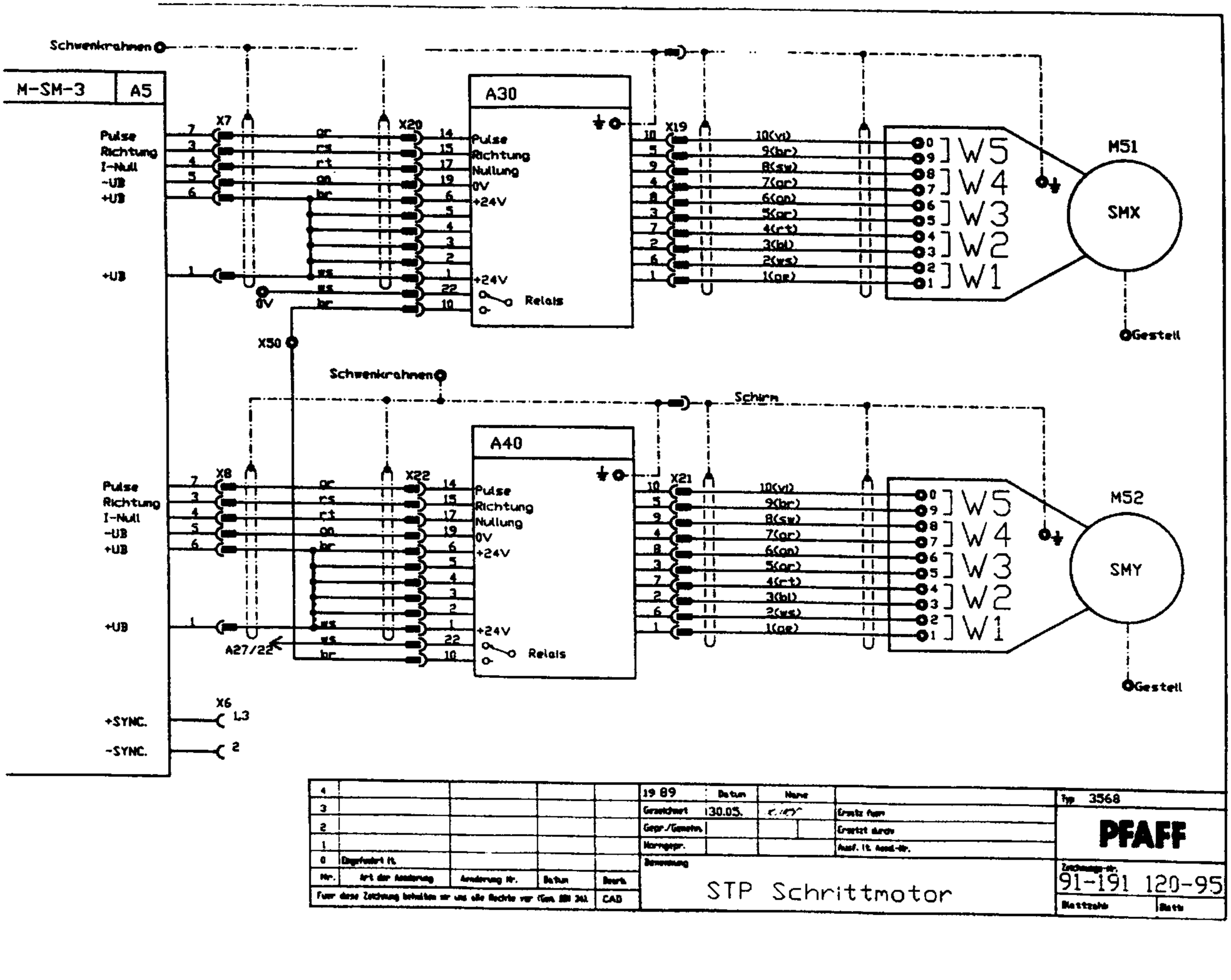
			4						
			3						
			2						
			1						
			0	Ersatz f.					
Fabrikat	Abmaße		Nr.	Zuletzt benutzt von	Änderung Nr.	Datum	Name	Pfleg. Nr.	Farbkomb. 9
Allgemeintoleranzen:									
ISO 8	Datum	Name	Oberflächen: DIN ISO 1302		Werkstoff: s. Einzelteile				Typ: 3568
Gezeichnet	04.09								PFAFF
Geprüft	30.10		Werkstückkanten DIN 6784		Hergestellt aus:				Ersatz für: 91-093 876-X1
Pkt. gepr.									Ersatz durch:
Normgepr.									Ausf. lt. Änd.-Nr. 29.8.89
Genehmigt	30.10								Zeichnungs-Nr.
Maßstab 1:1	Benennung: orteiler m. Ltg.								91-290 104 -X1



		4							
		3							
		2							
		1							
		0	Eingef. lt.					———	9
Paßmaß	Abmaße	Nr.	Zahl kommt vor	Änderung Nr.	Datum	Bearb.	Pfleg-Nr.	Oberflächenzustand	Schl-zahl x
Allgemeintoleranzen:								Typ: 3568	
19 86	Datum	Name	Oberflächen: DIN ISO 1302		Werkstoff:			PFAFF	
Gezeichnet	17.11.								
Geprüft	17.11.		Werkstoffkennzeichen: DIN 6784						
Fkt. gepr.					Hergestellt aus:			Ersatz für:	
Normgepr.								Ersetzt durch:	
Genehmigt	17.11							Ausf. lt. Änd.-Nr.	
Maßstab	Benennung							Zeichnungs-Nr.	
	STP Anschluß serielle Schnittstelle							91-190 873-X5	



Wireing connections for the interface cable
used on the Pfaff System 3000 program unit



4					19 89	Datum	Name	
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2					Gepr./Genehm.			Ersetzt durch
1					Normgepr.			Ausf. lt. Ausst.-Nr.
0	Ursprungsart lt.				Bemerkung			
Nr.	Art der Änderung	Änderung Nr.	Datum	Bearb.	STP Schrittmotor			
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Typ	3568
	PFAFF
Zeichnungs-Nr.	91-191 120-95
Blattzahl	Blatt

Part	Used for
A0	Solid state circuit board
A1	Solid state circuit, power pack
A3	Solid state circuit board
A4	Solid state circuit board parallel-I/O
A5	Solid state circuit board stepping motor ramp
A6	Solid state circuit board parallel-I/O
A7	
A8	
A9	Solid state circuit board interface Eprom data carrier

Part	Used for
A20	Solid state circuit, power pack
A21	Solid state circuit board optocoupler inlets-, outlets
A22	Solid state circuit board optocoupler outlets
A23	
A24	
A25	Solid state circuit board optocoupler interface sewing motor
A26	Solid state circuit board optocoupler inlets
A27	
A28	
A29	Thread monitor
A30	Stepmotor - final stage

Part	Used for
A40	Stepmotor - final stage
A51	Solid state circuit board interface keyboard display
A52	Solid state circuit board keypad
A53	Solid state circuit board, indicator unit
B2	-900 not in basic position
B26.1	Template down
B26.2	Tenplate up

Part	Used for
B28.3	Locating pin sewing (left)
B28.4	Locating pin transport
B28.5	Locating pin sewing (right)
B50	Synchronizer
B50.1	Needle into fabric
B51.1	Zero position
B51.2	End position

Part	Used for
B51.3	End position
B52.1	Zero position
B52.2	End position
B52.3	End position
B73	Label Folder rear
B74.1	Label transfer top
B74.2	Label transfer bottom

Part	Used for
B75.1	Label transfer swing out
B75.2	Label transfer swing in
B76.1	Label transfer front
B76.2	Label transfer rear
B81	Label at folding unit
BOBBER	Bobbin thread disturbance
ET	Label feeder installed

Part	Used for
EXTDR	External speed on
F1	Main fuse
F2	Motor overload switch - sewing motor
F3	Power pack
F4	Power pack
F5	Sewing motor
F6	Stepmotor - final stage

Part	Used for
F7	Stepmotor - final stage
FA+PFA	Autom. presser foot "on"
FMSCHN	Cutting finished
H101	Lamp "start"
H102	Lamp "stop"
H103	Lamp- "manual"
H104	Lamp "automatic"

Part	Used for
H105	Lamp "control on"
H106	Lamp "error reset"
H114	Lamp "program A"
H115	Lamp "progrom B"
H120	Lamp "label at folder"
K22	Retaining solenoid, folder
K44	Fabric feed roller on

Part	Used for
K60	Main contactor on
KASTEN	Enable cold start
KONTIN	Enable continuous
KST	Small-parts stacker, fitted
M2	Stacker roller
M3	Puller feed motor
M50	Sewing motor
M51	Stepping motor, X-axis

Part	Used for
M52	Stepping motor, Y-axis
MOTDR	Motor turns
NM	Sewing motor
N=F(U)	Speed control, sewing motor
POS1	Position 1 attained
POS2	Position 2 attained
Q1	Master switch

Part	Used for
S1	Presser foot top
S9	Needle thread monitor
S20.1	Pocket plate back
S20.2	Pocket plate forward
S20.3	Pocket plate up (pneumatic switch in series with S20.2 switch
S21.1	Pocket holder up
S23.1	Folding unit up
S23.2	Folding unit down

Part	Used for
S24.1	Edge folders back
S24.2	Edge folders forward
S27.1	Transfer forward
S27.2	Transfer back
S28.1	Indexing sewing on
S28.2	Indexing sewing off
S37	Plate up

Part	Used for
S38	Pocket plate turned in
S39	Folding unit w/static pocket plate
S41.1	Puller up
S41.2	Puller down
S42	Stacker forward
S50	Sewing motor on
S60	Main contactor off

Part	Used for
S61	Emergency stop
S62	Emergency stop
S70.1	Label feeder top
S70.2	Label feeder bottom
S80	Label magazine empty
S90	Safety control disable
S97	Pressure monitor

Part	Used for
S98	Safety guard rear
S99	Carriage cover closed
S101	Key "start"
S102	Key "stop"
S103	Key "manual"
S104	Key "automatic"
S105	Key "control on"

Part	Used for
S106	Key "error reset"
S107	Foot switch "pocket plate front"
S108A S108B	Key "folding unit start"
S109	Key "clamping cylinder retracted"
S110	Key "sewing"
S111	Key "push button"
S112	Key "erase"

Part	Used for
S113	Key "no sewing"
S114	Key "program A"
S115	Key "program B"
S120	Key "bring label"
S121	Key "label push button"
SGRD	Carriage in basic position
SMOK	Stepping-motor drives in order

Part	Used for
SPGTST	Power supply +12 V external
STOP	Stop without position
STOPP1	Stop, 1st position
STOPP2	Stop, 2nd position
THERR	Needle thread disturbance
X1.	Plug-in connection for folding unit
X2.	Plug-in connection for sewing head

Part	Used for
X3.	Plug-in connection synchronizer sewing head
X4.	Plug-in connection 900 at sewing head
X5.	Plug-in connection
X6.	Plug-in connection synchronizer - Quick
X7.	Plug-in connection 900 - Quick
X8.	Plug-in connection control signals Quick
X9.	Plug-in connection S1 (presser foot)

Part	Used for
X10.	Terminal strip in distributor template feed
X11.	Terminal strip in distributor carriage
X12.	Plug-in connection serial interface Prog.
X13.	Plug-in connection serial interface CPU
X14.	Terminal strip in distributor at template
X15.	Terminal strip in control cabinet 12/24 V left
X16.	Terminal strip in control cabinet 12/24 V right

Part	Used for
X17.	Terminal strip control cabinet contactor board
X18.	Terminal strip in folding unit
X19.	Plug-in connection stepping motor x-drive
X20.	Plug-in connection control x-drive
X21.	Plug-in connection stepping motor y-drive
X22.	Plug-in connection control y-drive
X23.	Plug-in connection puller

Part	Used for
X24.	Push-in connection thread monitor
X25.	Plug-in connection for label feeder
X26.	Terminal strip in distributor label feeder
X27.	Plug-in connection for foot switch
X28.	Plug connector for small part stacker (mains)
X29.	Plug connector for small part stacker (signal)
X50	Terminal strip in control cabinet left
Y1	Presser foot down

Part	Used for
Y2	Cutting "on"
Y3	Air flow needle cooling
Y5	Thread puller engage
Y10	Zigzag engaged
Y11	Increase of thread tension
Y20.1	Pocket plate backwards
Y20.2	Pocket plate forwards
Y21.1	Pocket holder upwards

Part	Used for
Y21.2	Pocket holder downwards
Y23.1	Folding unit and table up
Y23.2	Folding unit and table down
Y24.1	Edge folders backwards
Y24.2	Edge folders forwards
Y25	Positioning pin upwards
Y26.1	Template downwards

Part	Used for
Y26.2	Template upwards
Y27.1	Transfer forwards
Y27.2	Transfer backwards
Y28.1	Locating pins, sewing
Y28.2	Locating pins, transfer
Y30	Clamping cylinder folding unit extend
Y40	Cover of workpiece feed roller up

Part	Used for
Y41	Puller down
Y42	Stacker forward
Y43	Air blast, stacker
Y45	Air flow fabric feed assistance
Y70.1	Labe slide up
Y70.2	Labe slide down
Y71.1	Label clamp back

Part	Used for
Y71.2	Label clamp forward
Y72	Label cutting
Y73	Label folder front
Y74	Label transfer up
Y75.1	Label transfer swing out
Y75.2	Label transfer swing in
Y76	Label transfer front
Y77	Label suction

Part	Nomenclature	Part number
A0	Solid state circuit board	91-094 453-93/001
A1	Solid state circuit board	91-094 753-91
A3	Solid state circuit board	91-094 521-93/002
A4	Solid state circuit board	91-092 767-93/004
A5	Solid state circuit board	91-093 459-93/002
A6	Solid state circuit board	91-092 767-93/007
A7	Solid state circuit board	91-092 767-93/005

Part	Nomenclature	Part number
A8	Solid state circuit board	91-092 767-93/006
A9	Solid state circuit board	91-093 331-93/002
A20	Solid state circuit board	91-093 329-91
A21	Solid state circuit board	91-093 330-93/001
A22	Solid state circuit board	91-093 323-91
A23	Solid state circuit board	91-093 323-91
A24	Solid state circuit board	91-093 323-91

Part	Nomenclature	Part number
A25	Solid state circuit board	91-092 490-91
A26	Solid state circuit board	91-093 321-91
A27	Solid state circuit board	91-093 321-91
A28	Solid state circuit board	91-093 321-91
A29	Solid state circuit board	91-094 591-91
A30	Stepmotor - final stage	71-75 00-0138
A40	Stepmotor - final stage	71-75 00-0138

Part	Nomenclature	Part number
A51	Solid state circuit board	91-094 419-91
A52	Solid state circuit board	91-094 541-93/001
A53	Solid state circuit board	91-093 929-91

Part	Nomenclature	Part number
B2	Proximity switch	71-13 00-0448
B26.1	Proximity switch	71-13 00-0448
B26.2	Proximity switch	71-13 00-0448
B28.3	Proximity switch	71-13 00-0448
B28.4	Proximity switch	71-13 00-0448
B28.5	Proximity switch	71-13 00-0448
B50	Synchronizer	71-14 00-0039

Part	Nomenclature	Part number
B50.1	Proximity switch	71-13 00-0448
B51.1	Proximity switch	71-13 00-0473
B51.2	Proximity switch	71-13 00-0473
B51.3	Proximity switch	71-13 00-0473
B52.1	Proximity switch	71-13 00-0473
B52.2	Proximity switch	71-13 00-0473
B52.3	Proximity switch	71-13 00-0473

Part	Nomenclature	Part number
B73	Proximity switch	71-13 00-0448
B74.1	Proximity switch	71-13 00-0448
B74.2	Proximity switch	71-13 00-0448
B75.1	Proximity switch	71-63 00-0224
B75.2	Solid state circuit board	71-63 00-0224
B76.1	Solid state circuit board	71-13 00-0448
B76.2	Solid state circuit board	71-13 00-0448

Part	Nomenclature		Part number
B81	Reflex photocell unit		71-85 00-0056
F1	Automatic cut-out	16 A	71-15 00-0082
F2	Motor overload switch	1,6 - 2,5 A 2,5 - 4 A	71-11 00-0183 71-1100-0186
F3	Fuse	T 1,6	70-15 24-0018
F4	Fuse	T 0,8	70-15 24-0015
F5	Fuse	T 0,63	70-15 24-0014

Part	Nomenclature		Part number
F6	Fuse	T 8 A	70-15 15-0025
F7	Fuse	T 1 A	70-15 15-0016
H1	Light bulb		70-25 21-7234
H101	Light bulb		71-25 00-0267
H102	Light bulb		71-25 00-0267
H103	Light bulb		71-25 00-0267

Part	Nomenclature	Part number
H104	Light bulb	71-25 00-0267
H105	Light bulb	71-25 00-0267
H106	Light bulb	71-25 00-0267
H114	Light bulb	71-25 00-0267
H115	Light bulb	71-25 00-0267
H120	Light bulb	71-25 00-0267

Part	Nomenclature	Part number
K22	Relay	71-19 00-0060
K22	Varistor	71-63 00-0058
K44	Relay	71-19 00-0060
K44	Varistor	71-63 00-0058
K60	Relay	71-19 00-0224
K60	Switching diodes	71-63 00-0159

Part	Nomenclature	Part number
M2	Motor	See pneum. parts list
M3	Motor	See pneum. parts list
M50	Motor	See pneum. parts list
M50	Solid state circuit board	71-59 00-0576
M51	Motor	See pneum. parts list
M52	Motor	See pneum. parts list

Part	Nomenclature	Part number
Q1	Master switch	71-11 00-0307
S1	Solenoid switch	71-13 00-0479
S9	Thread monitor	91-094 036-91
S20.1	Quick-Greac switch	99-135 051-91
S20.2	Quick-Greac switch	99-135 051-91
S21.1	Limit switch	71-12 00-0413

Part	Nomenclature	Part number
S23.1	Limit switch	99-135 051-91
S23.2	Limit switch	99-135 051-91
S24.1	Pneumatic/electrical converter	99-136 122-91
S24.2	Pneumatic/electrical converter	99-136 122-91
S27.1	Solenoid switch	99-135 051-91
S27.2	Solenoid switch	99-135 051-91
S28.1	Solenoid switch	71-13 00-0527

Part	Nomenclature	Part number
S28.2	Solenoid switch	71-13 00-0527
S37	Limit switch	71-12 00-0413
S38	Limit switch	71-12 00-0420
S41.1	Solenoid switch	71-13 00-0527
S41.2	Solenoid switch	71-13 00-0527
S42	Limit switch	71-12 00-0532
S61	Push-button switch	71-13 00-0497

Part	Nomenclature	Part number
S62	Push-button switch	71-13 00-0498
S70.1	Solenoid switch	71-13 00-0527
S70.2	Solenoid switch	71-13 00-0527
S80	Limit switch	71-12 00-0420
S90	Push-button switch	71-13 00-0216
S97	Pressure monitor	95-629 723-71/993
S98	Limit switch	71-12 00-0413

Part	Nomenclature	Part number
S99	Limit switch	71-12 00-0413
S101	Push-button switch	71-13 00-0374
S102	Push-button switch	71-13 00-0374
S103	Push-button switch	71-13 00-0374
S104	Push-button switch	71-13 00-0374
S105	Push-button switch	71-13 00-0374
S106	Push-button switch	71-13 00-0374

Part	Nomenclature	Part number
Y1	Solenoid valve	See pneum. parts list
Y2		
Y3		
Y5		
Y10		
Y11		
Y20.1		
Y20.2		
Y21.1		
Y21.2		
Y23.1		
Y23.2		
Y24.1		
Y24.2		
Y25		
Y26.1		
Y26.2		
Y27.1		
Y27.2		
Y28.1		
Y28.2		
Y30		
Y40		
Y41		
Y42		
Y43		
Y45		
Y70.1		
Y70.2		
Y71.1		
Y71.2		
Y72		
Y73		
Y74		
Y75.1		
Y75.2		
Y76		
Y77		

Part	Nomenclature	Part number
S113	Push-button switch	71-13 00-0375
S114	Push-button	71-13 00-0374
S115	Push-button	71-13 00-0374
S120	Push-button	71-13 00-0374
S121	Push-button	71-13 00-0374
T 1	Transformer	71-55000-165

1.4.2 Steuerkarte D 650.0X

1.4.2.1 Betriebsdaten

Betriebsspannung	70 - 130 VDC ± 10%
Phasenströme einstellbar	2,0 - 5,0 A
Boost einstellbar	1,0 - 1,9xI_N (max.6A)
Anzeige für Bereitschafts- und Störungsanzeigen	LEDs
Drehschalter zur Einstellung des Boost	
Drehschalter zur Einstellung des Phasenstroms	

1.4.2.2 Anzeige und Programmierschalter

1.4.2.3 Boost (Grenzwert I_{Boost} = 6 A max.)

I_{Boost}	$1,0xI_N$	$1,1xI_N$	$1,2xI_N$	$1,3xI_N$	$1,4xI_N$	$1,5xI_N$	$1,6xI_N$	$1,7xI_N$	$1,8xI_N$	$1,9xI_N$
Stellung	0	1	2	3	4	5	6	7	8	9

top rotary dial switch must poiont to the 0 position

1.4.3.3 Phasenstrom (Angabe in A)

I (A)	2,0	2,2	2,4	2,6	2,8	3,0	3,2	3,4	3 6	3,8
Stellung	0	1	2	3	4	5	6	7	8	9

I (A)	4,0	4,2	4,4	4,6	4,8	5,0				
Stellung	A	B	C	D	E	F				

bottom rotary dial switch must point to the F position

1.4.3.4 Stromabsenkung

Schalterstellung	OFF		ON	
Pulsfrequenz	< 10 Hz	> 10 Hz	< 10 Hz	> 10 Hz
Motorstrom I	$I_{Nenn} \times 0,6$	I_{Nenn}	I_{Nenn}	I_{Nenn}

1.4.3.5 Schrittwinkel

Schalterstellung	OFF	ON
Schrittwinkel	Halbschritt 1000 Schritte pro Umdrehung	Vollschritt 500 Schritte pro Umdrehung

switch # 3 | Half step | Full step