

Every year

1. Check for possible wearing of chains and of push bar
2. Check the conditions of heating elements on loading inlet
3. Check the conditions and proper operation of rear safety bars and chute
4. Check the catch arms pivot axis
5. Screws fixing yokes to bottom frame : nuts of these screws must not be locked. Leave a gap of 2 mm. approx. (see table F.40.1202) - (\*)
6. Nuts of cylinder rods : upper nut must not be locked to yoke. Leave a gap of 1 mm. approx.
7. Bracket screws of catch arms opening devices : both those fixed to bottom frame and these fixed to side frames. They must be locked.
8. Loading bar : it must be straight and its rotation free.

(\*) Specific note for point 5 :

Docking between yokes and lower frame (see table F.40.1202 - detail 2) should be checked in these conditions :

- a) Plate stack lifted about 800-900 mm from the floor.
- b) Plate caught by catch arms closed.
- c) Hydraulic station and the control panel switched off.
- d) Four logs fitted between the lower frame and the base of side frame as indicated in the drawing.

After these operations

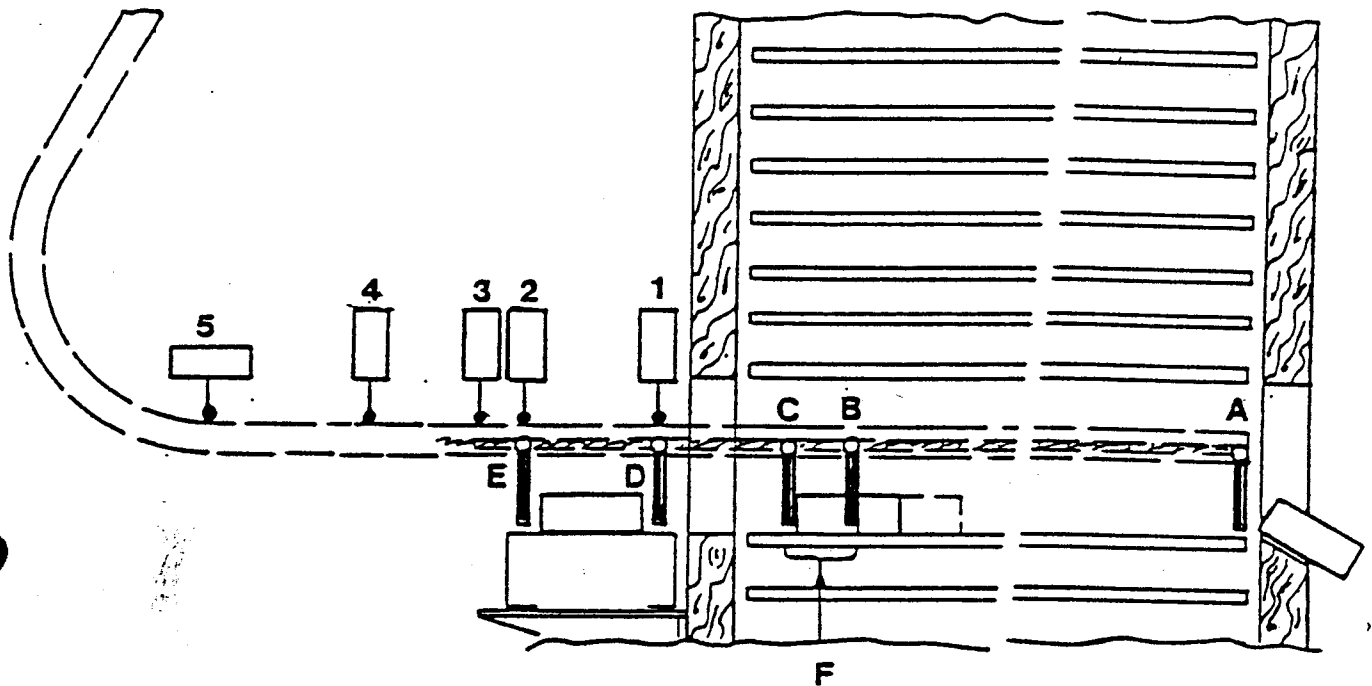
- e) Enter the freezer and inspect with a torch.

## 9.6 Instructions for cylinders disassembly

1. Disassemble the cabin side panels (next to the cylinders) when the freezer is stopped.
2. Start the freezer and set the control panel to operate in Manual Mode.
3. Act on UP to catch 3 or 4 plates, then start the plates opening by pressing DOWN.
4. Turn off the hydraulic unit and the control panel, and go into the upper part of the freezer.
5. Take off the two nuts and the cylinder braking plate (see fig. 1).
6. Remove the top nut and the plate next to sensor TS (see sketch 2) if fitted.
7. Go out from the freezer, re-start the machine and always in Manual Mode, select DOWN.
8. The piston will lower until the end stroke while the plate stack and yokes will keep their position on catch arms.
9. Now disconnect the hydraulic piping, acting on the three-piece joints (disassemble some pipes if necessary). Take care that oil spilling is recovered in a basin.
10. Unscrew the 4 screws fastening the piston lower side and withdraw it from the freezer.
11. Replace the gaskets and re-fit the piston into the freezer re-positioning the shims under the bottom frame, if required, to obtain the correct perpendicular position
12. Connect again the hydraulic piping. Always in Manual Mode select UP, checking at the same time that piston stems fit into yokes holes, and that bottom nut gets below the yoke itself.
13. Fasten the two cylinder top nuts and the plate, making sure to leave 1 mm free between the yoke and the first nut (see sketch 1).

PLATE FREEZERS - PLATEMATIC

Position of loading bar when encoder or sensor switches of load ing device intervene

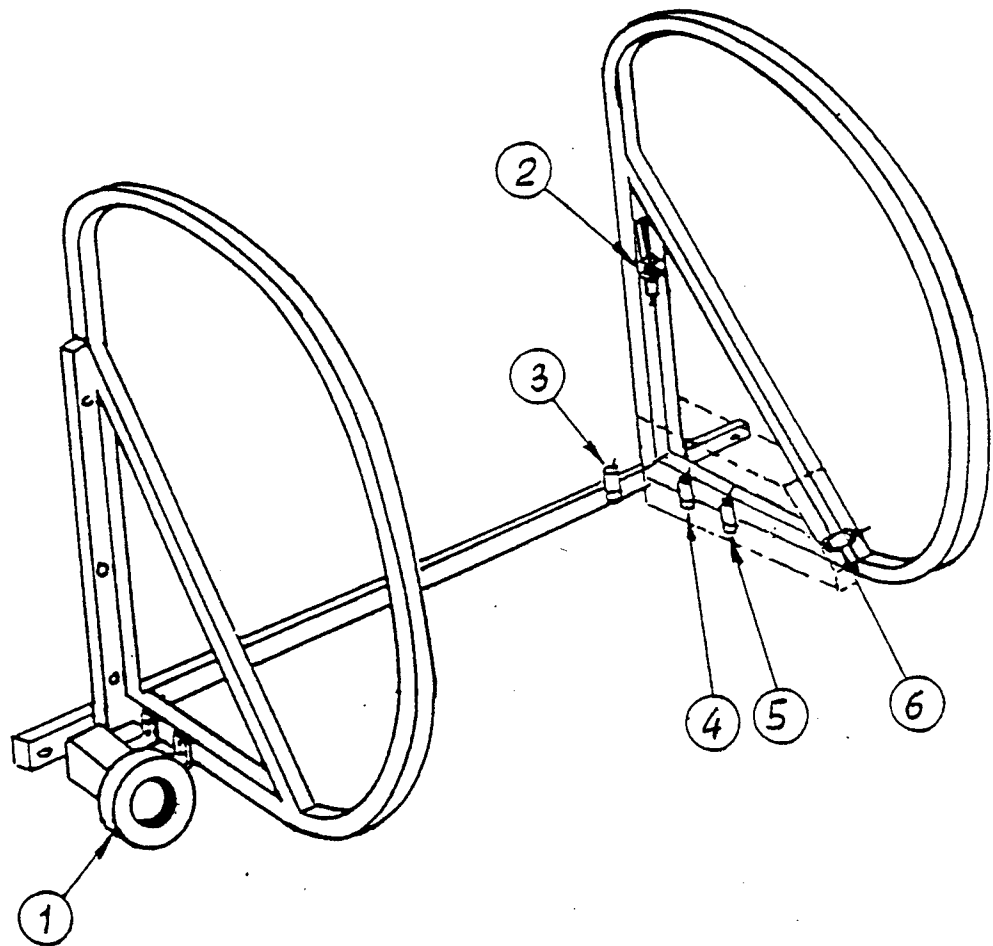


Sensor position	Loading bar position
1. 'Rear' sensor switch	A. Bar in 'rear' position
2. 'Intermediate'	B. Bar in 'intermediate' pos.
3. 'Forward'	C. Bar in 'forward' posit.
4. 'Full forward'	D. Bar in 'break-away' pos.
5. 'Full unload' sensor switch	E. Bar in 'full unload' pos.
	F. Extra-stroke for break-away' function

PLATE FREEZERS - PLATEMATIC

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Sensor switches of loading device



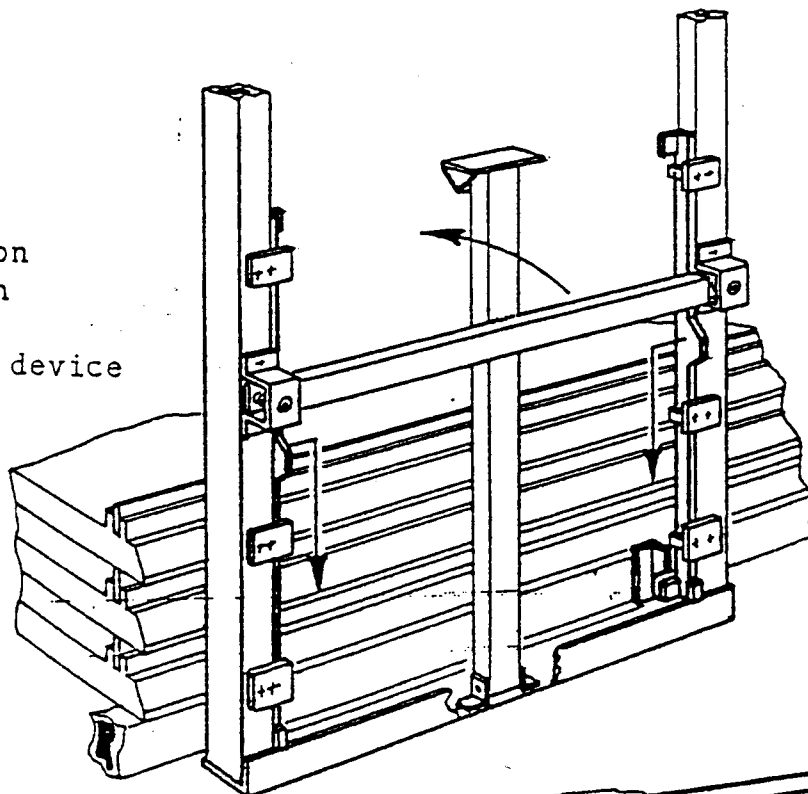
- 1 Sensing wheel
- 2 SAFETY sensor switch
- 3 Intermediate sensor
- 4 Forward sensor

- 5 REAR sensor switch
- 6 FULL UNLOAD sensor switch

PLATE FREEZERS - PLATEMATIC

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Catch arms holders

B) Operation  
of catch  
arms  
closing device



A) Operation  
of catch  
arms  
opening device

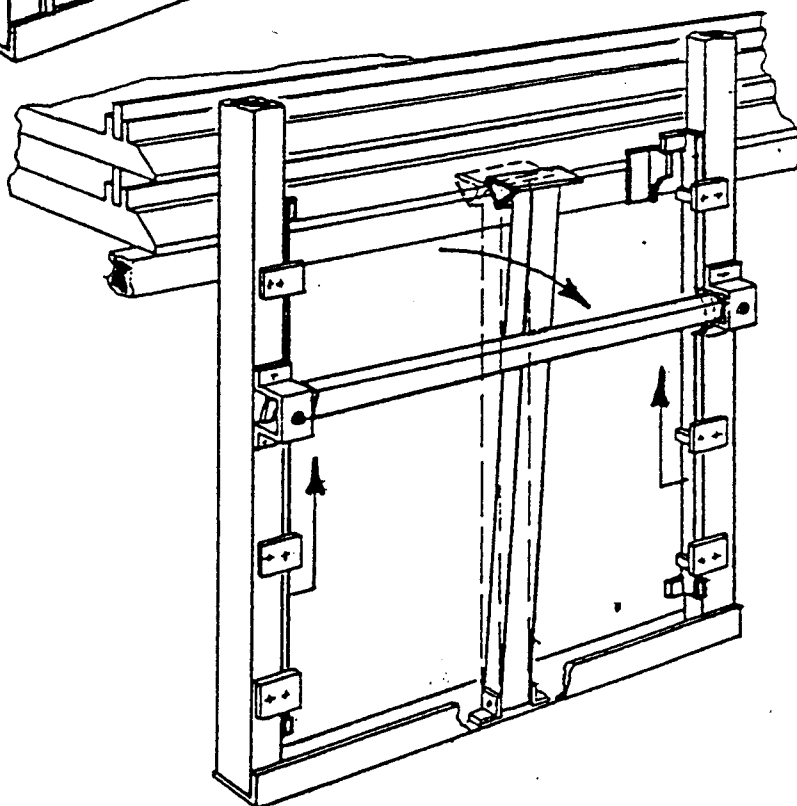
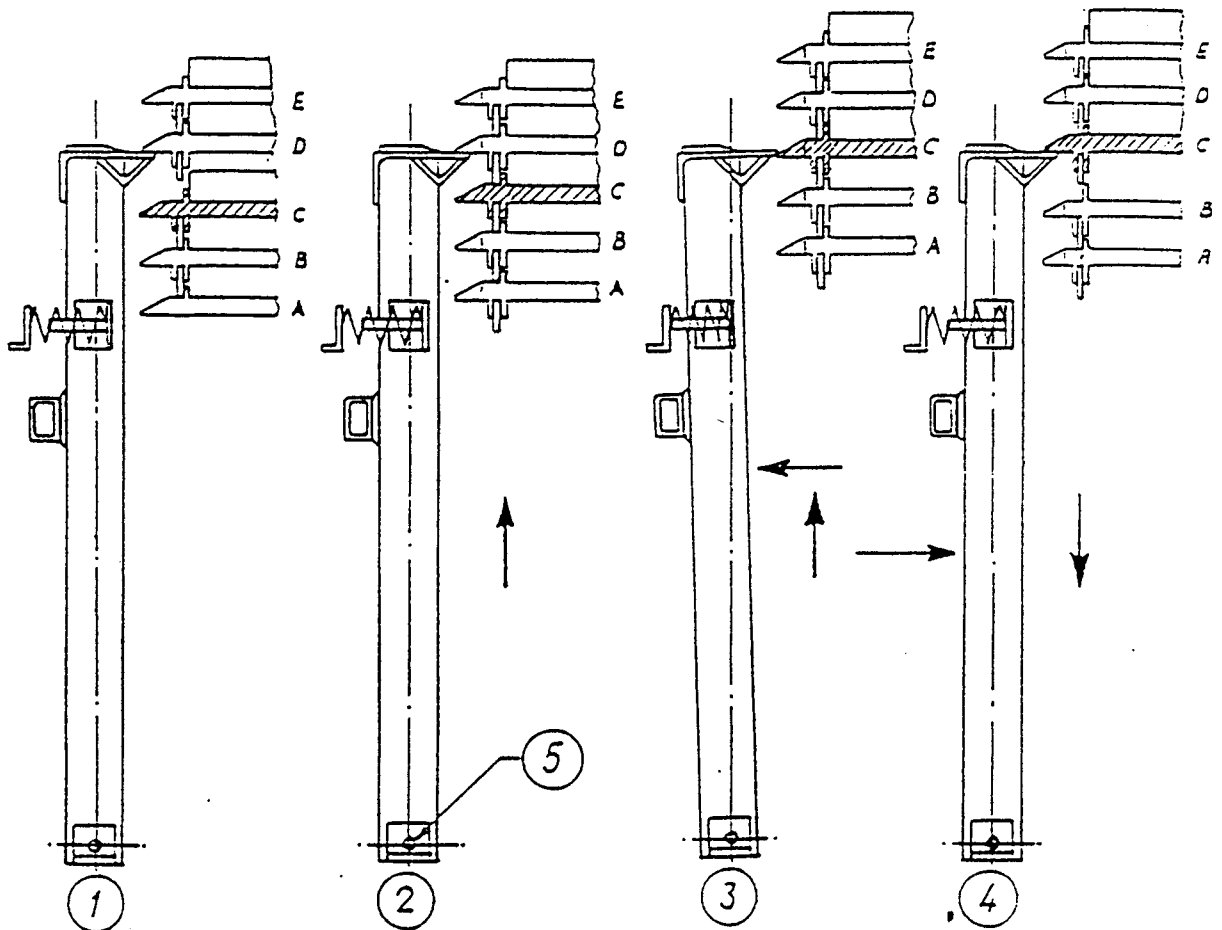


PLATE FREEZERS - PLATEMATIC

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Catch arms movements

Drawing shows catching of a station

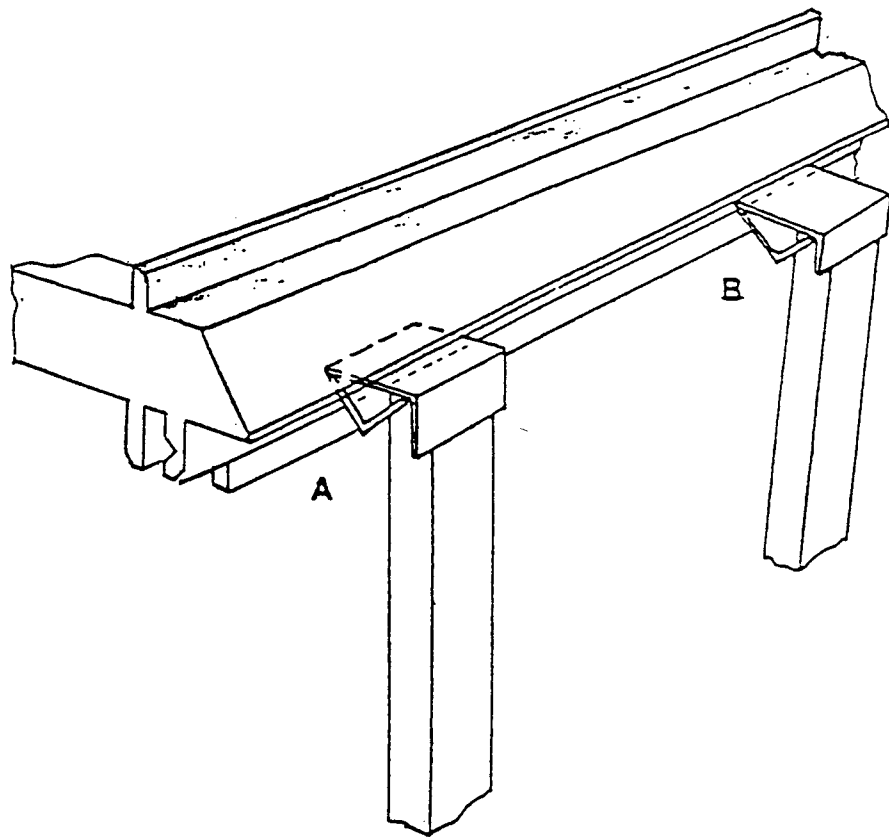


- 1 Open station : product load
- 2 Closed station : lifting for station change
- 3 Open arms at load station passage
- 4 Station is over the arms which close; then the next lower station opens
- 5 Arms rotating pivot

PLATE FREEZERS - PLATEMATIC

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Catch arms



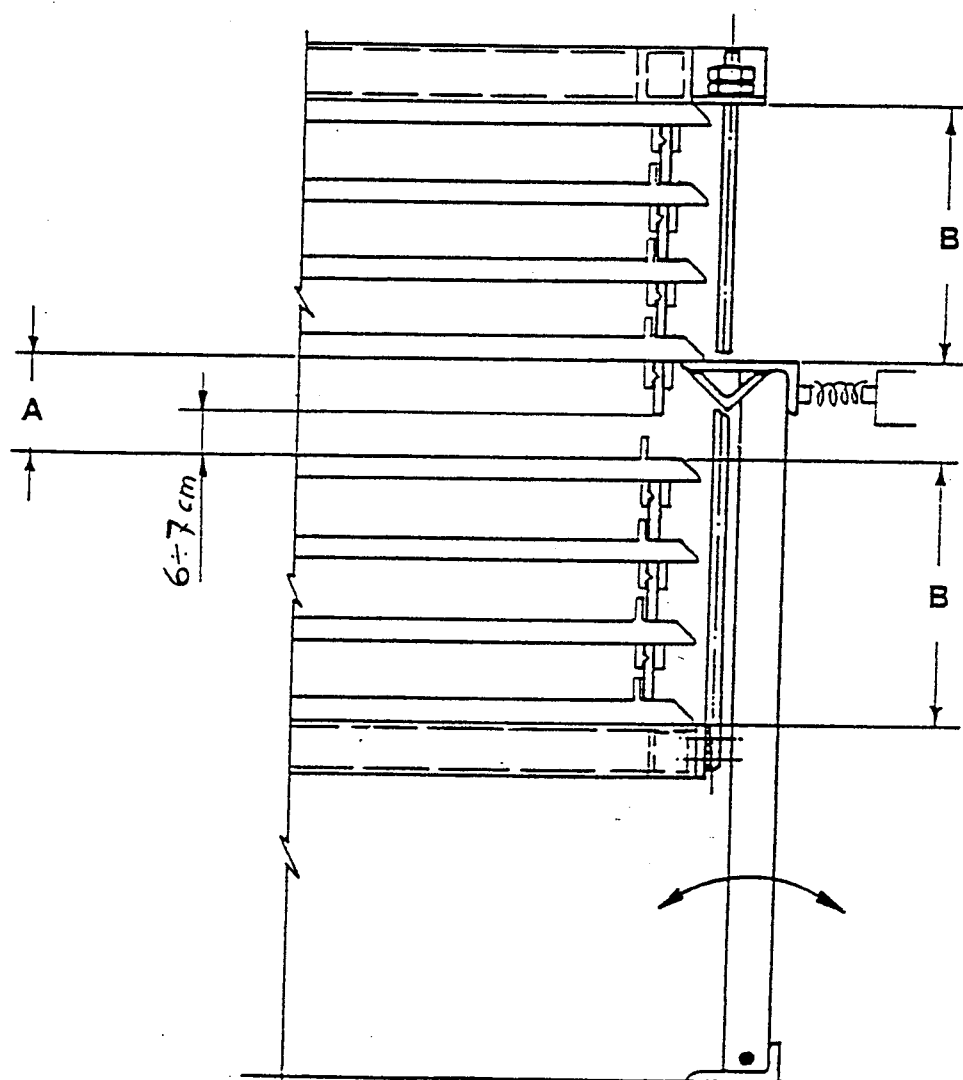
- A Plate is caught
- B Plate is not caught

Lifting of plate stack is automatically stopped only when all the catch arms are in position A

PLATE FREEZERS - PLATEMATIC

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Plate stack



A Open station

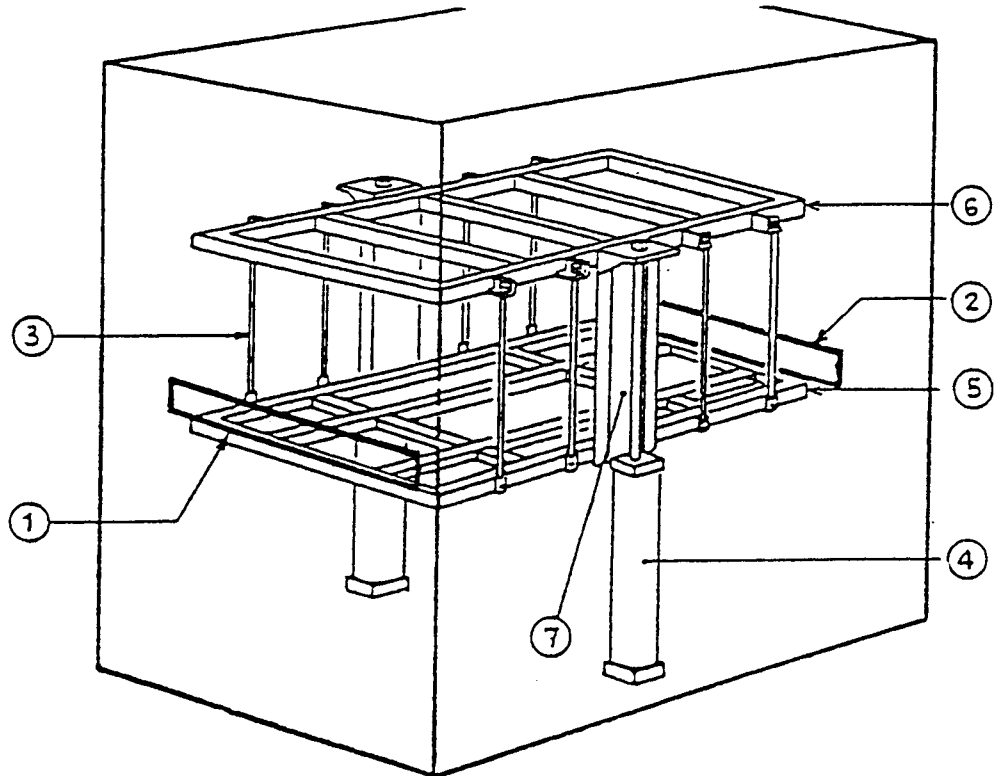
B Closed station



PLATE FREEZERS - PLATEMATIC

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Up stack : loading position of last plate



Down stack : freezing position

- 1 Loading inlet
- 2 Unloading outlet
- 3 Holders
- 4 Cylinder
- 5 Lower frame
- 6 Upper frame
- 7 Yoke

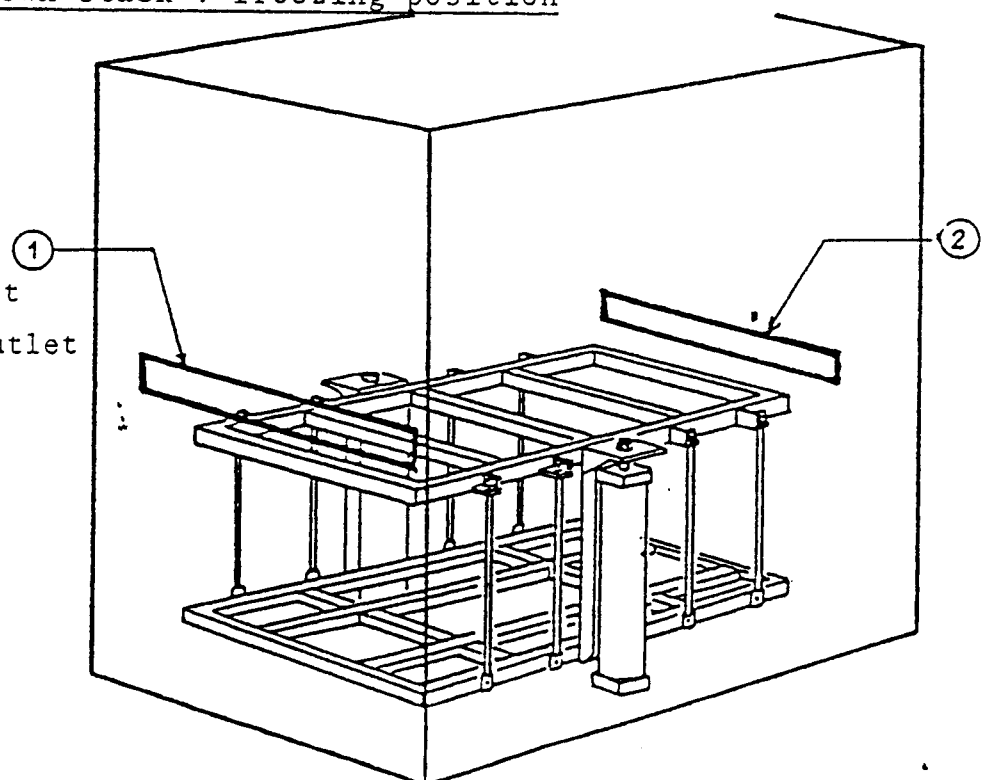
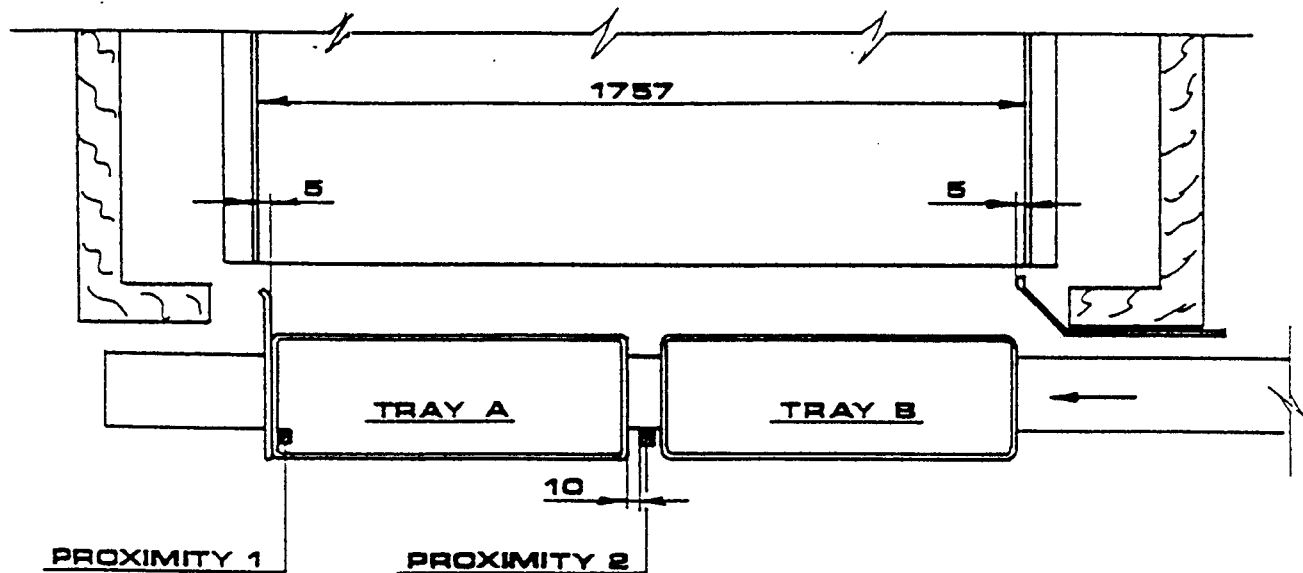
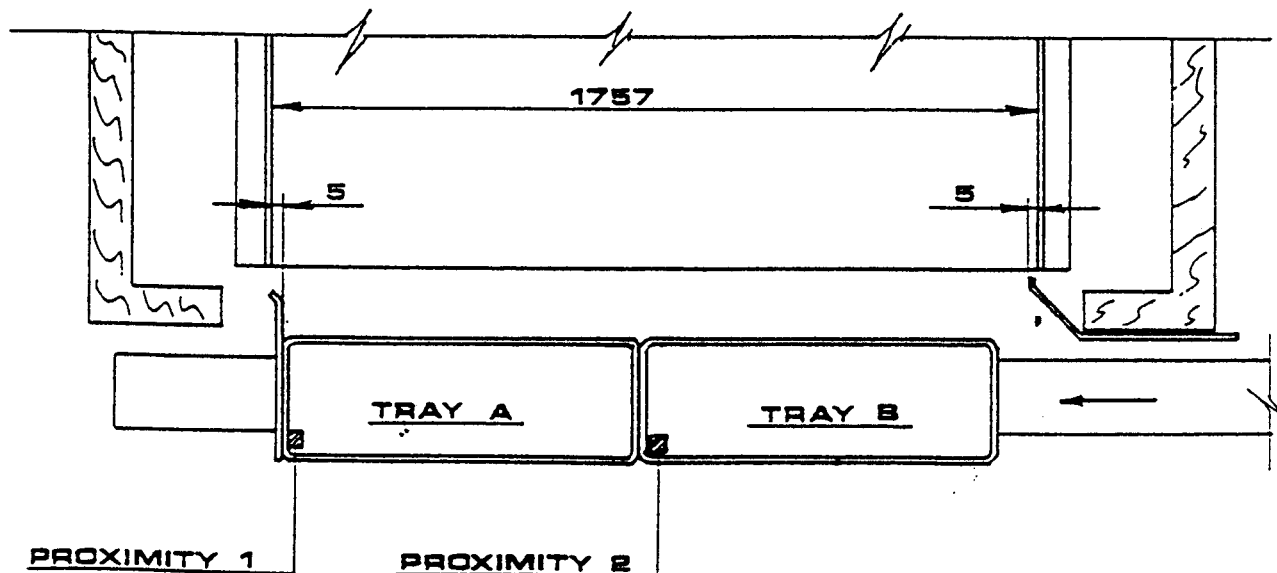


PLATE FREEZERS - PLATEMATIC

Positioning of proximity sensors and trays



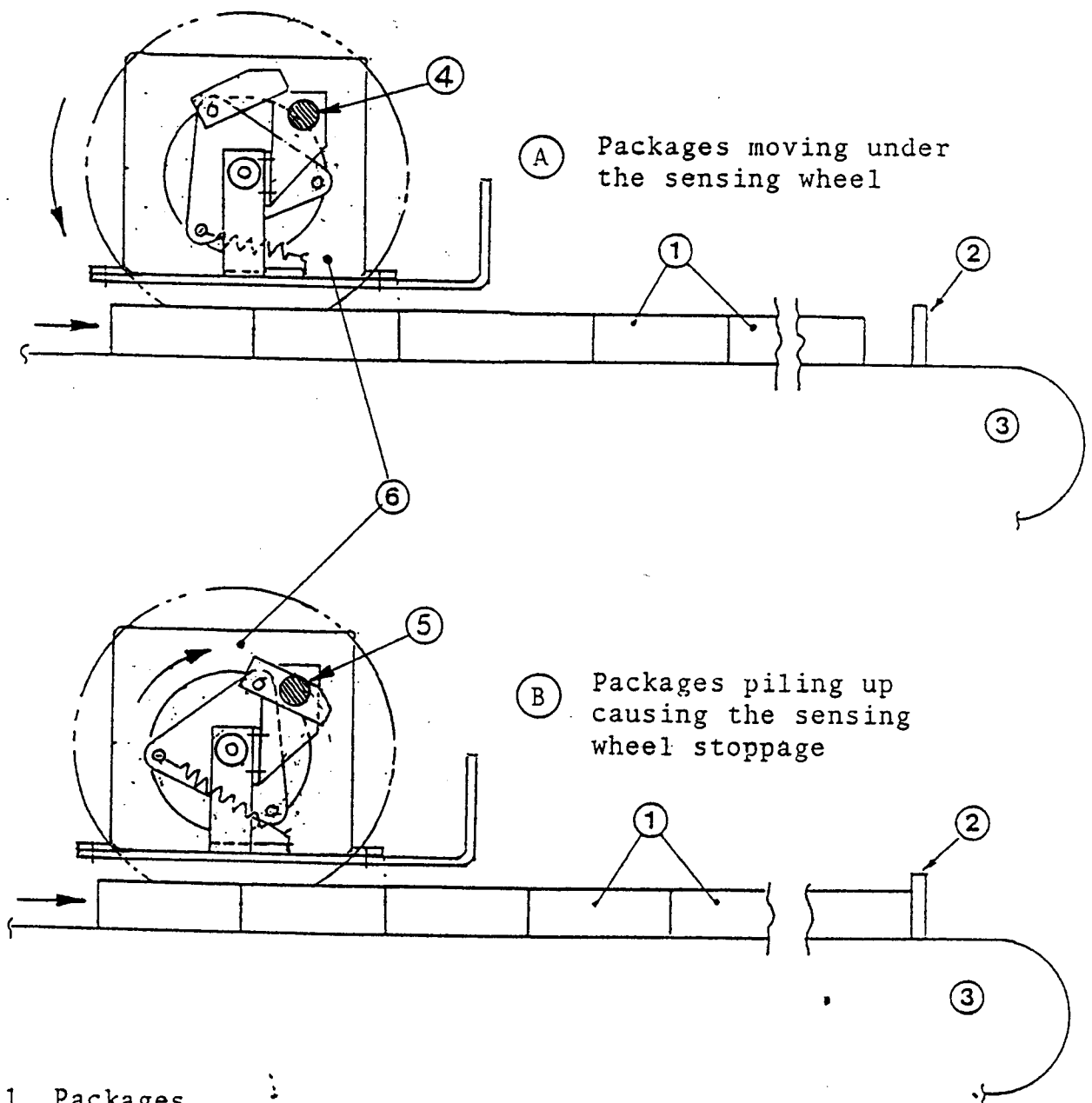
Prox. 1 activated by tray "A"  
 Prox. 2 not activated by tray "A"  
 Prox. 2 " " " " "B"  
 Push bar does not move



Prox. 1 activated by tray "A"  
 Prox. 2 " " " " "B"  
 Push bar moves

PLATE FREEZERS - PLATEMATIC

Sensing motor



A Packages moving under the sensing wheel

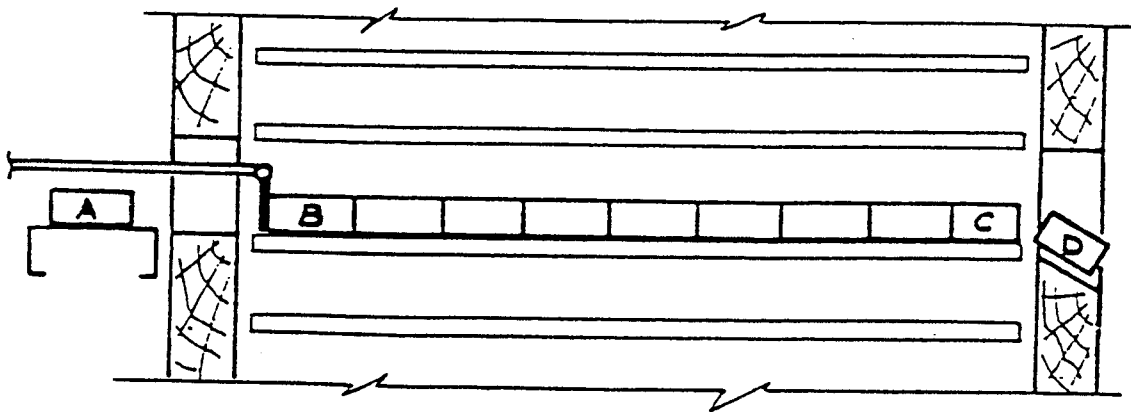
B Packages piling up causing the sensing wheel stoppage

- 1 Packages
- 2 Package stop (gate)
- 3 Loading belt
- 4 Open sensor switch
- 5 Close sensor switch
- 6 Sensing motor which rotates through approximately 35° to energize sensor switch when sensing wheel stops

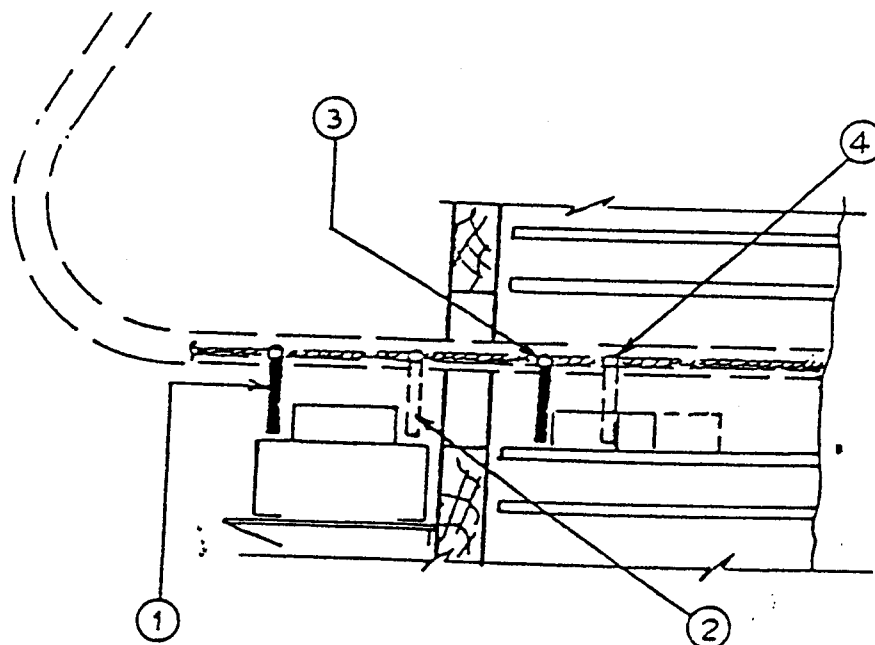
PLATE FREEZERS - PLATEMATIC

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Loading bar movement



Bringing A in to B, C has to move to D

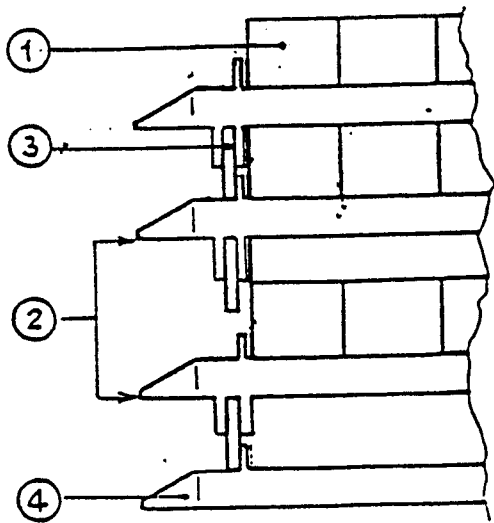
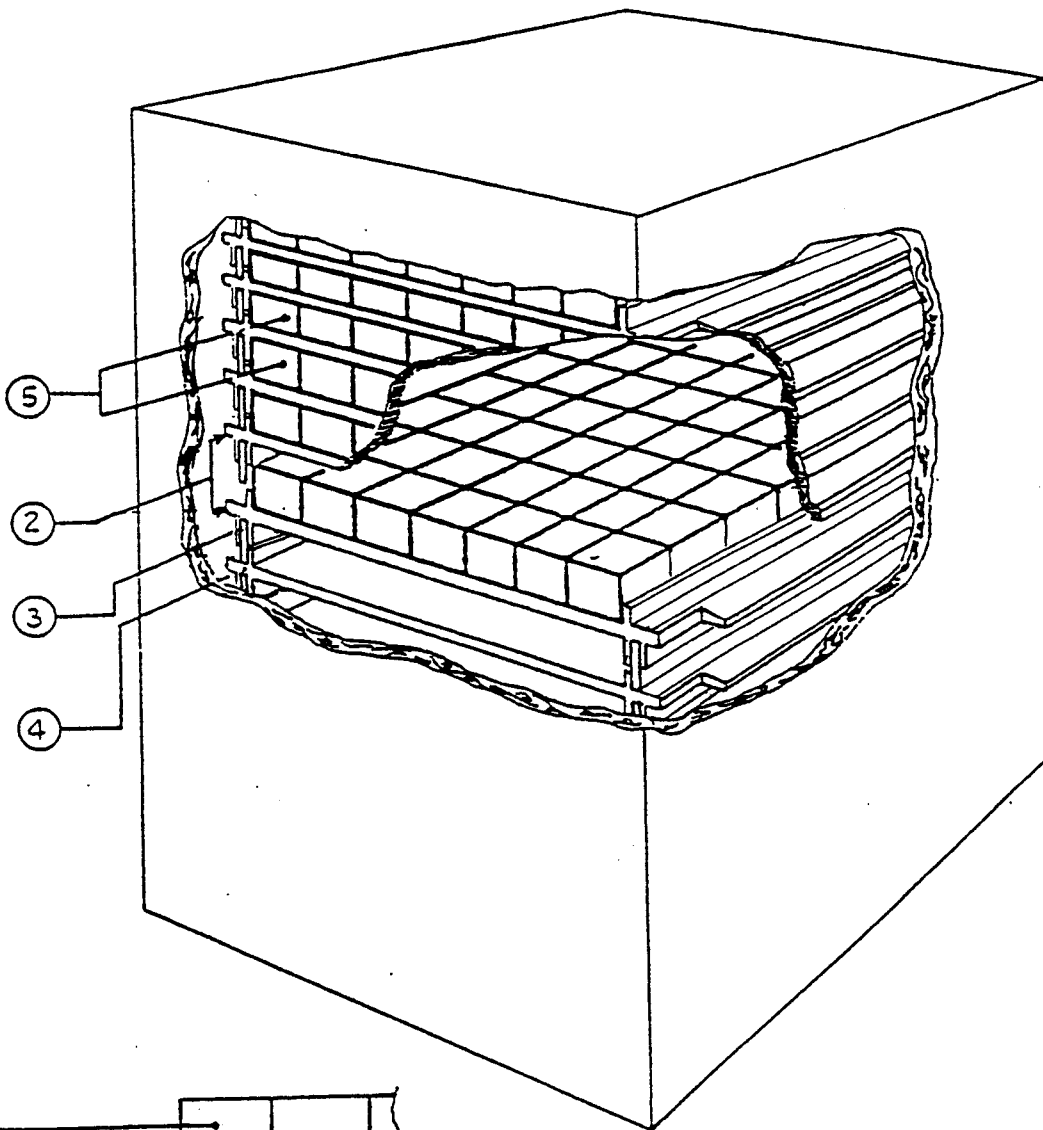


- 1 Rear position, starting for normal load
- 2 Intermediate position, starting for break-away execution
- 3 Position of normal load
- 4 Break-away position

PLATE FREEZERS - PLATEMATIC

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Plate stack

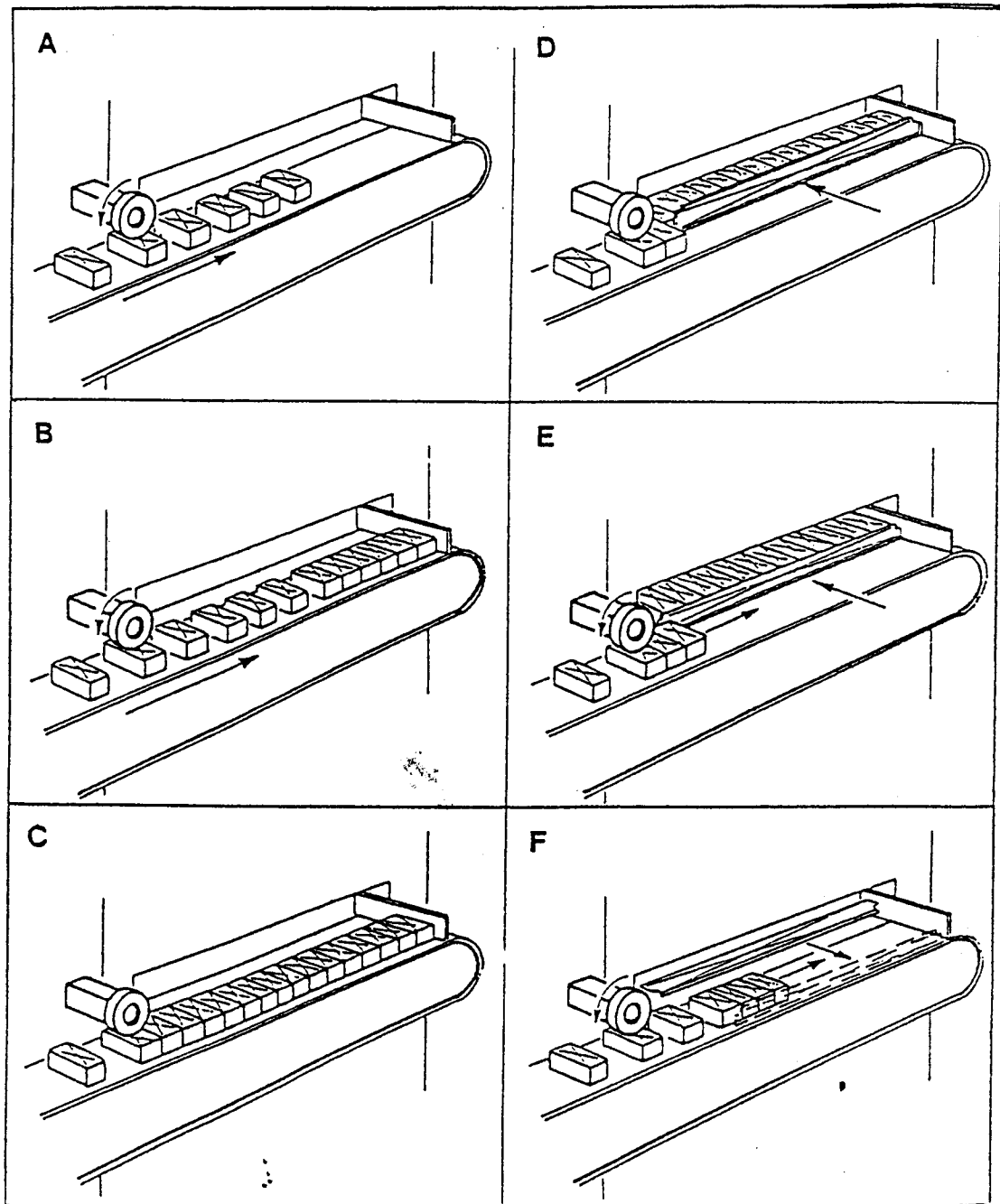


- 1 Product
- 2 Station
- 3 Spacer
- 4 Plate
- 5 Plates loaded with product

PLATE FREEZERS - PLATEMATIC

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Packages and sensing wheel movement



- A Rotating wheel
- B Rotating wheel
- C Stopped wheel
- D Loading bar forwarding
- E Packages introduction (wheel now rotating again)
- F Loading bar reverse

PLATE FREEZERS - PLATEMATIC

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Roof railing - Ladder

Constructions according to safety local rules.

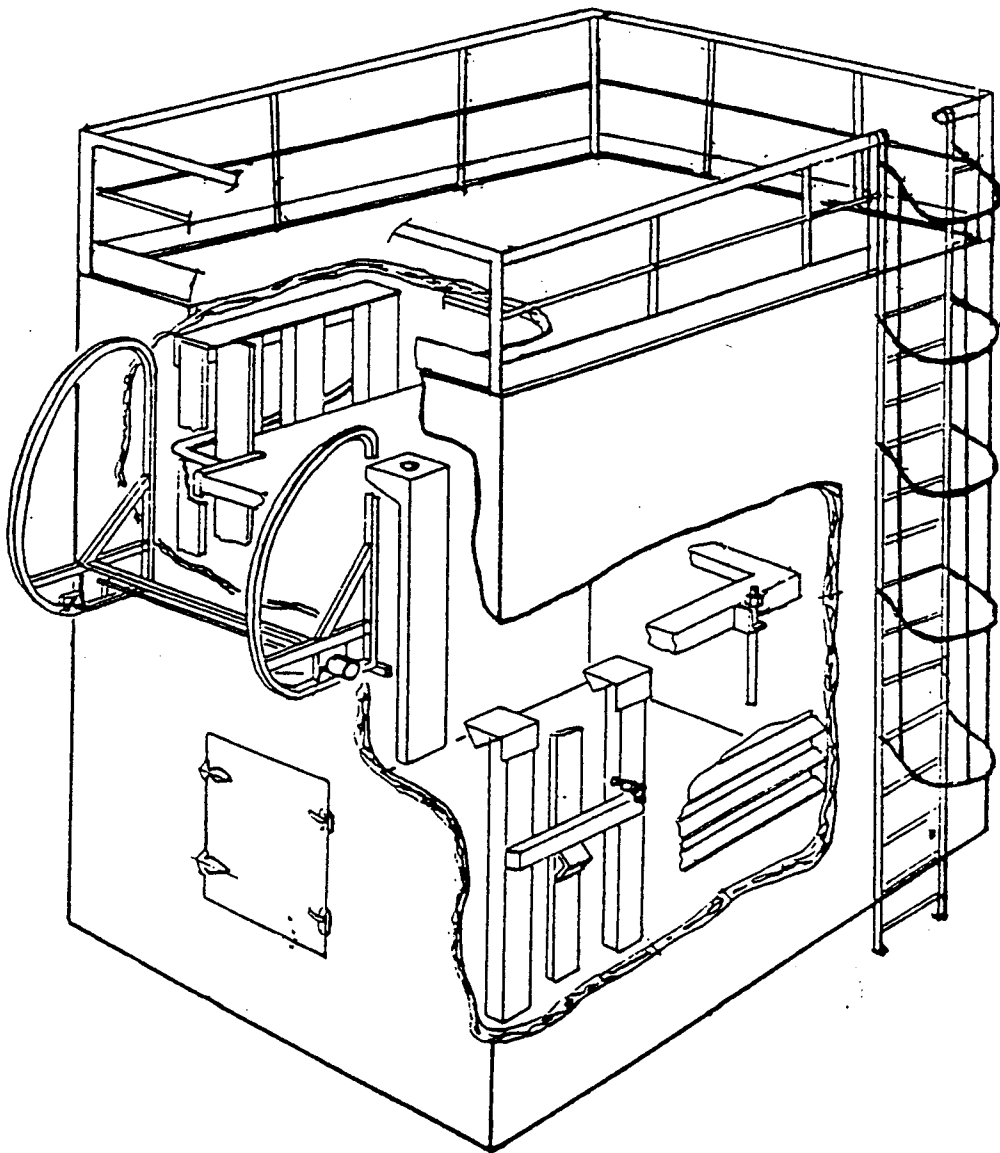
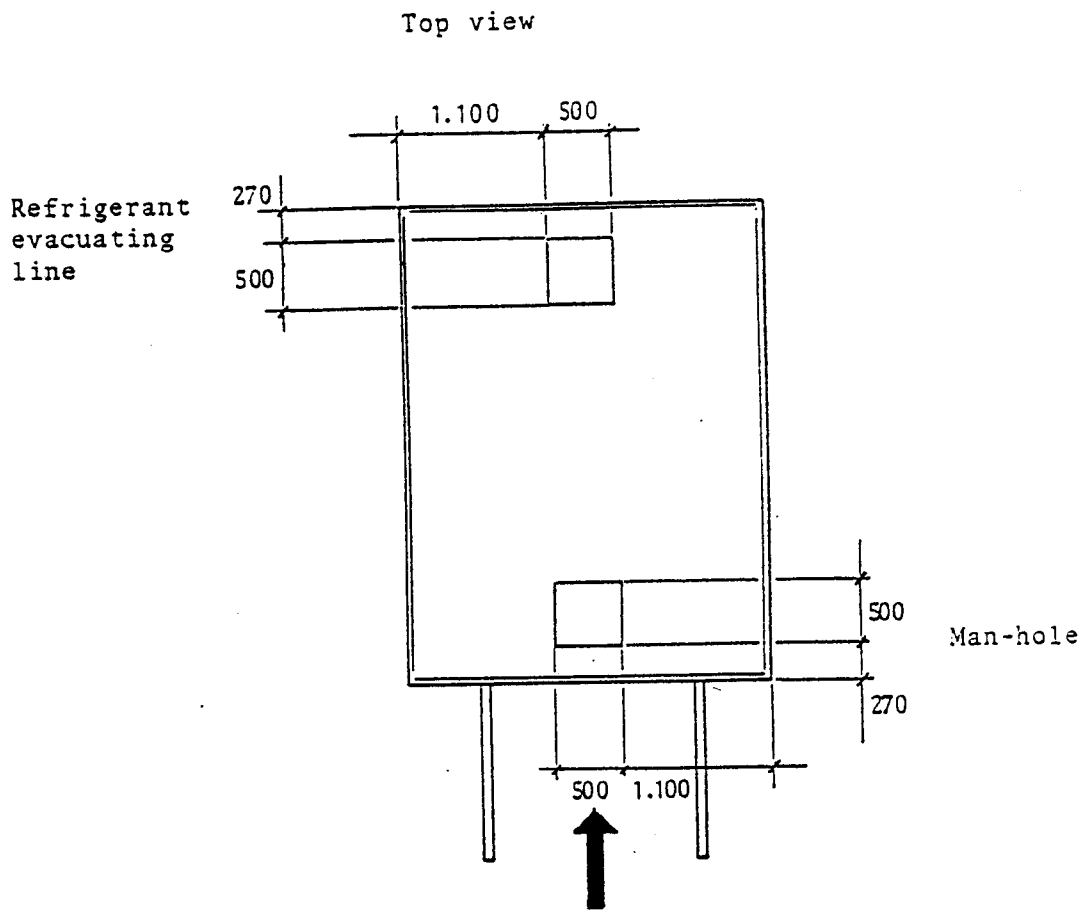


PLATE FREEZERS - PLATEMATIC

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Refrigerant gas evacuating duct and emergency man-hole



All data subject to confirmation

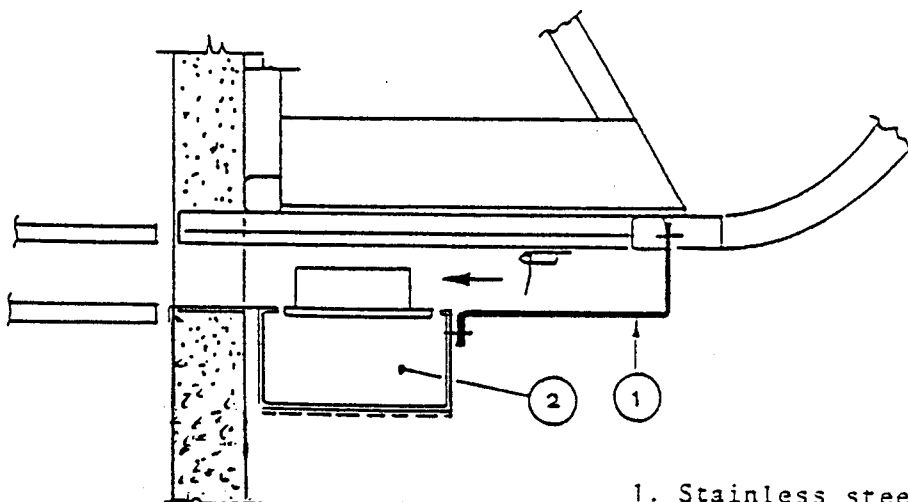
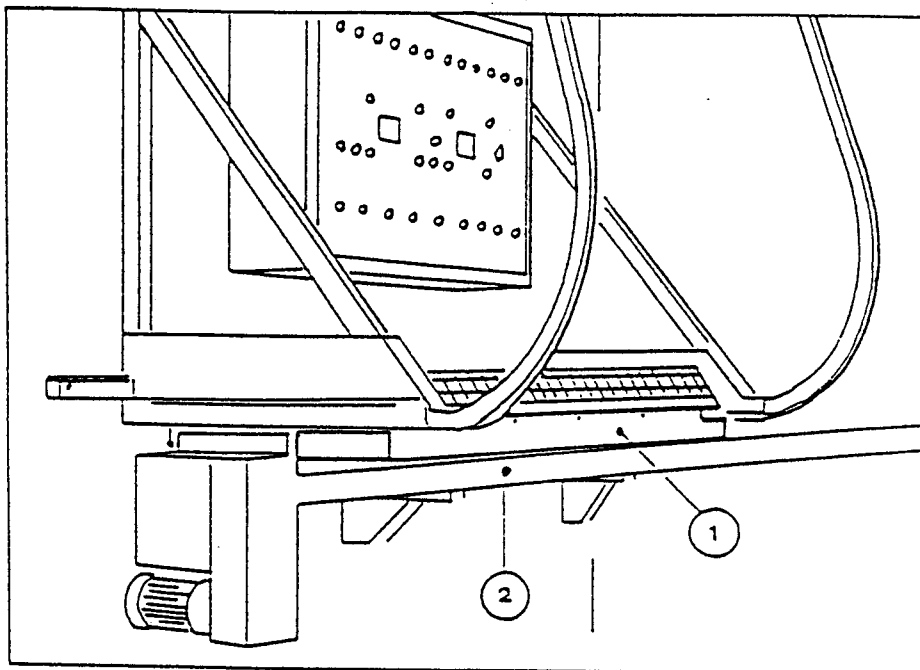


PLATE FREEZERS - PLATEMATIC

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Extension of front protection grid

To be realized on site as a safety for the operator,  
after the installation of conveyor belt.



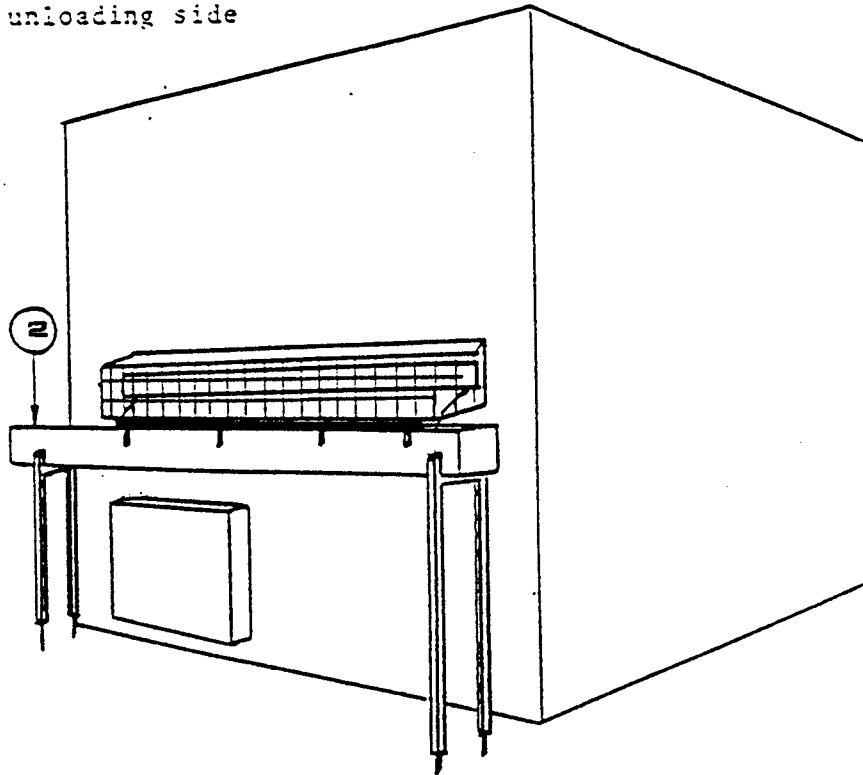
- 1. Stainless steel grid
- 2. Conveyor belt

All data subject to confirmation

PLATE FREEZERS - PLATEMATIC

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Unloading conveyor positioning

unloading side



- 1 - Protection grid
- 2 - Conveyor

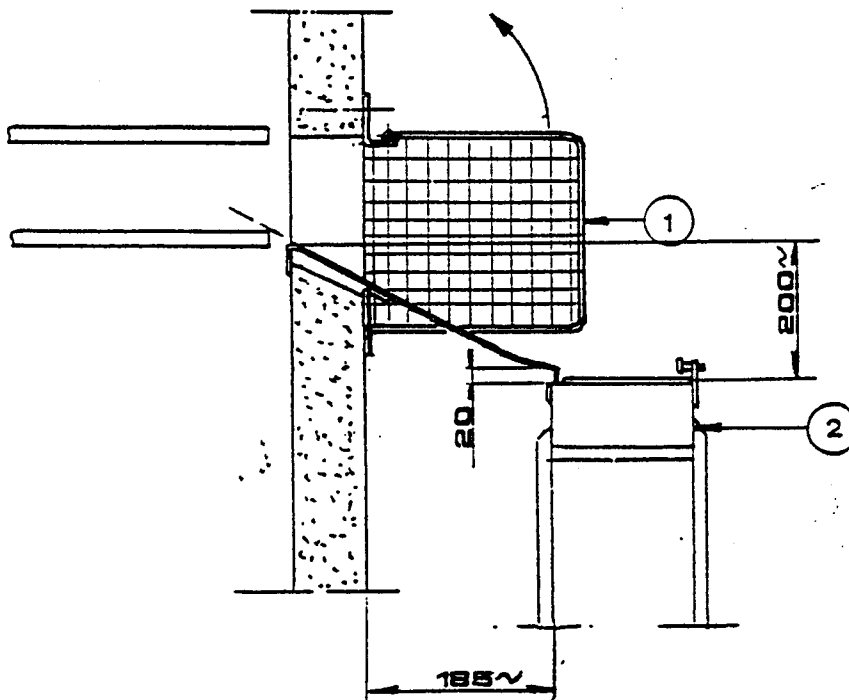
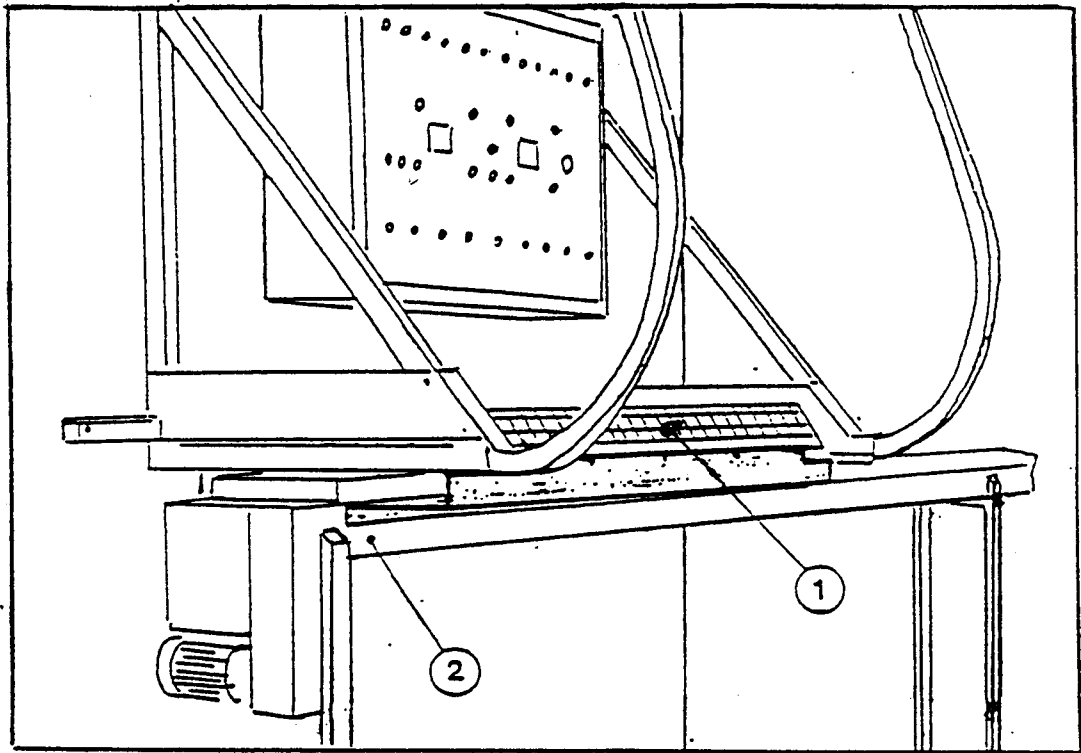


PLATE FREEZERS - PLATEMATIC

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Loading conveyor positioning



- ① Protection grid
- ② Conveyor

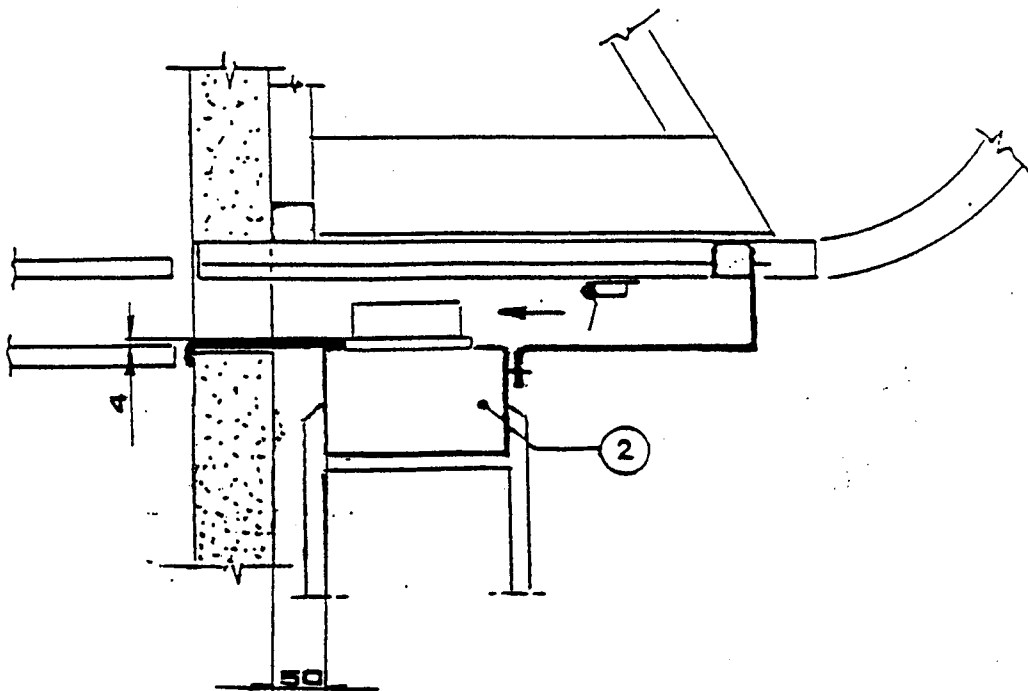
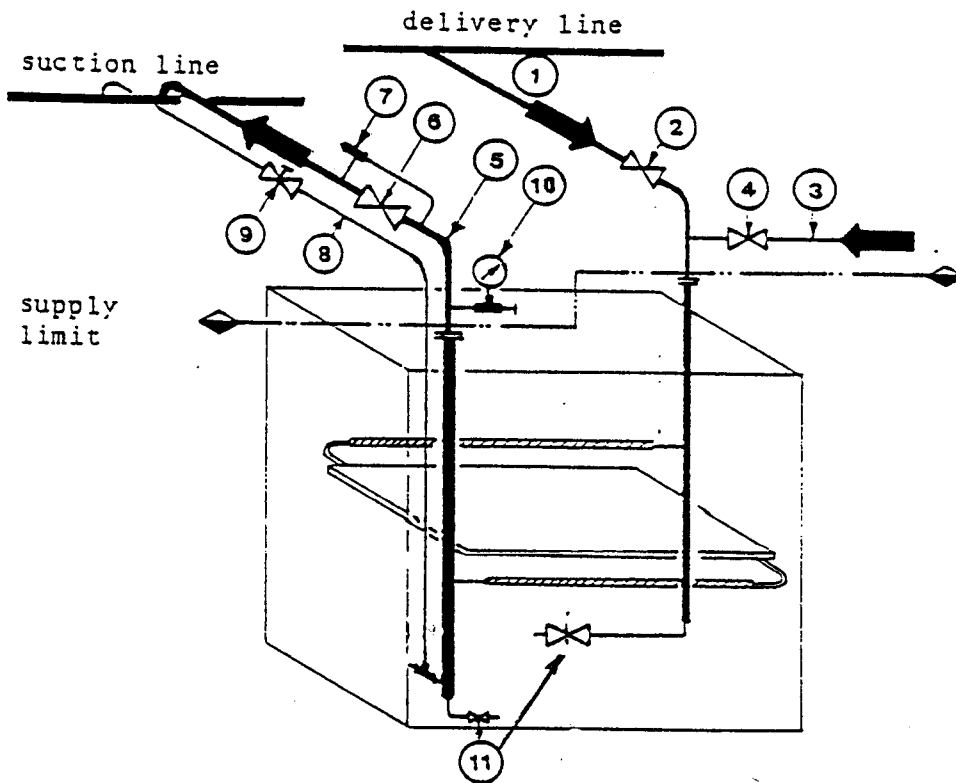


PLATE FREEZERS - PLATEMATIC

Refrigerant connections



Item	Description	FM	FF	FF2-FF2S-FX2-FX2S
1	Liquid line	1.1/4"	1.1/2"	2"
2	Stop valve	1.1/4"	1.1/2"	2"
3	Hot gas line (for defrosting)	1.1/4"	1.1/2"	1.1/2"
4	Stop valve	1.1/4"	1.1/2"	1.1/2"
5	Suction line	4"	5"	6"
6	Stop valve	4"	5"	6"
7	Relief valve	-	-	-
8	Evacuating line	1/2"	1/2"	3/4"
9	Regulating valve	1/2"	1/2"	3/4"
10	Pressure gauge	-	-	-
11	Oil draining valve	1/2"	1/2"	3/4"

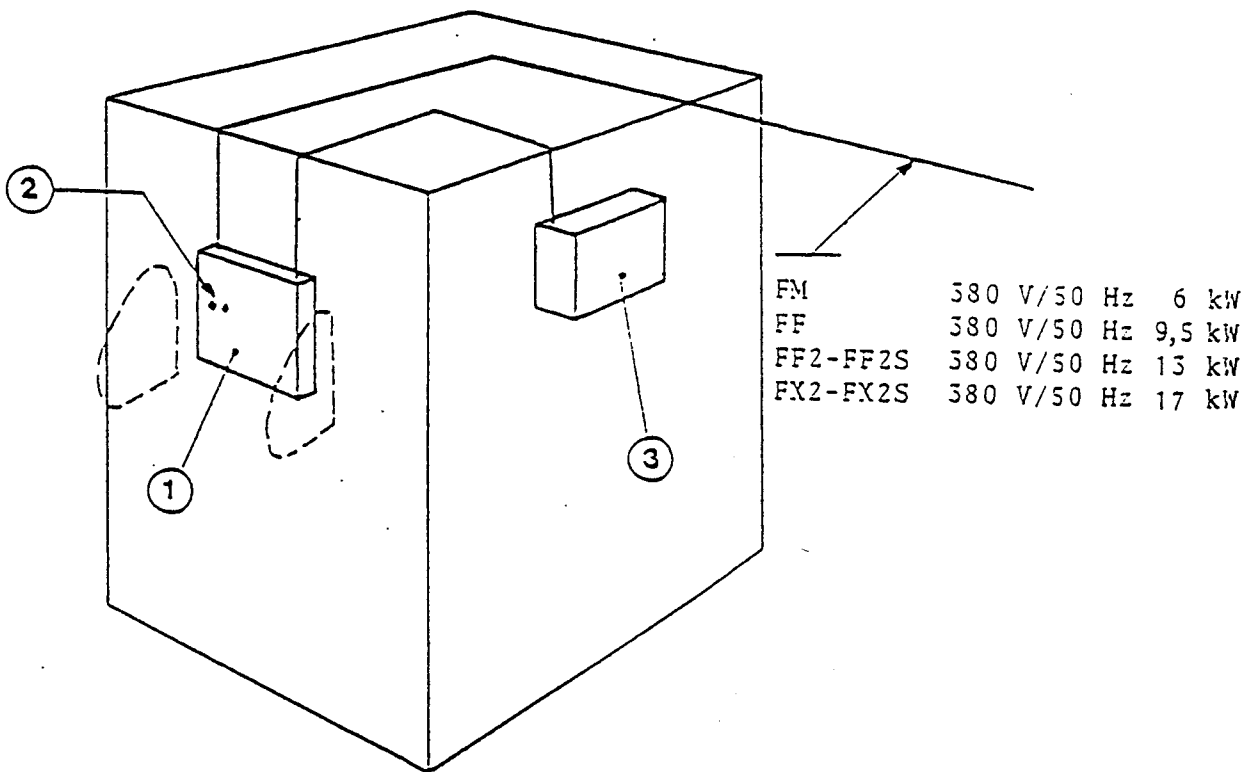
Sizes of Item 1 to 12 are the recommended ones for maximum refrigeration load, and should be recalculated in case of different duties.

All data subject to confirmation

PLATE FREEZERS - PLATEMATIC

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Electric wiring

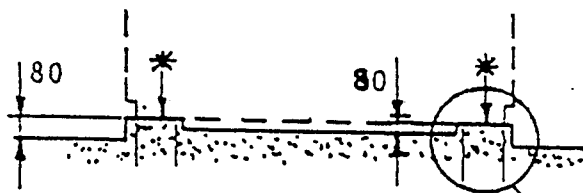


1. Control panel
2. Push-buttons for operating the hydraulic station
3. Hydraulic station

All data subject to confirmation

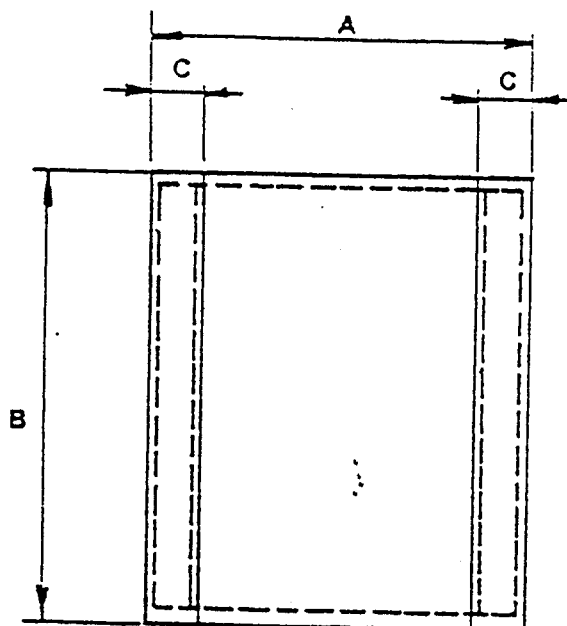
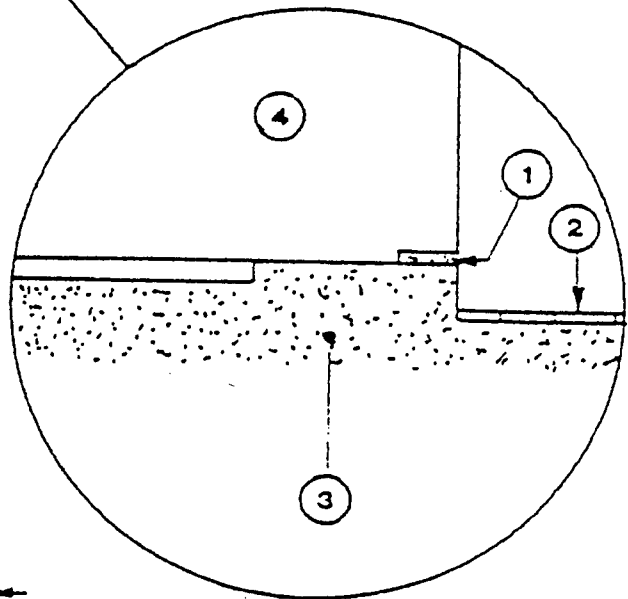
PLATE FREEZERS - PLATEMATIC

Concrete basement



\* surfaces must be flat

1. Seal accurately
2. Floor tiles
3. Concrete base
4. Freezer cabin

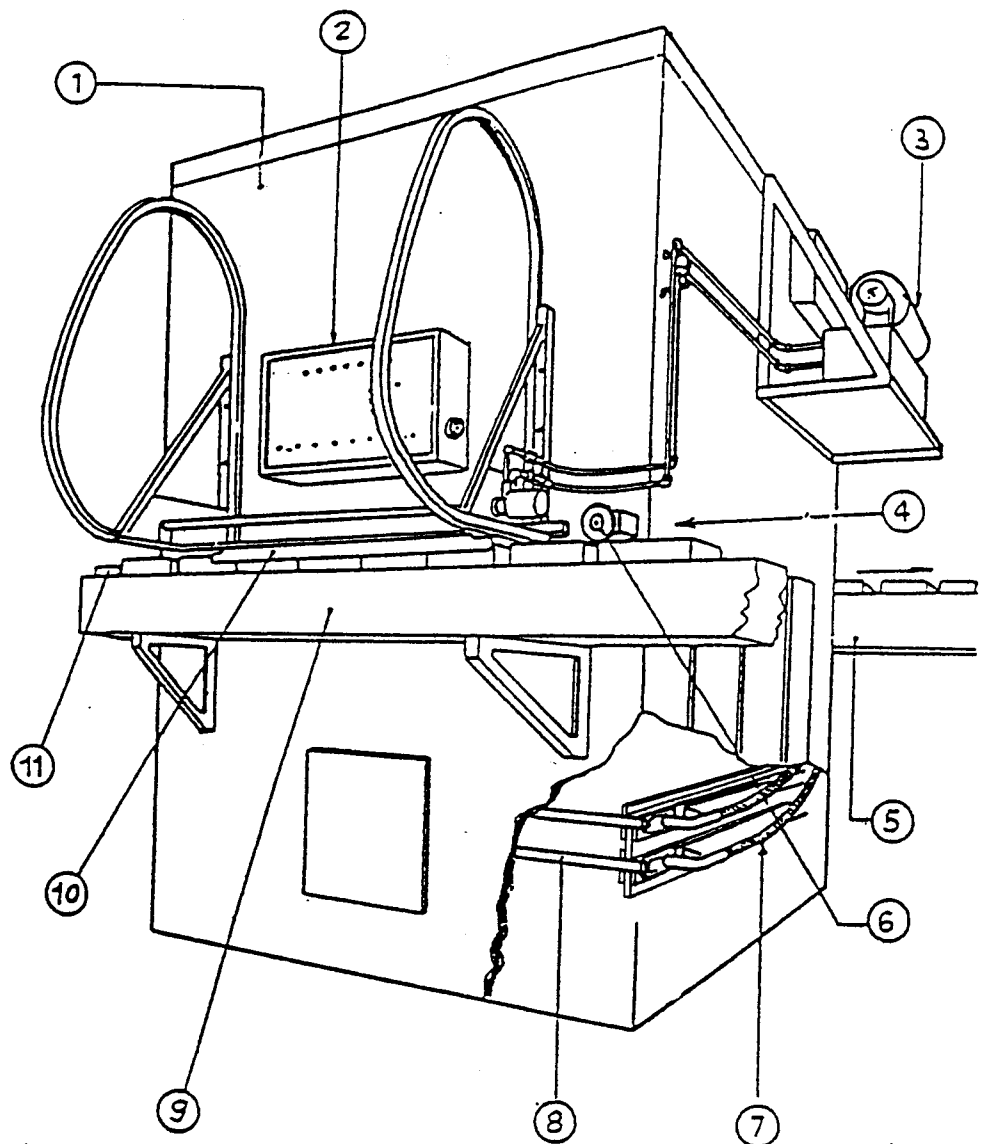


Type	Dimensions		
	A	B	C
	mm		
FM	2.700	2.550	550
FF-FF2-FF2S	2.700	3.700	550
FX-FX2-FX2S	3.100	4.300	550
FX2S/L	3.900	4.300	850

Concrete with minimum pressure strength of 2,5 kg/cm<sup>2</sup>

All data subject to confirmation

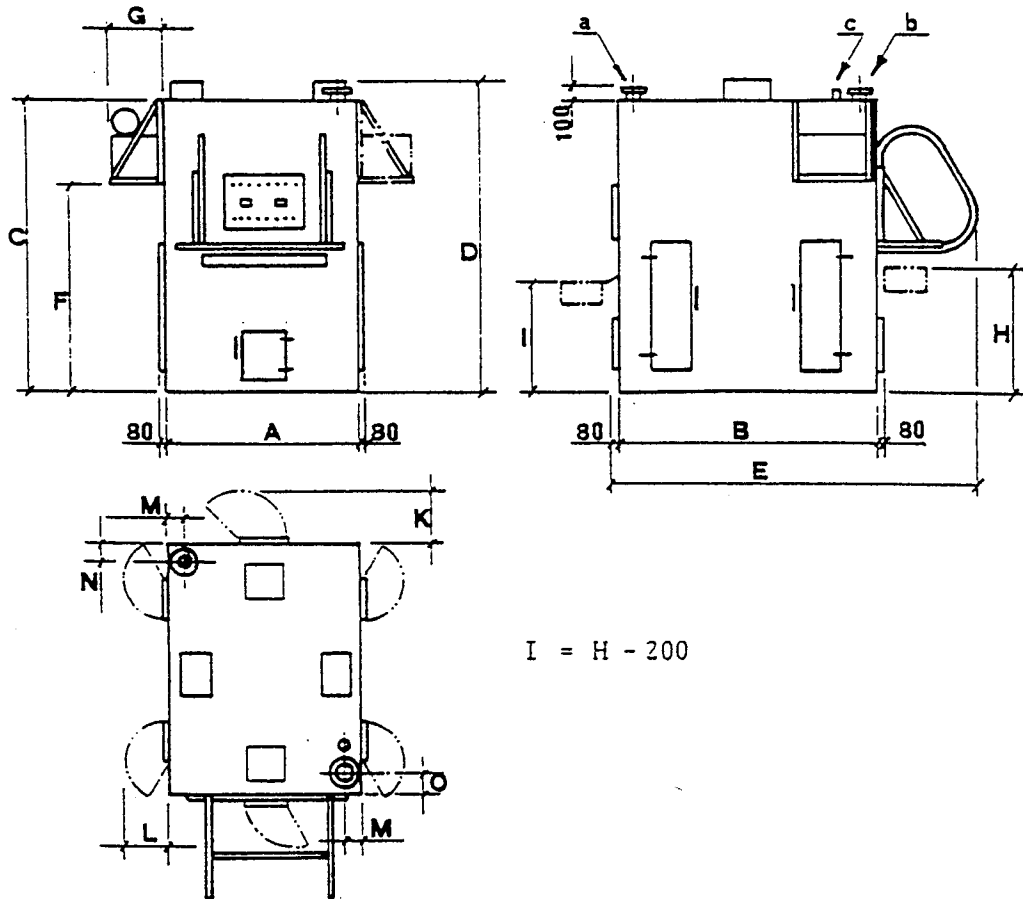
## PLATE FREEZERS - PLATEMATIC

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Components identificationCOMPONENT IDENTIFICATION

- |                     |                      |
|---------------------|----------------------|
| 1 Cabin             | 7 Flexible hoses     |
| 2 Control panel     | 8 Evaporating plates |
| 3 Hydraulic station | 9 Loading belt       |
| 4 Product flow      | 10 Loading device    |
| 5 Unloading belt    | 11 Gate              |
| 6 Sensing motor     |                      |

PLATE FREEZERS - PLATEMATIC

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 Dimensions and weights



Type	FM	FF	FF2	FF2S	FX2	FX2S	
No. stations	8 to 18	8 to 24	12 to 32	15 to 35	12 to 32	15 to 35	
Dimensions mm	A	2.700			3.100		
	B	2.550	3.700			4.300	
	C	2.340	2.950	4.300	5.160	4.300	5.160
	D	2.580	3.300	4.560	5.510	4.560	5.510
	E	4.050	5.150			5.750	
	F	1.150	1.700	3.050	3.900	3.050	3.900
	G	800					
	H	1.050	1.545	2.000	2.440	2.000	2.440
	K	740					
	L	760	590				
	M	170	190	200		220	
	N	170	280	240	250	260	
	O	170	260	215	235	250	
Dry weight for min. station	kg	4.600	7.200	10.500	11.300	12.700	13.700
Dry weight for each addit. stat.	kg	145	210	210		315	
Oil charge for hydraulic unit	kg	100			180		

All data subject to confirmation





## 10.0 SPARE PARTS

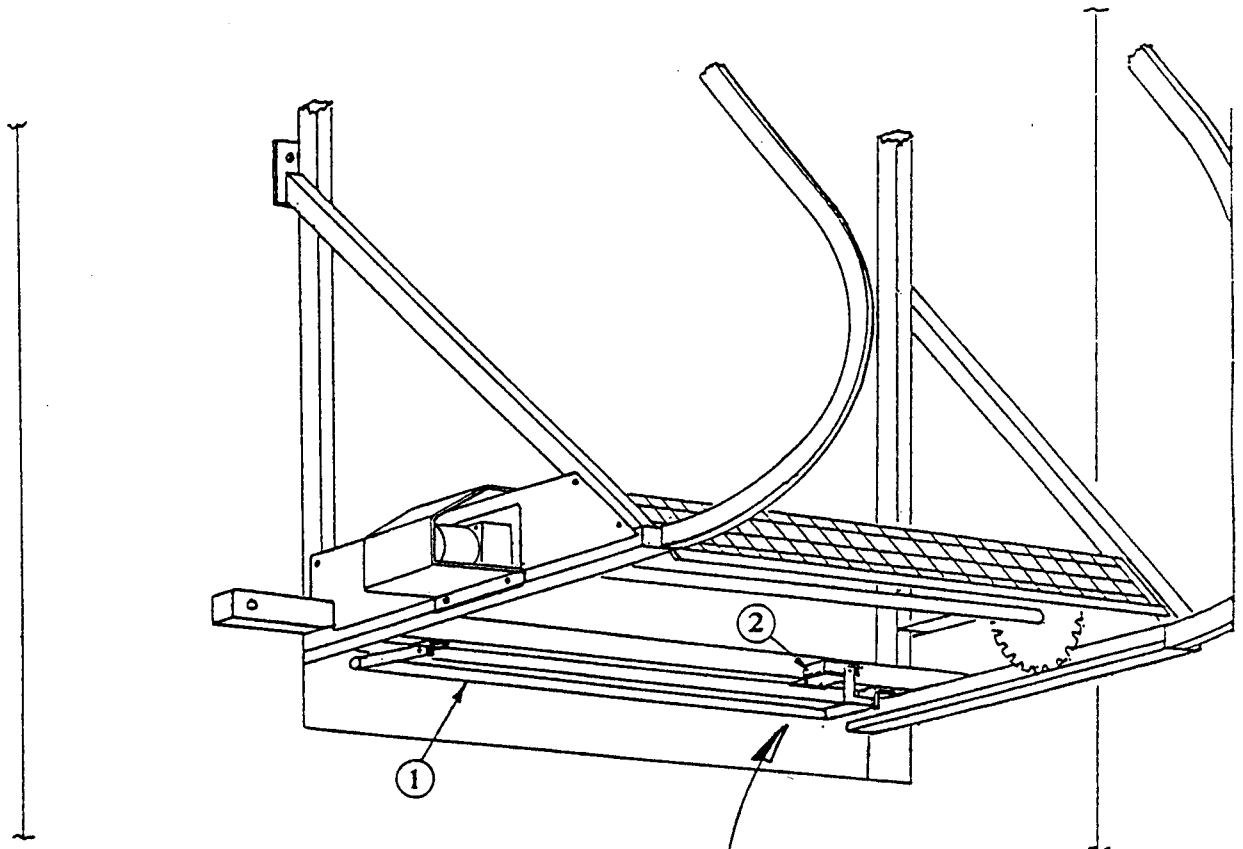
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### 10.1 Set of recommended spare parts

Q.ty	Description	PLATEMATIC FM reference code
10	Flexible hose gasket	0405080
2	Flexible hose	0116605
1	Loading bar	0212648
1	Right chain 1° element	0212608
1	Left chain 1° element	0212344
1	Special bar end	0213100
1	Right bar end	0213098
1	Left bar end	0213097
2	Rubber wheel	1316013
1	Sensing wheel assembly	1223358
2	Sensor switch N. C.	1223429
2	Sensor switch N. O.	1223430
3	Safety switch for doors and grids	1223446
1	Gasket set for cylinder	0411116
1	Coil for hydraulic valve	1312099
1	Filter for hydraulic station	-----

PLATE FREEZERS - PLATEMATIC

Loading safety bar



- 1. Safety bar
- 2. Microswitch
- 3. Adjusting screw
- 4. Frame loading device
- 5. Loading bar

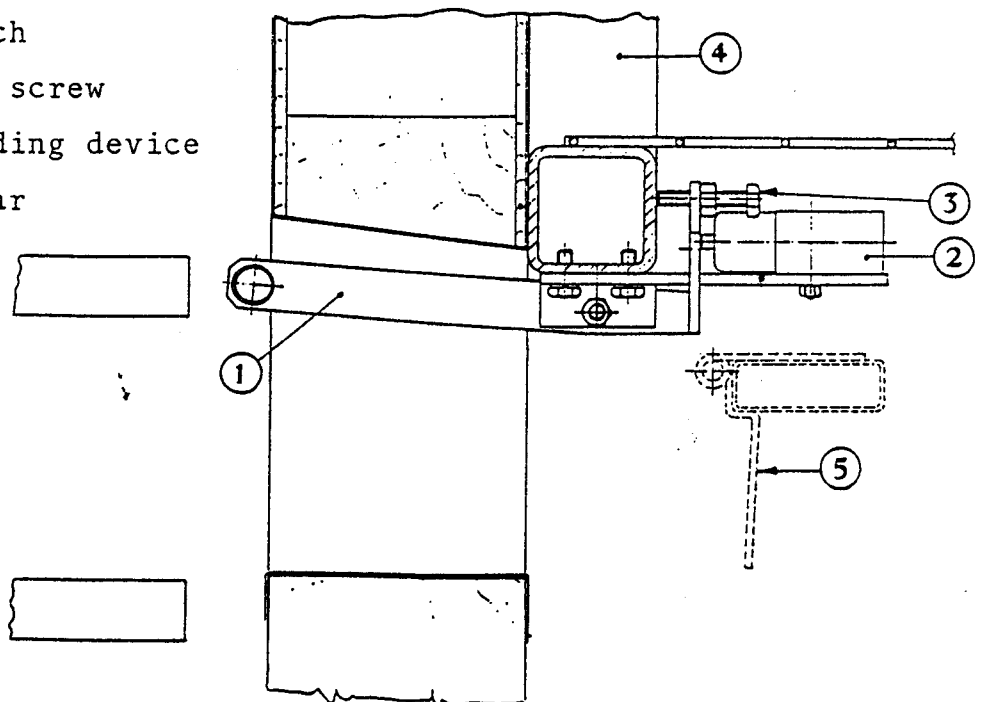
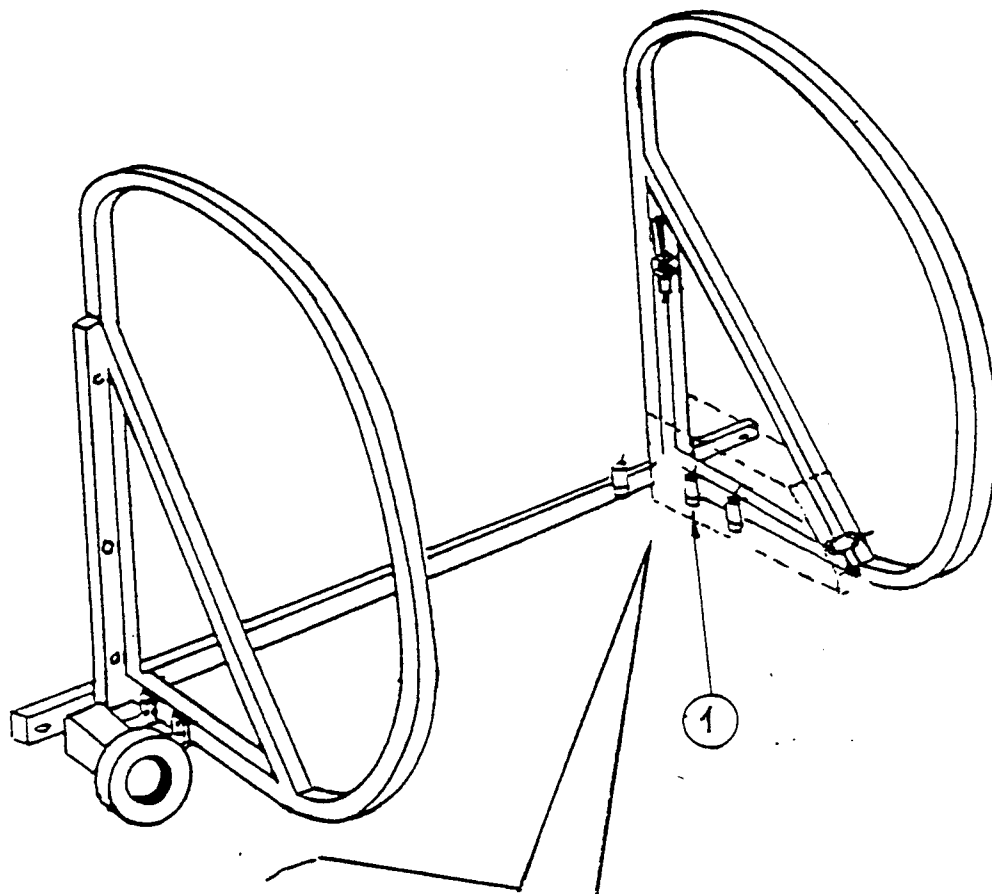


PLATE FREEZERS - PLATEMATIC

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Loading device - Forward sensor position



- 1 - "Forward" sensor
- 2 - Bracket
- 3 - Cam

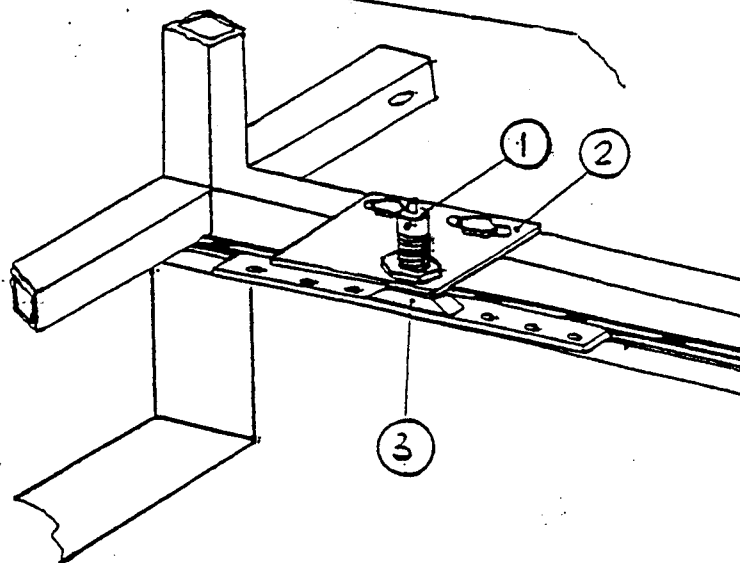
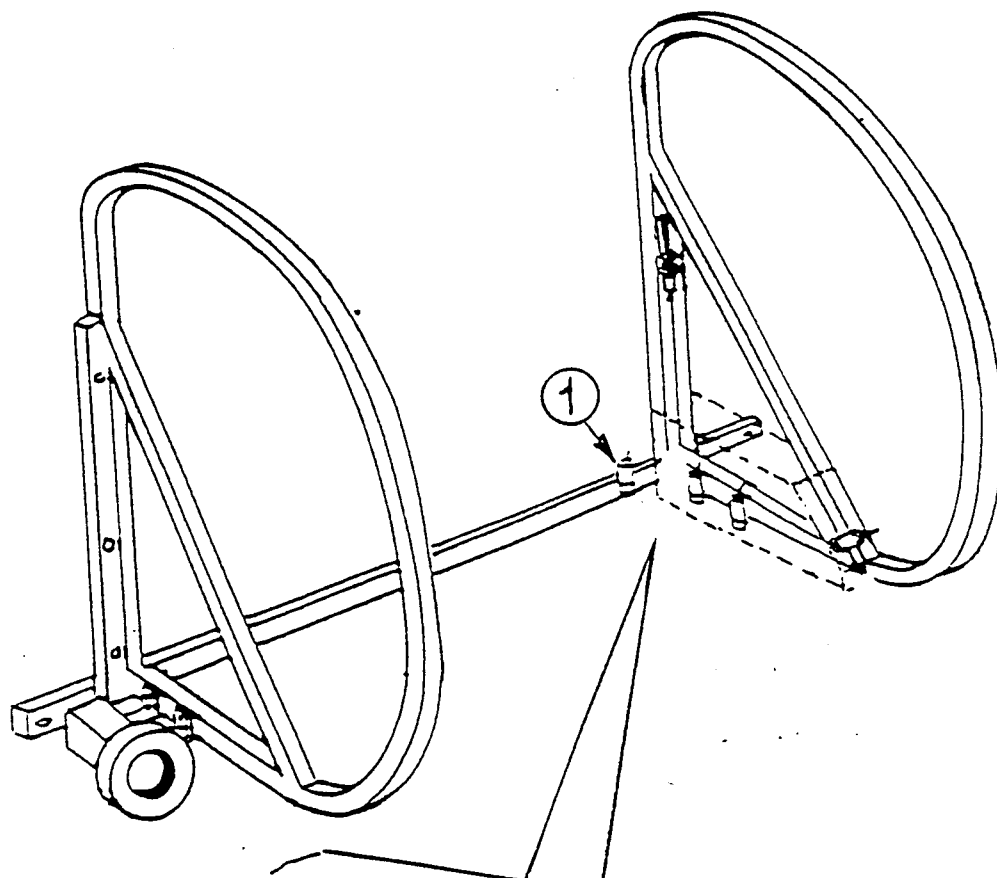


PLATE FREEZERS - PLATEMATIC

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Loading device - Intermediate sensor



- 1 - Intermediate sensor
- 2 - Bracket

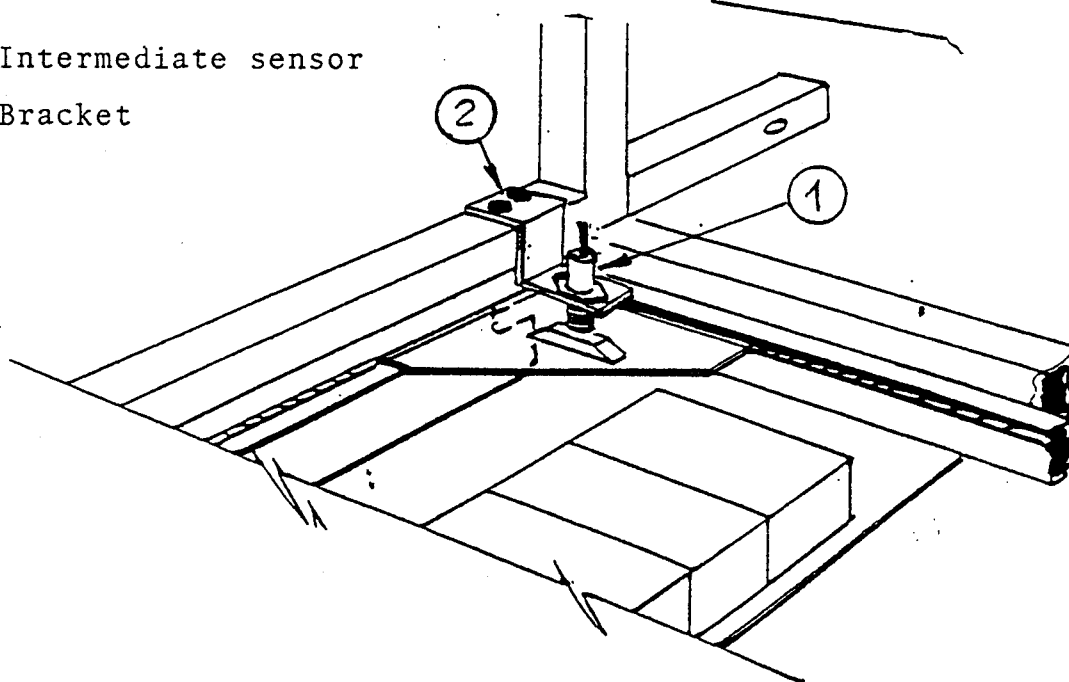
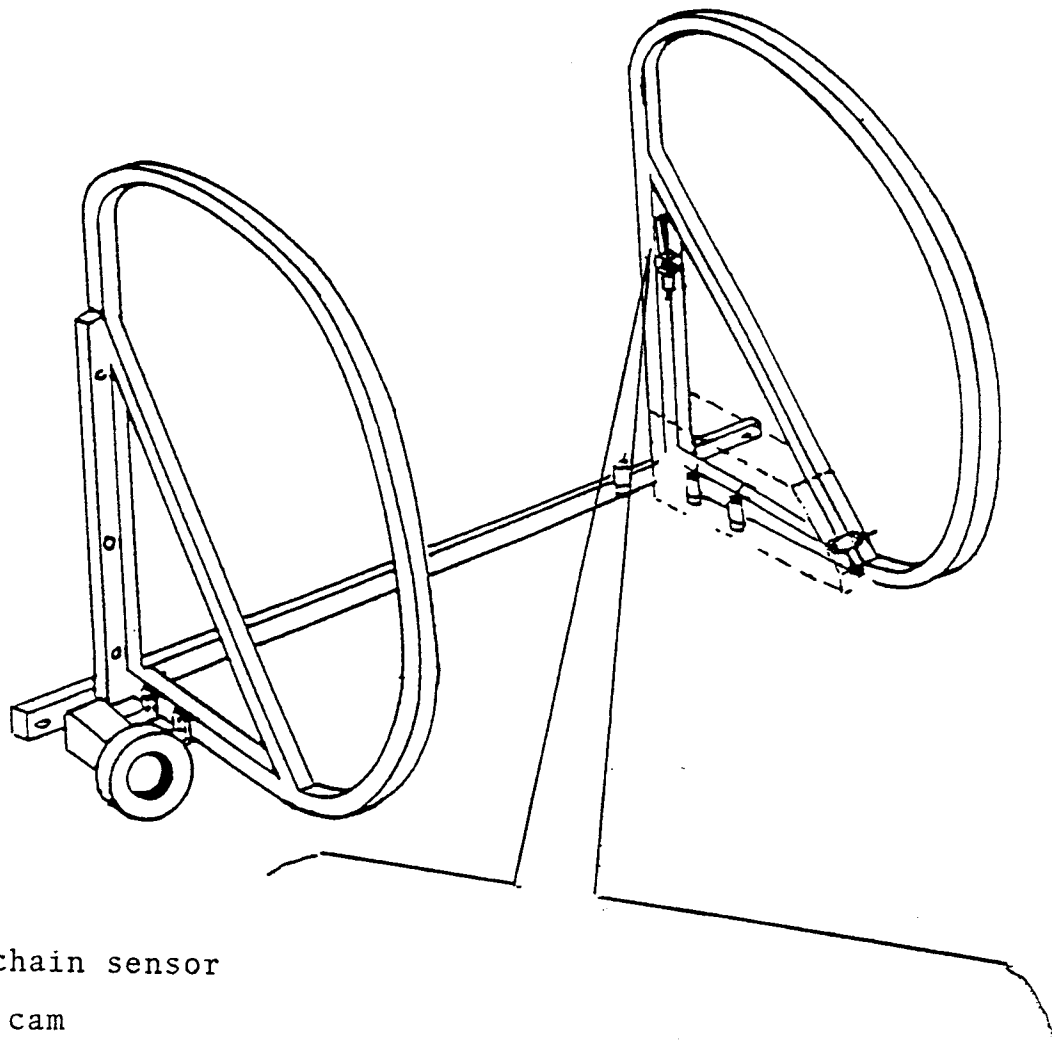


PLATE FREEZERS - PLATEMATIC

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Loading device - Safety chain sensor



- 1 - Safety chain sensor
- 2 - Driving cam
- 3 - Spring for cam

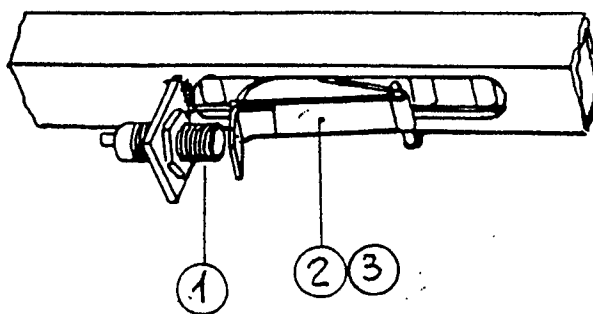
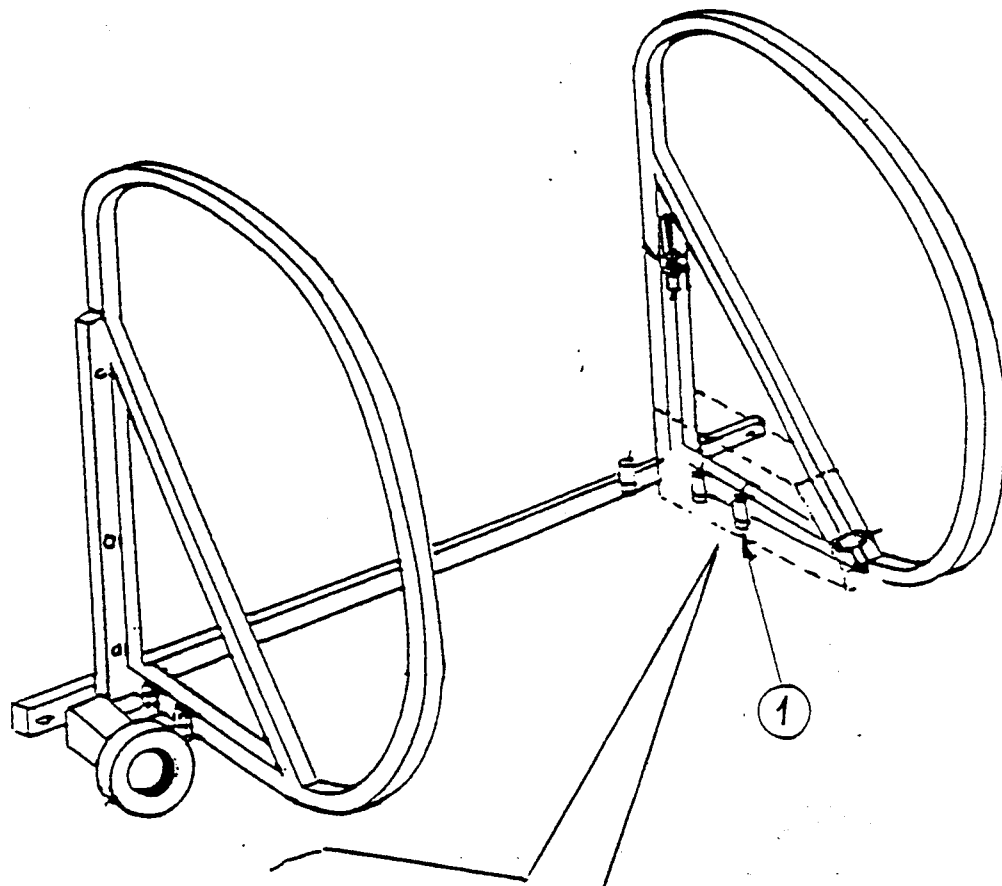


PLATE FREEZERS - PLATEMATIC

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Loading device - Rear sensor



- 1 - Rear sensor
- 2 - Bracket adjustable
- 3 - Cam

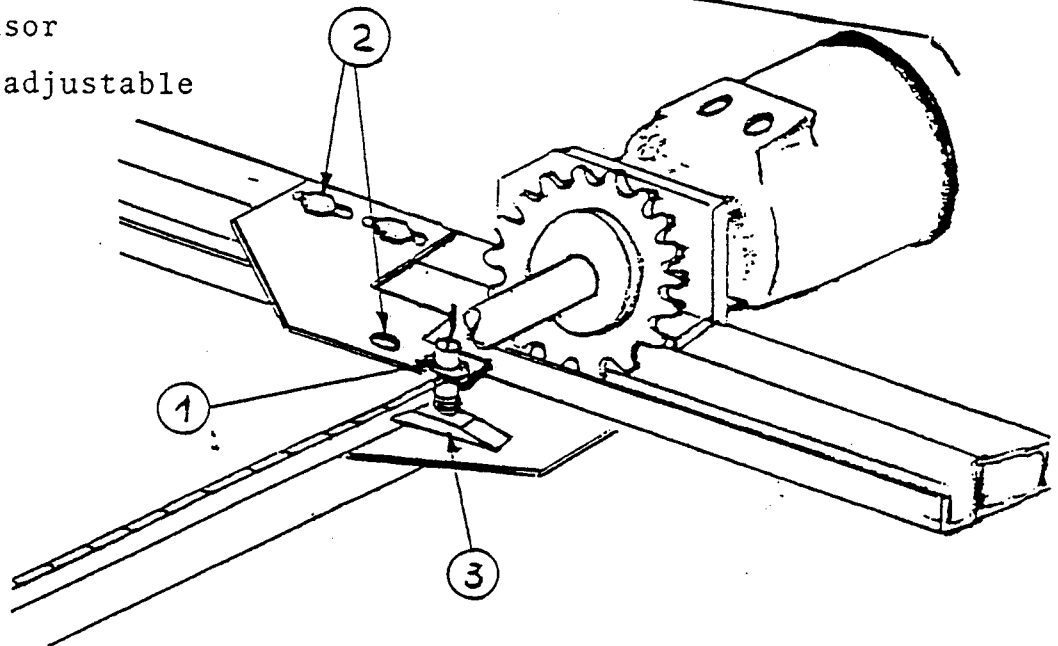
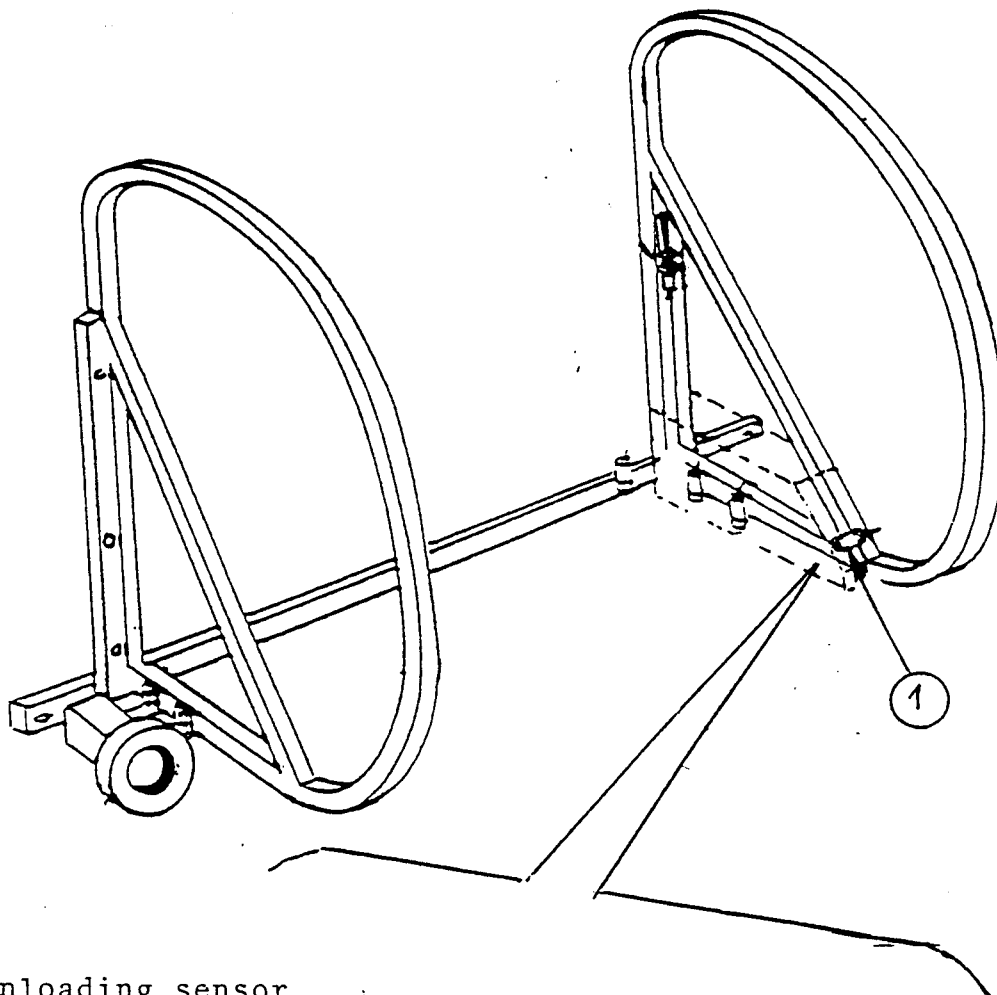


PLATE FREEZERS - PLATEMATIC

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Loading device - Full unloading sensor



- 1 - Full unloading sensor
- 2 - Driving cam
- 3 - Spring for cam

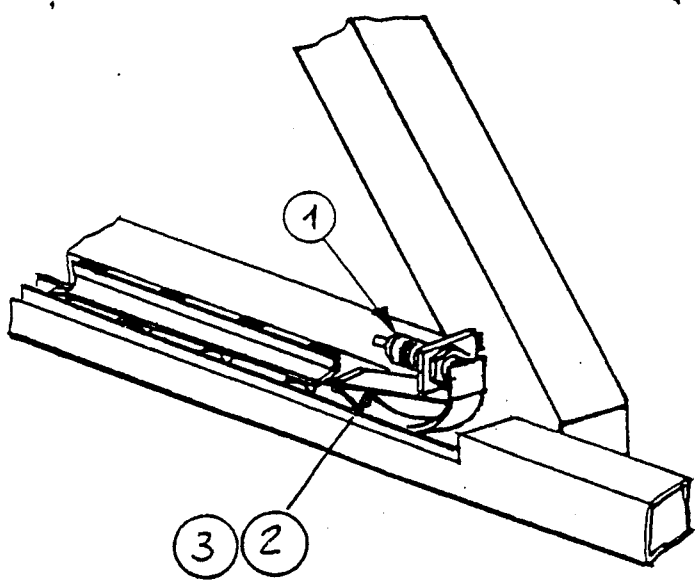
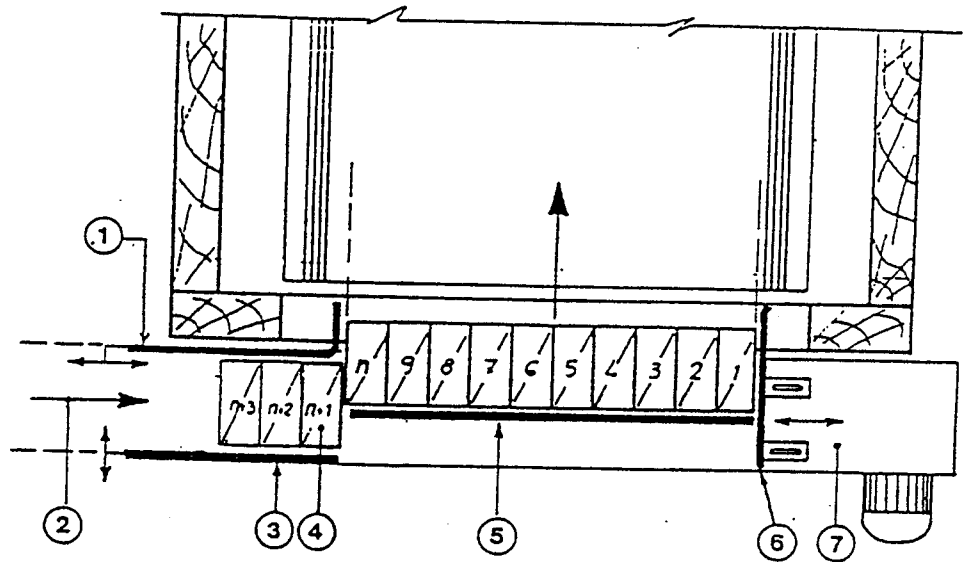


PLATE FREEZERS - PLATEMATIC

Adjustment of loading bar length



1. Adjustable inside guide
2. Packages entry direction
3. Adjustable outside guide
4. Package not introduced
5. Shortened bar suitable to introduce N. packages without crashing package N.+1
6. Adjustable gate
7. Loading belt
8. Shorten ends (shortened according to necessity)
9. Cotter pin
10. Pivot
11. Alternative shorten end for quickly setting
12. Adjustment screws

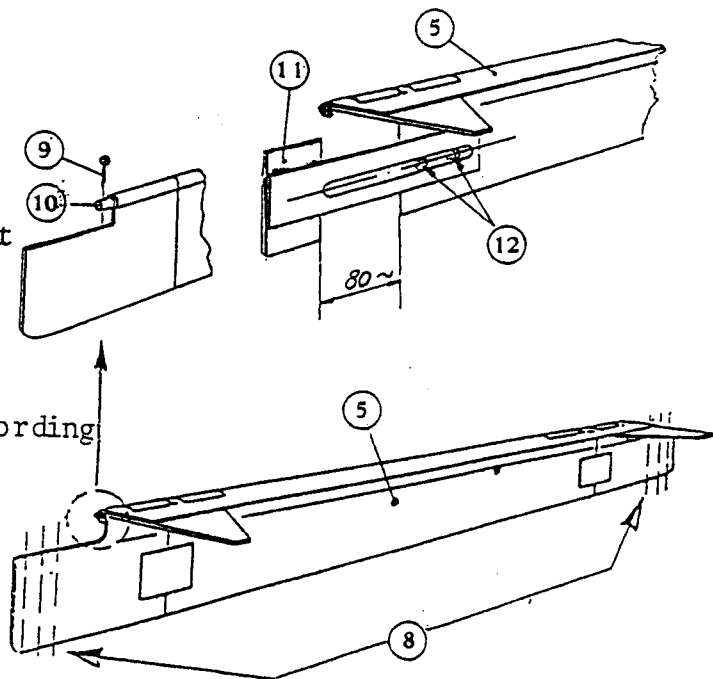




PLATE FREEZERS - PLATEMATIC

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Sensor switches inside freezer

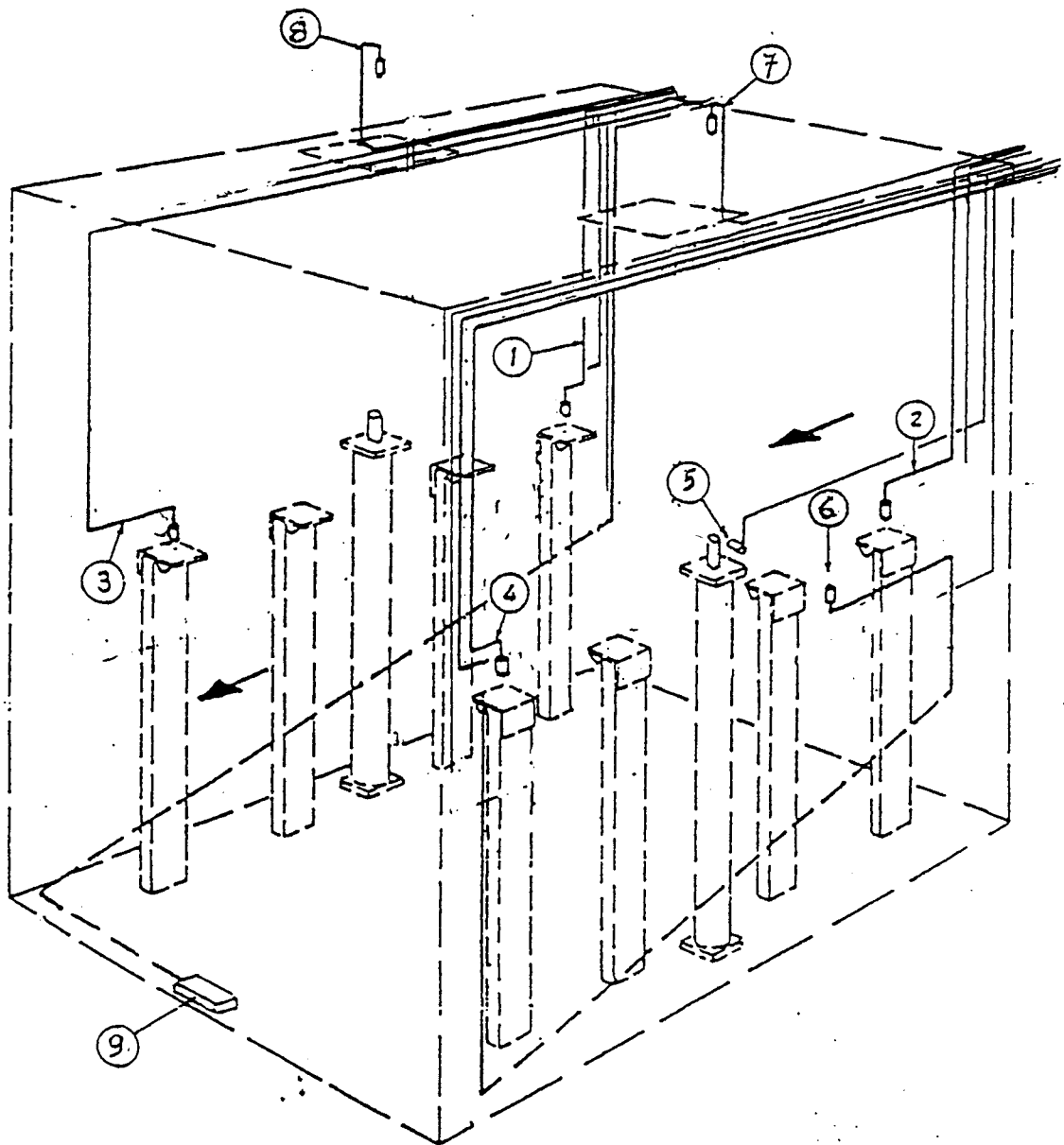
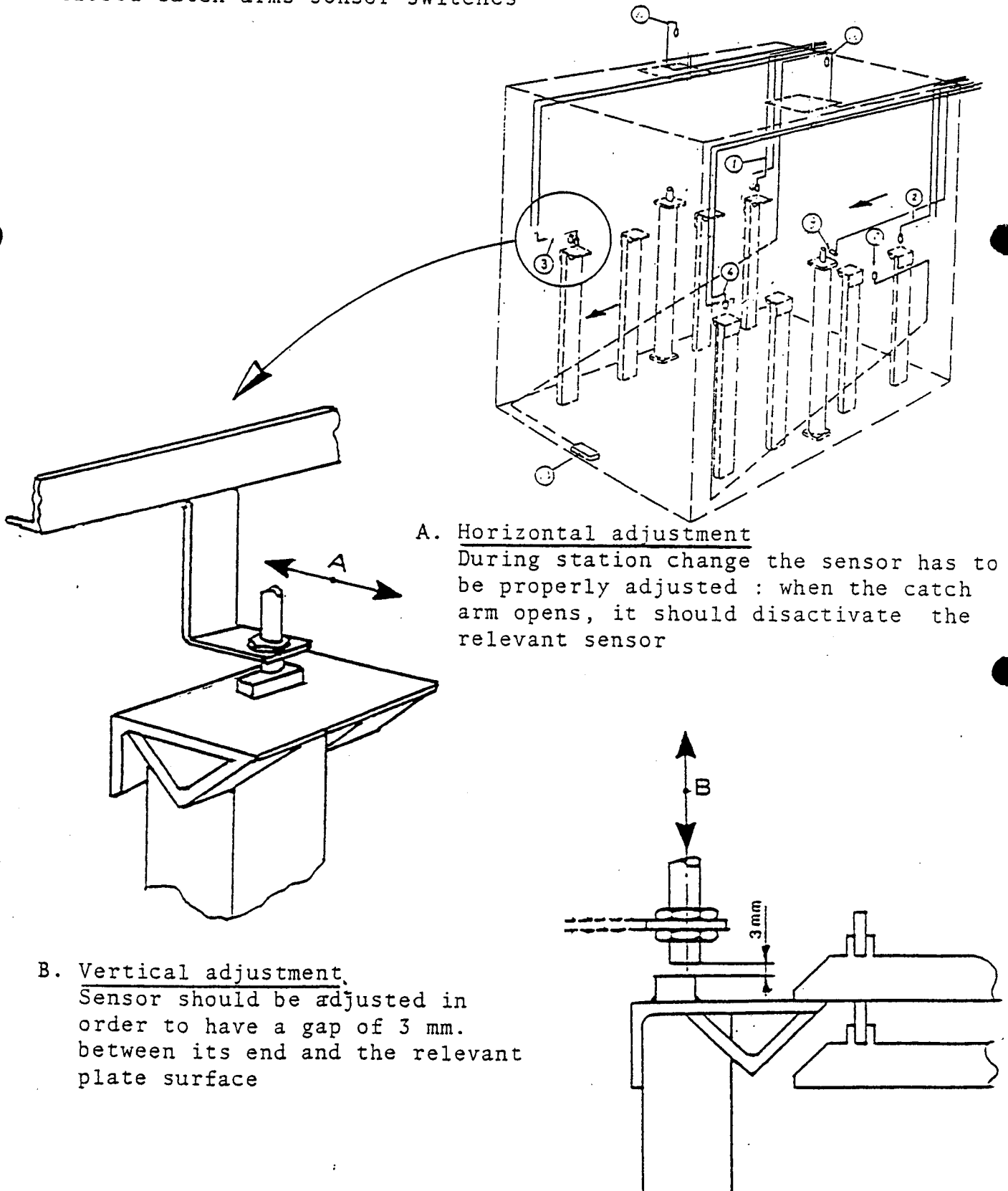


PLATE FREEZERS - PLATEMATIC

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 Closed catch arms sensor switches



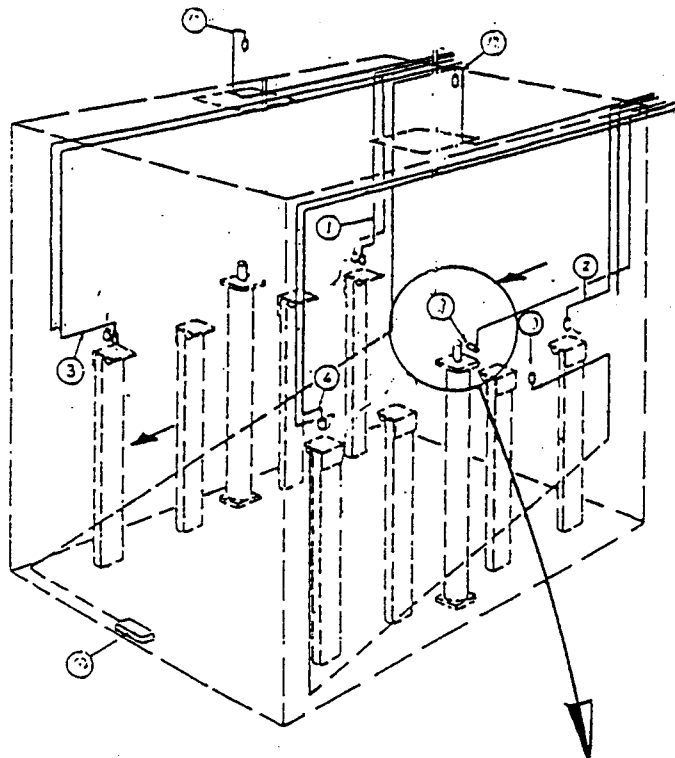
A. Horizontal adjustment  
 During station change the sensor has to be properly adjusted : when the catch arm opens, it should disactivate the relevant sensor

B. Vertical adjustment.  
 Sensor should be adjusted in order to have a gap of 3 mm. between its end and the relevant plate surface

PLATE FREEZERS - PLATEMATIC

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'Plates in freezing position' sensor switch



During plate stack down stroke the bracket (4) interests the sensor (2) which signals the 'freezing position'.

- 1) Yoke
- 2) Sensor switch
- 3) Bracket supporting sensor
- 4) Adjustable bracket

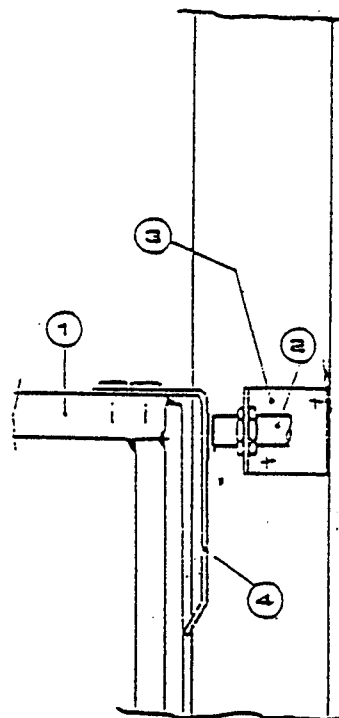
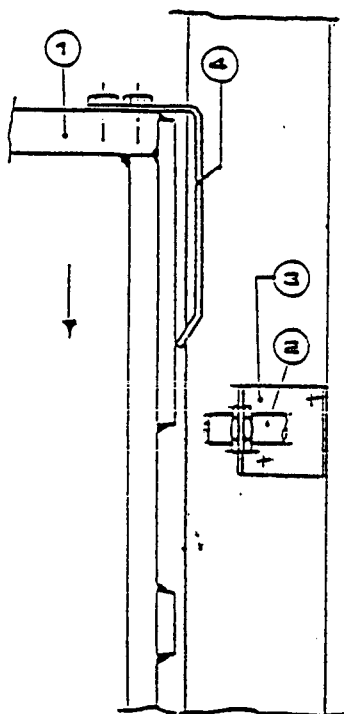
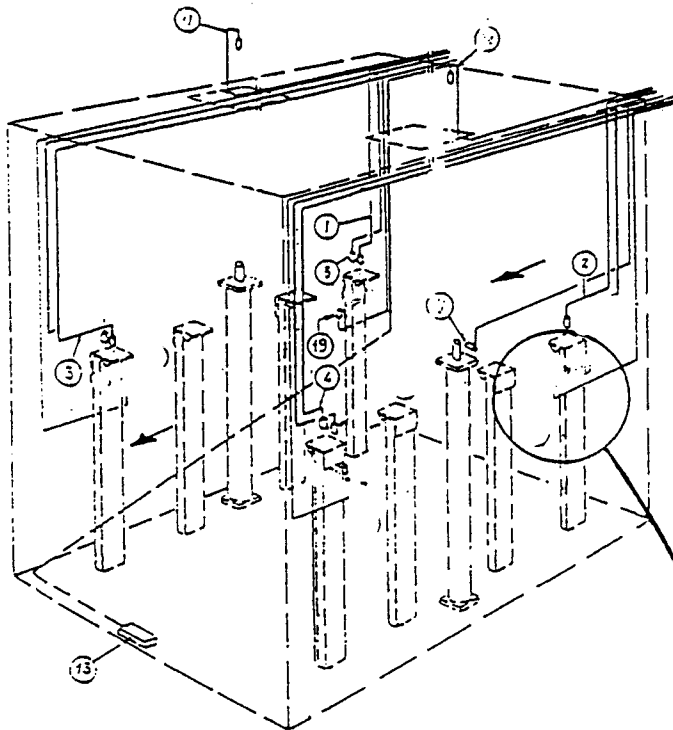


PLATE FREEZERS - PLATEMATIC

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'Plates in loading position' sensor switch



It controls the correct position of plates during the loading cycle.

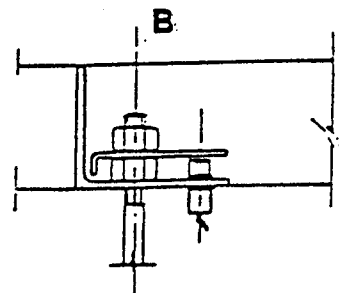
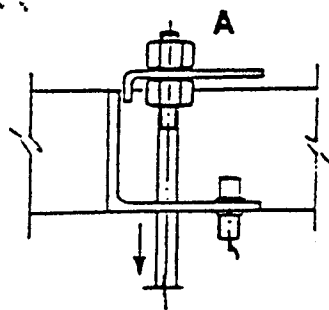
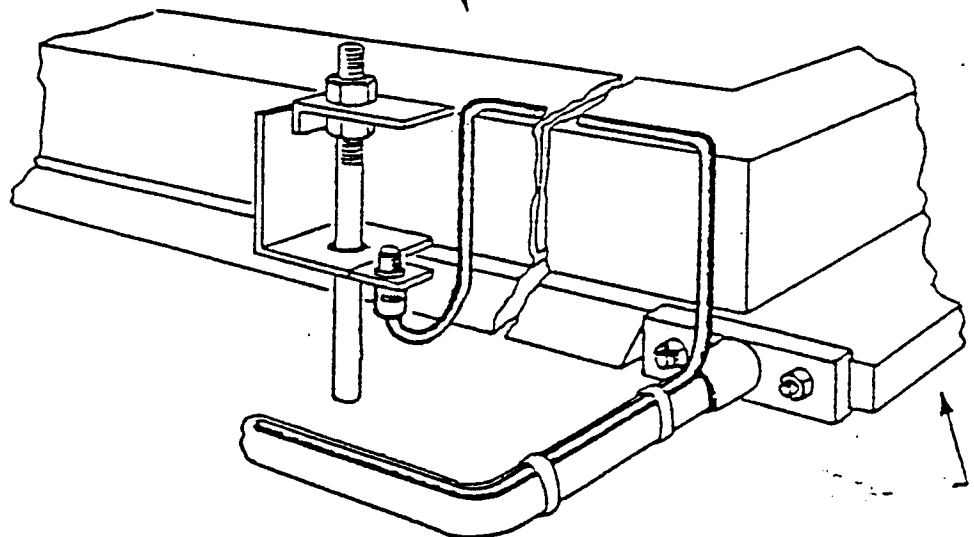
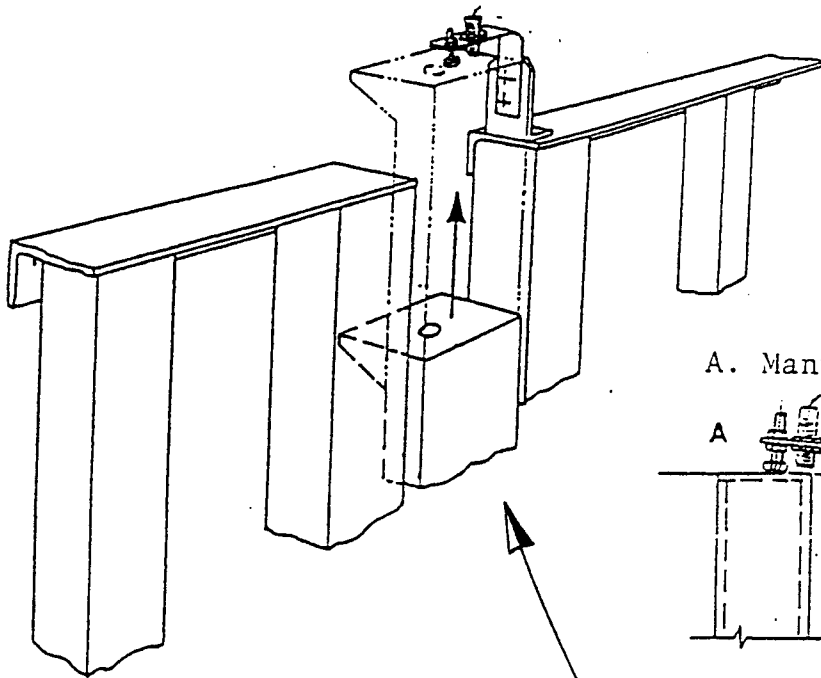
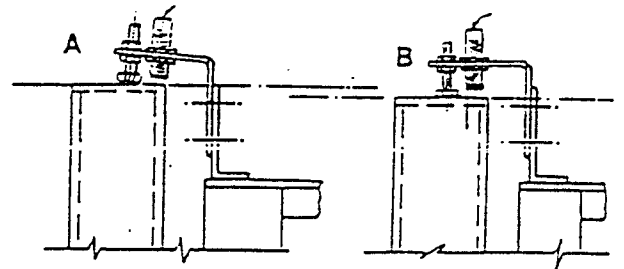


PLATE FREEZERS - PLATEMATIC

'Plates in upper position' sensor switches (left and right)



A. Manual up movement



B. Automatic up movement  
(10 mm. lower)

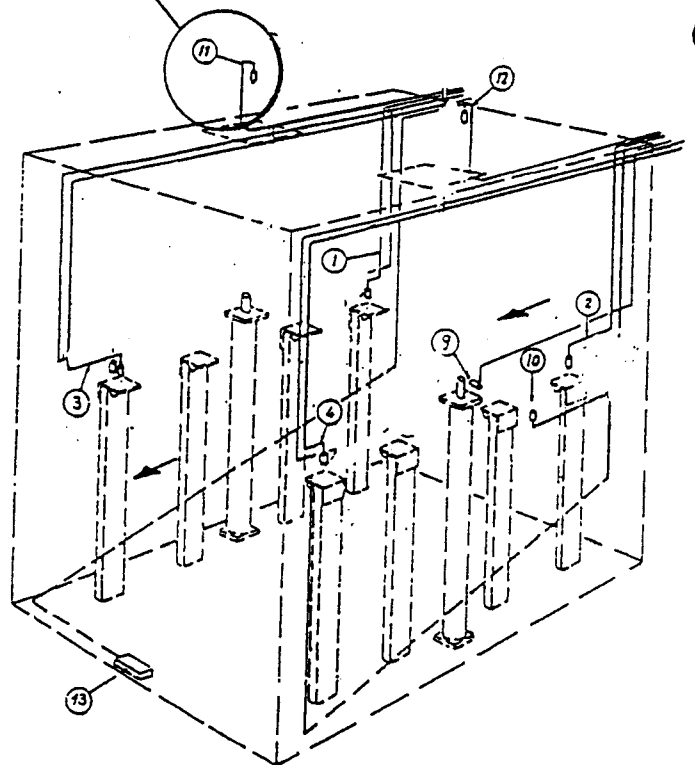


PLATE FREEZERS - PLATEMATIC

-----  
Horizontality device

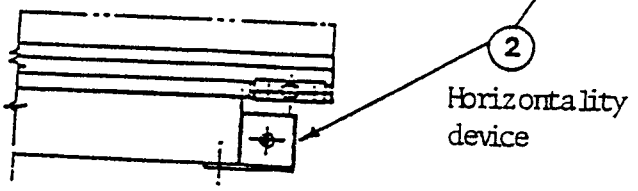
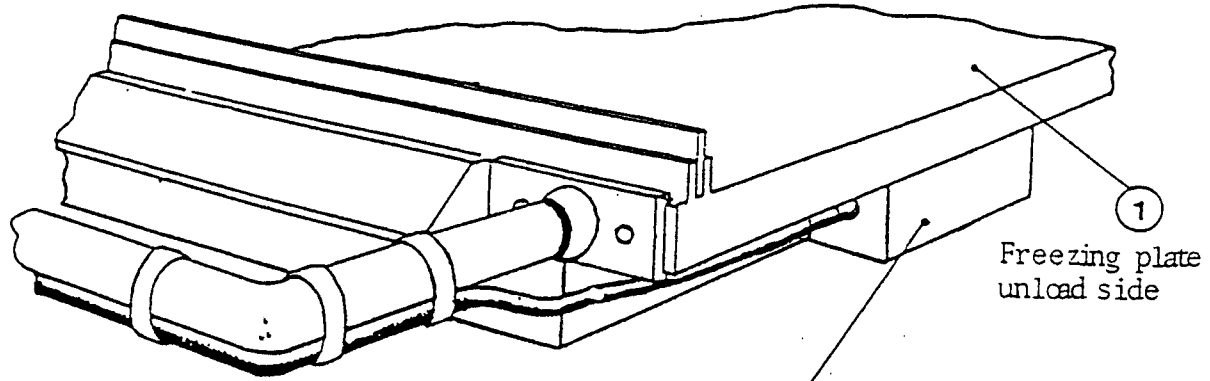
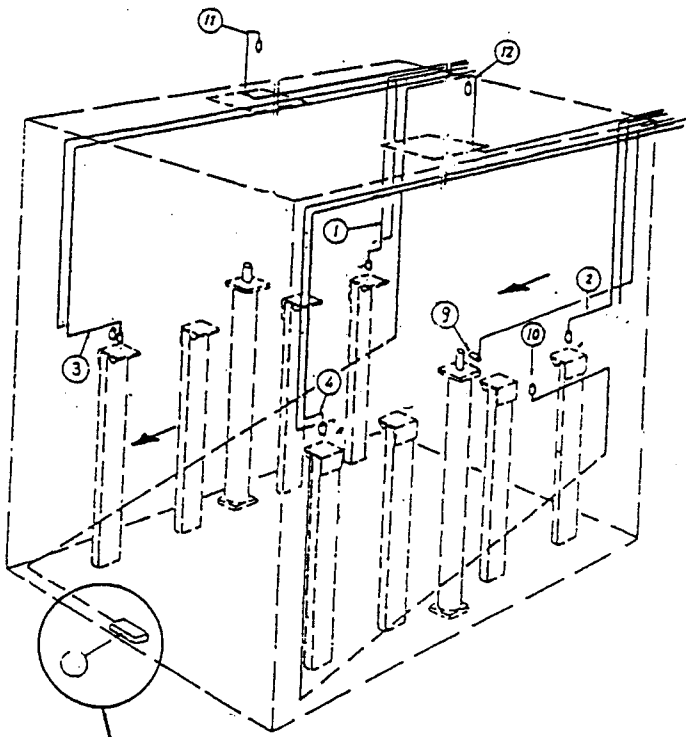
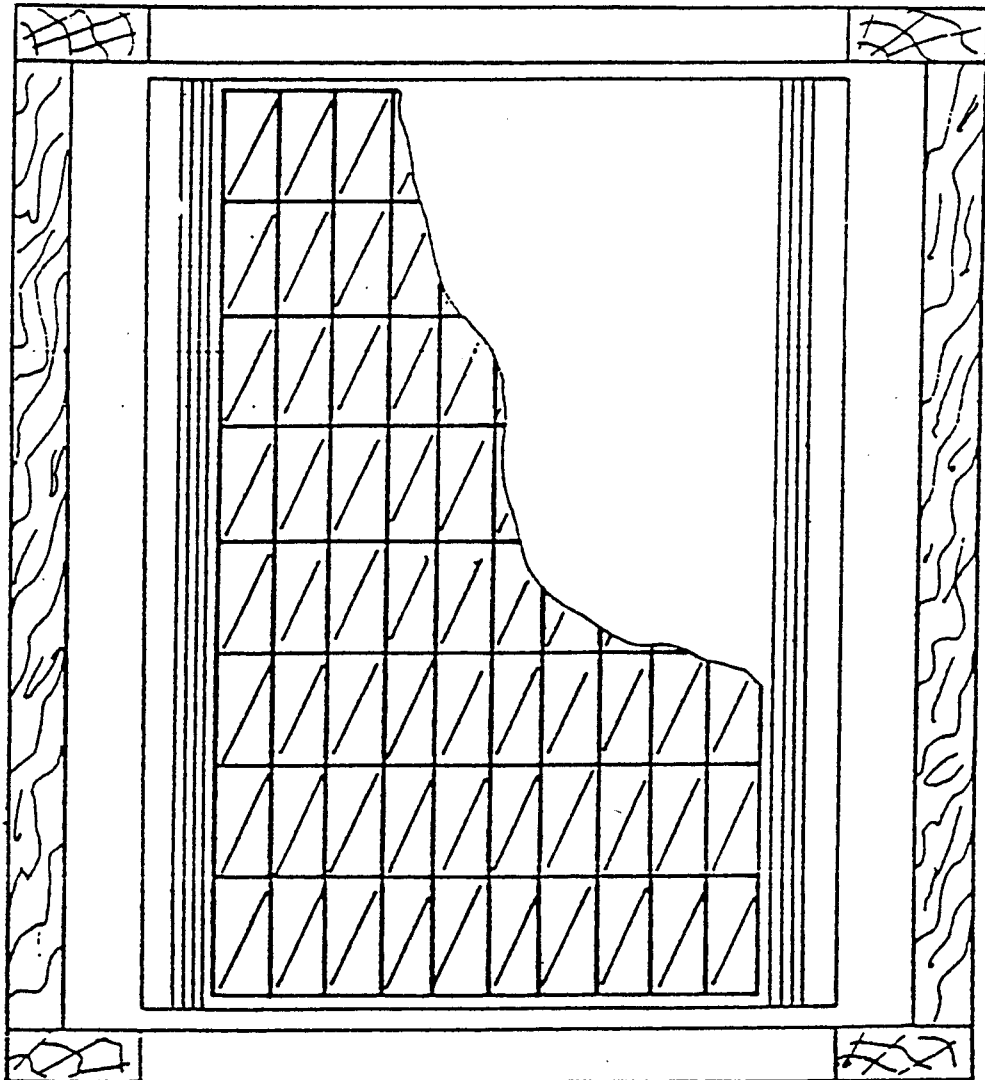
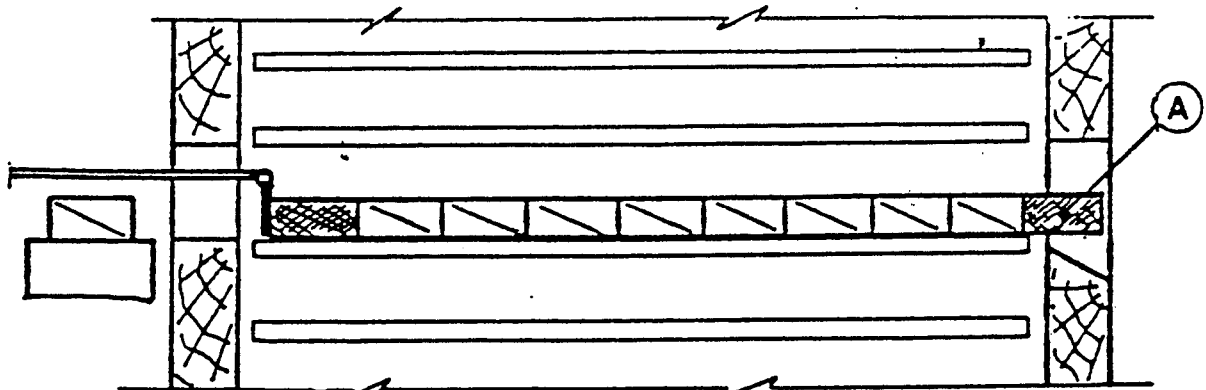


PLATE FREEZERS - PLATEMATIC

-----  
Example of product arrangement on the plate



'forward' encoder position adjustment



A. Gravity centre of package is outside the plate

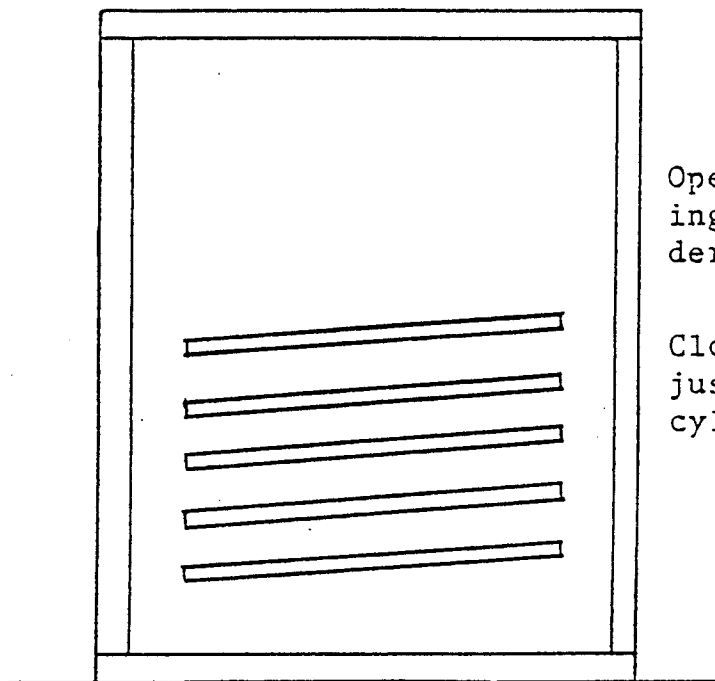
# PLATE FREEZERS - PLATEMATIC

---

Adjustment of freezing plates horizontality

(Note : max. plate stack down-stroke speed : 65+70 mm/sec. approx)

UP-MOVE  
MENT

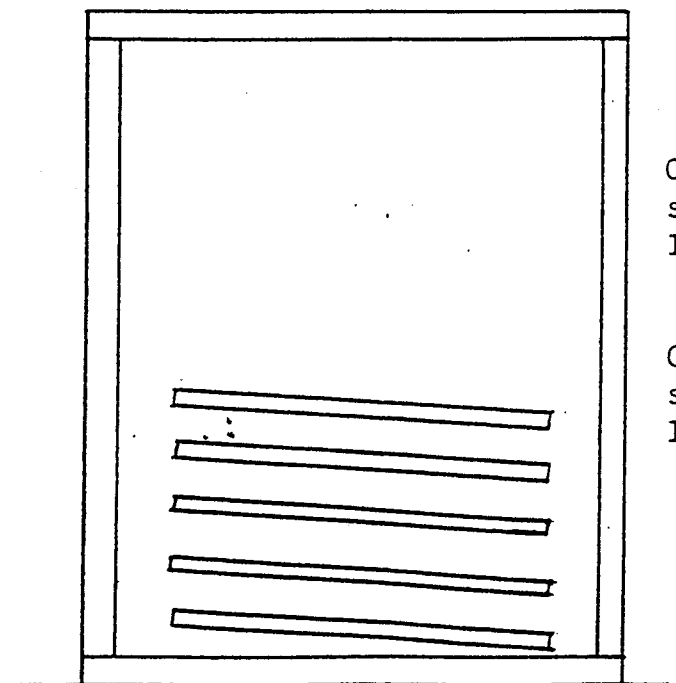
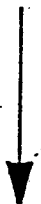


Open UP-MOVEMENT adjusting valve of left cylinder

OR :

Close the up-movement adjusting valve of right cylinder

DOWN MO  
VEMENT



Open DOWN-MOVEMENT adjusting valve of left cylinder

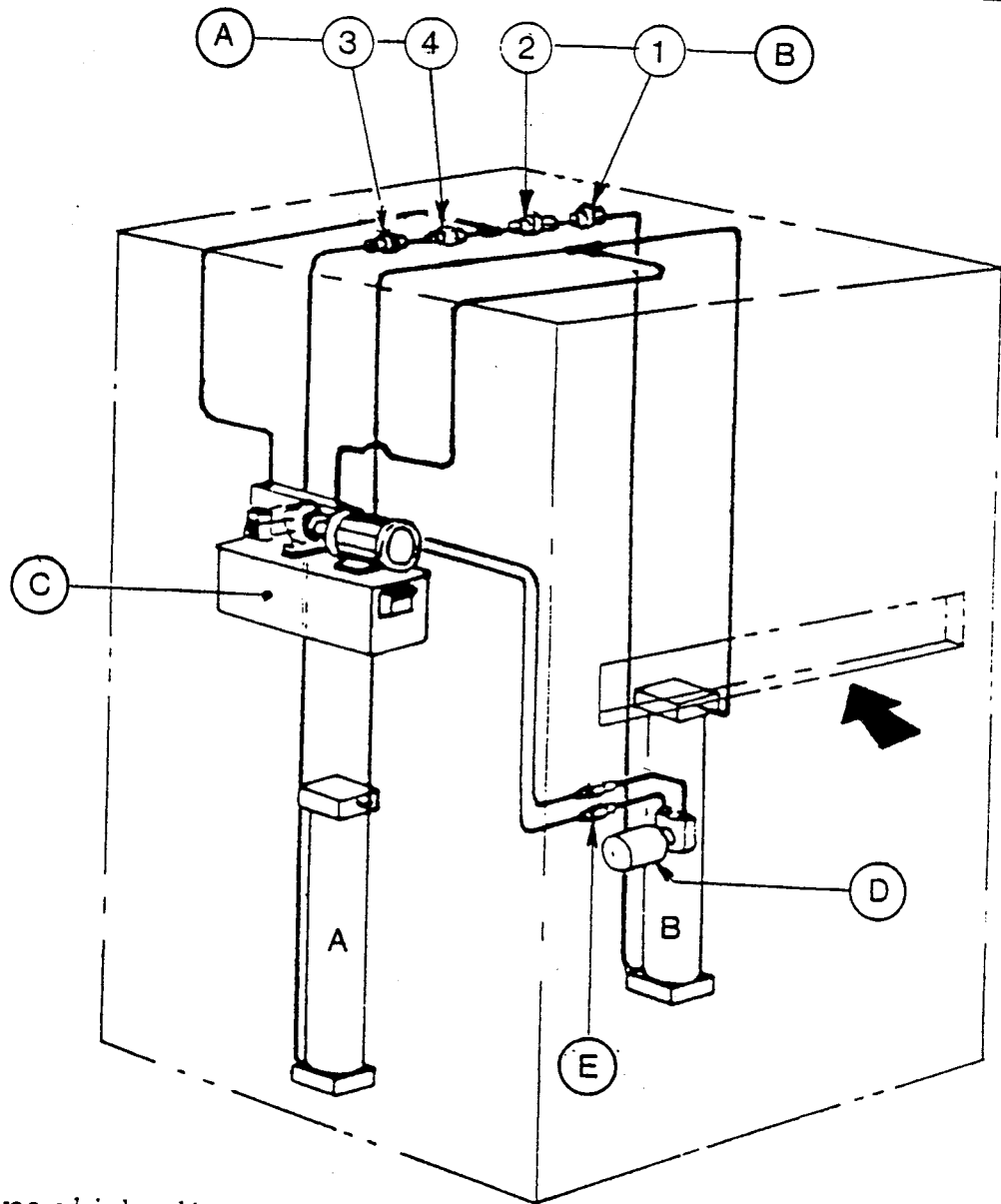
OR :

Close down-movement adjusting valve of right cylinder



PLATE FREEZERS - PLATEMATIC

COMPONENTS OF HYDRAULIC CIRCUIT AND THEIR ADJUSTMENT (STATION ON THE LEFT)



- (A) Valves which adjust speed of A left cylinder :  
(3) down movement - (4) up movement
- (B) Valves which adjust speed of B right cylinder:  
(1) down movement - (2) up movement
- (C) Hydraulic station
- (D) Hydraulic motor for loading bar
- (E) Valves which adjust speed of motor D

## PLATE FREEZERS - PLATEMATIC

Oil flow regulating system for loading bar speed

The drawing shows

- the valve regulating forward bar speed is the one through which the oil passes coming out from the motor
- the oil outlet turns around the motor, with a flow opposite to the shaft rotating sense

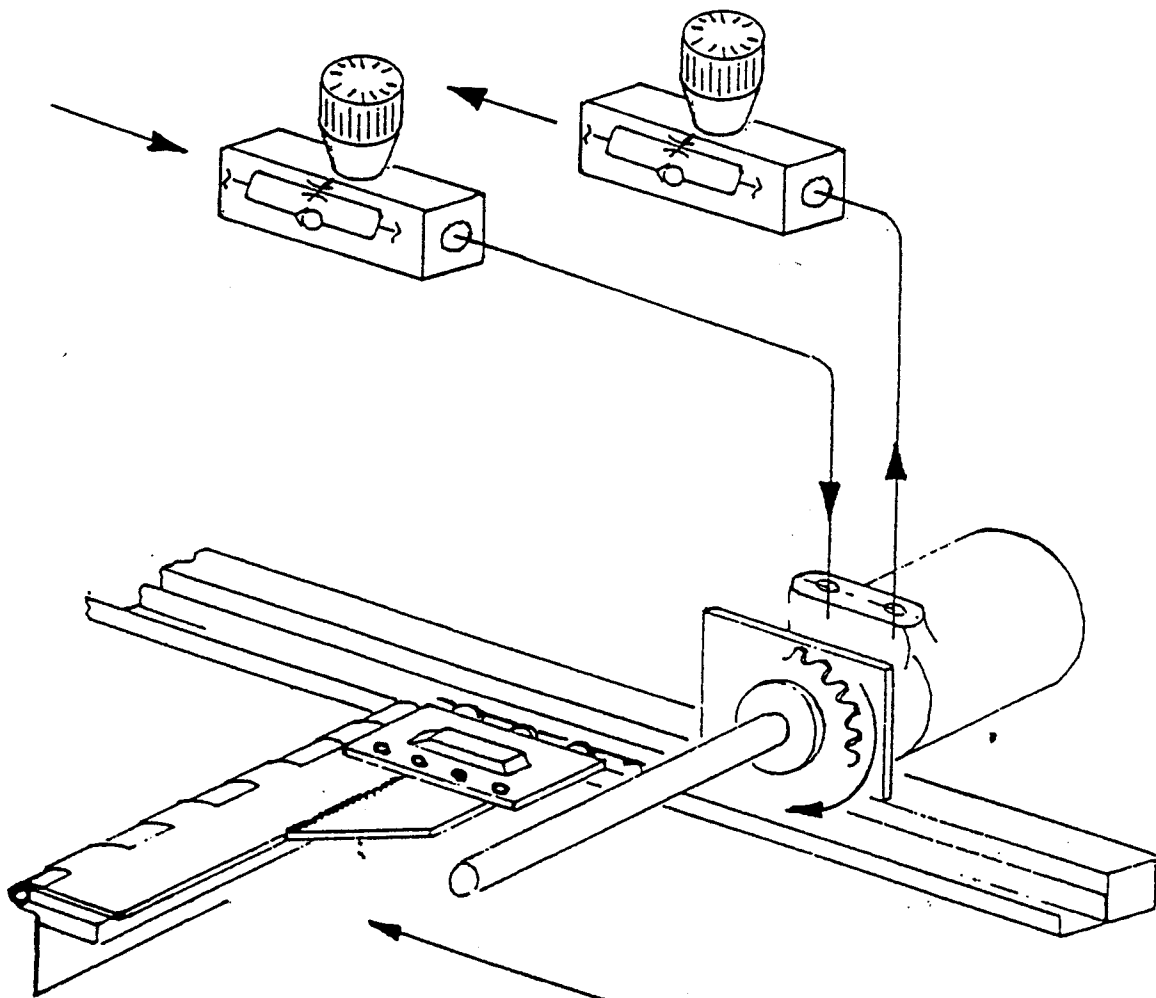
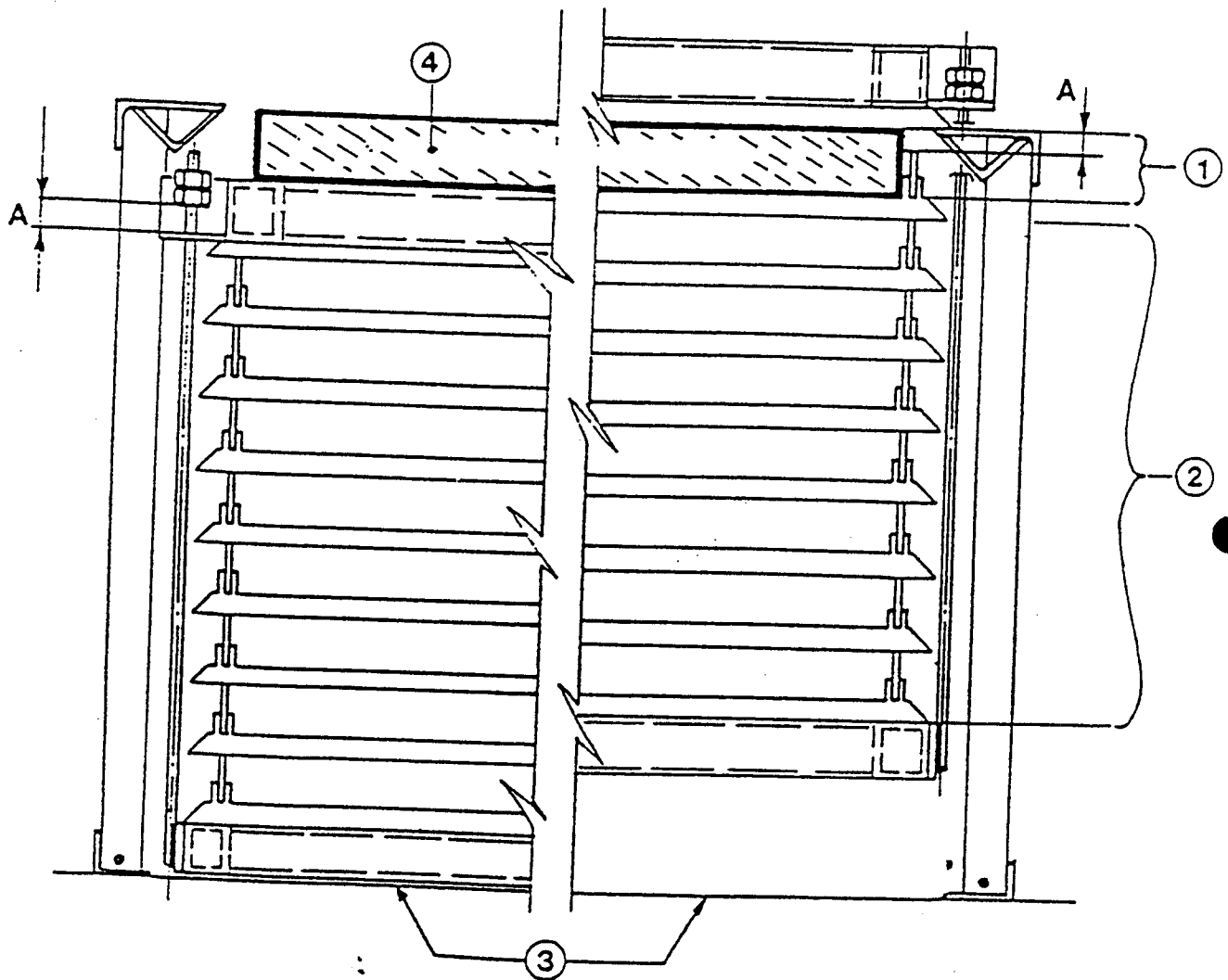


PLATE FREEZERS - PLATEMATIC

---

Positioning of first freezing station

A = 6 to 7 cm (same distance for all the 8 holders)



1. Open station

2. Closed stations

3. Floor

4. Loading inlet

PLATE FREEZERS - PLATEMATIC

---

Photocell at unloading

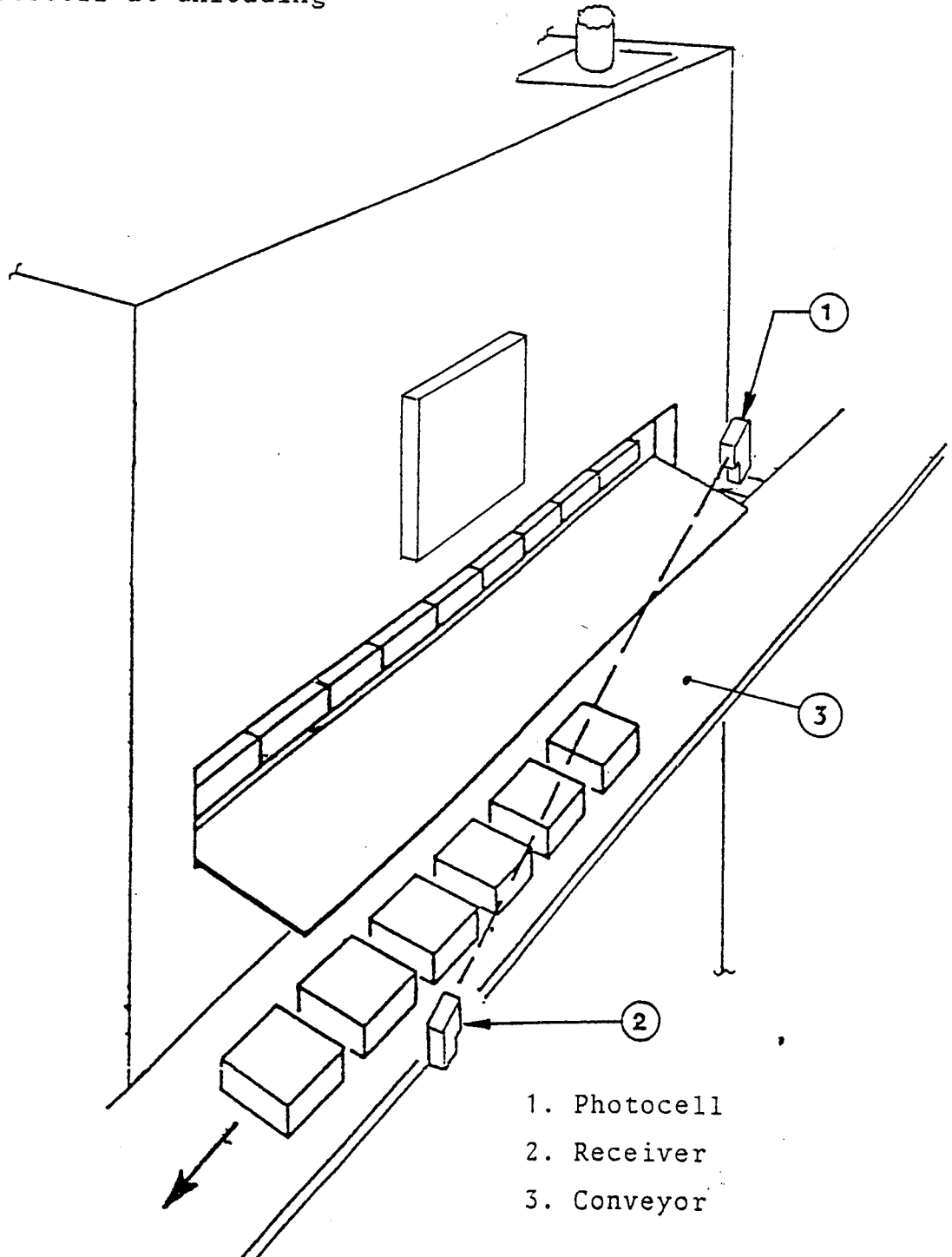
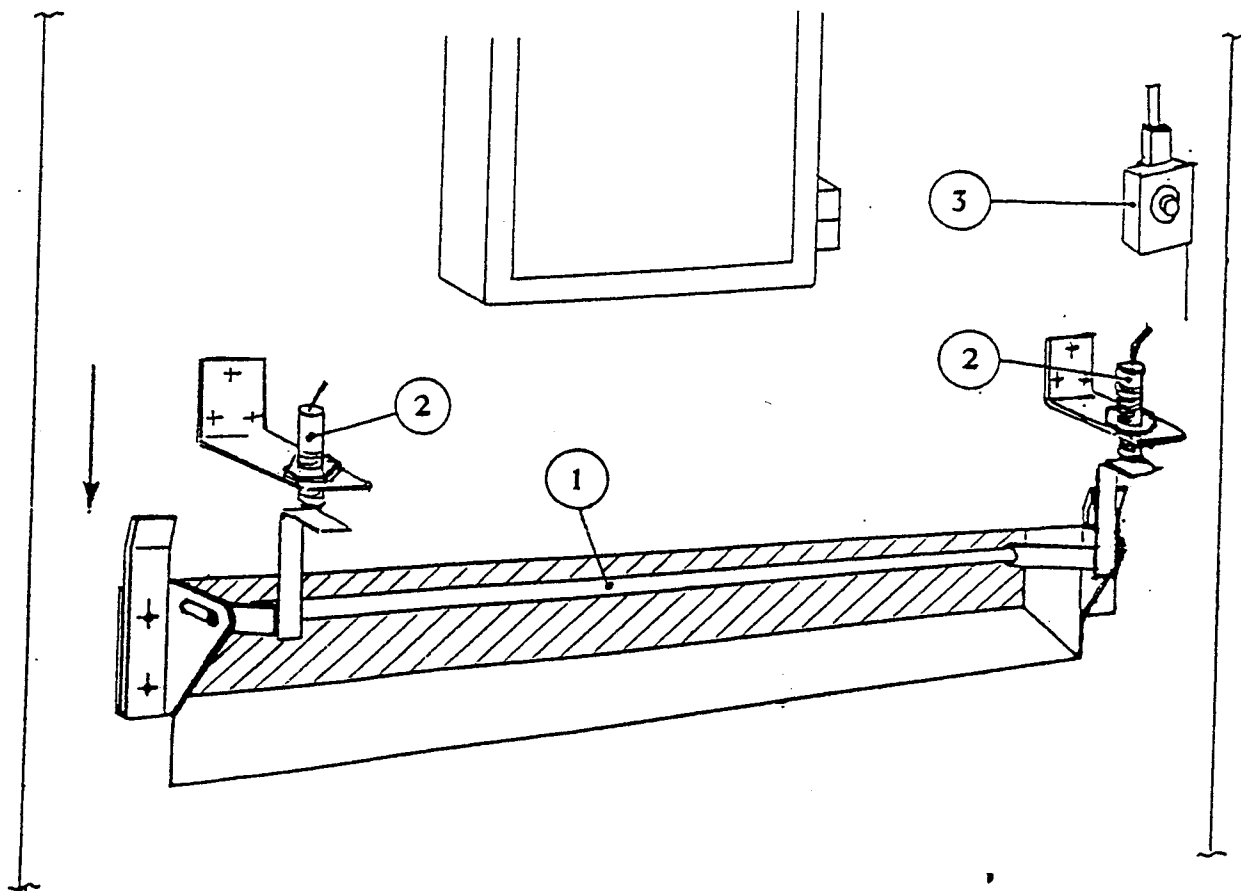


PLATE FREEZERS - PLATEMATIC

---

Unloading safety bar



- 1 Unload safety bar
- 2 Safety bar sensor switch
- 3 RESET button

PLATE FREEZERS - PLATEMATIC

Hydraulic schema

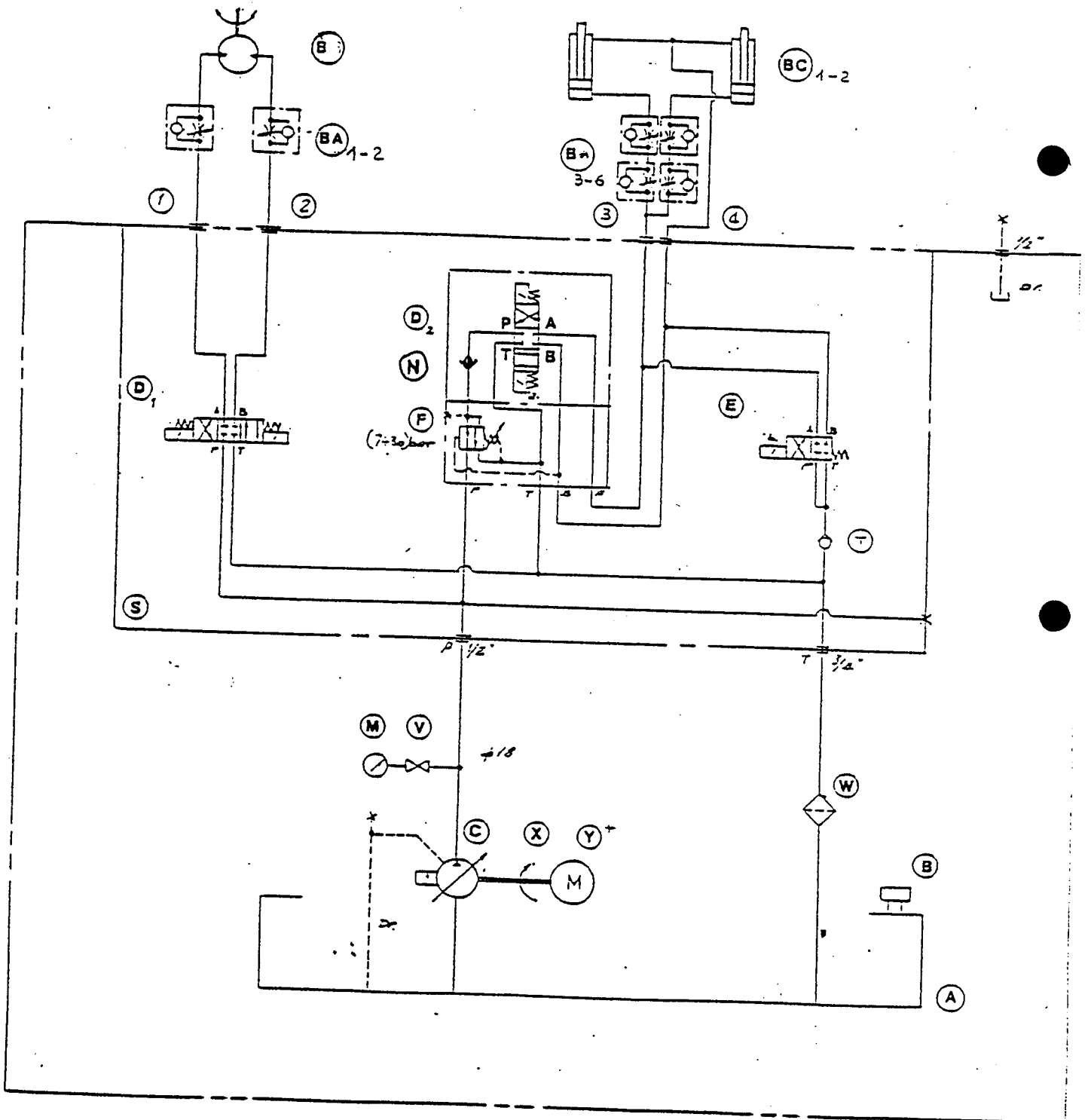
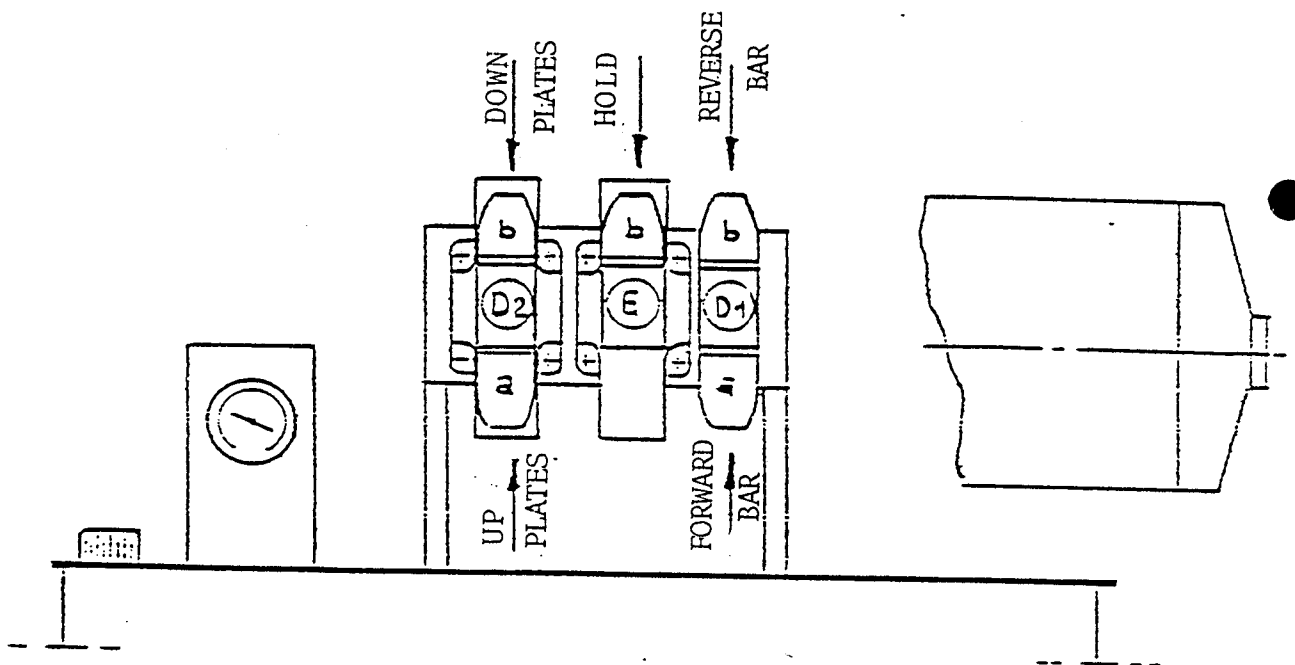


PLATE FREEZERS - PLATEMATIC

Hydraulic station (schema IM-00859, drawing No. 192684)  
 Identification of electrovalves and pressures reading

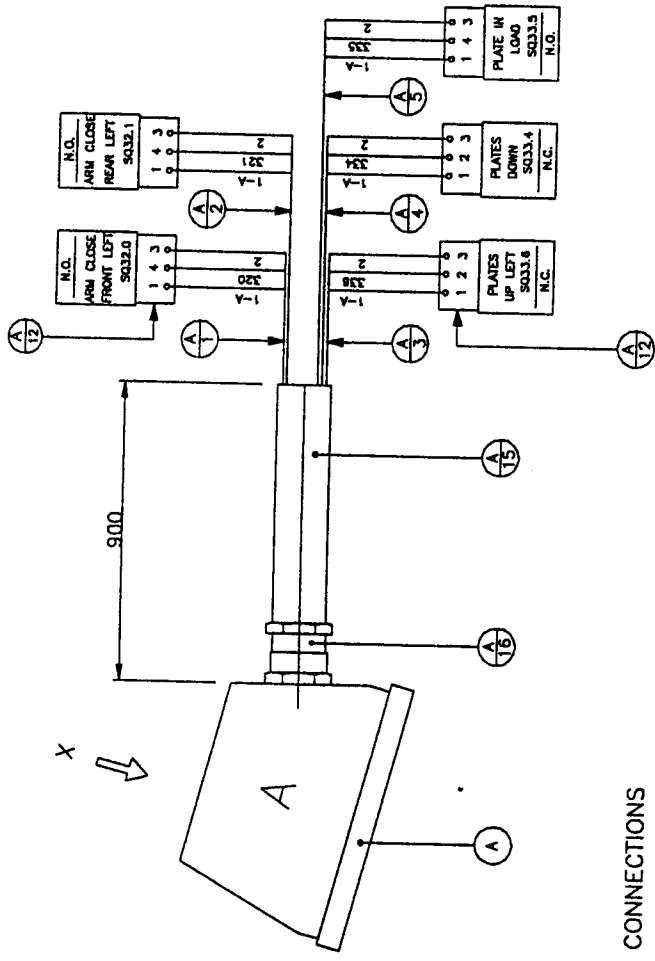


Note :

- to set pressures it is necessary to act on screw valve after having loosened the lock nut, as follows :
  - . turn the screw clockwise to increase the pressure
  - . turn the screw counterclockwise to decrease the pressure

Pressure setting

Pos.	Users	Coils to energize	Valves to adjust	Pressure (BAR)
P1	Plates "UP"	D1/a	on pump	40 : 50
P2	Plates "DOWN"	D1/b	F	10
P1	"FORWARD"/"REVERSE bar"	D2/a D2/b	on pump	40÷50
	Plates DOWN for own weight	E/b		∅



PIN CONNECTIONS  
VIEW FROM " X "

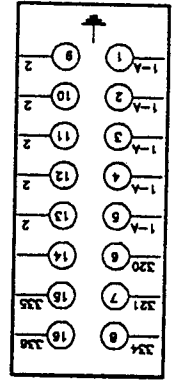
NOTE:

- ALL CABLE ARE IDENTIFIED WITH CABLE NUMBER  
AND PLC ADDRESS

PLC	DESCRIPTION	DRAWING	CODE	QUANTITY	NO. PCS	MATERIAL
A16	CABLE SHEATH FITTING DIA. 28 P028			1		
A15	CABLE SHEATH DIA. 28			1		
A14						
A13	SENSOR CONNECTOR		1223390	3		
A12						
A11						
A10						
A9						
A8						
A7						
A6						
A5	LOW TEMPERATURE CABLE SECTION 3 X 0.75			1		
A4						
A3						
A2						
A1	LOW TEMPERATURE CABLE SECTION 3 X 0.75			1		
A	MULTIPIN CONNECTOR (16 PIN)			1		

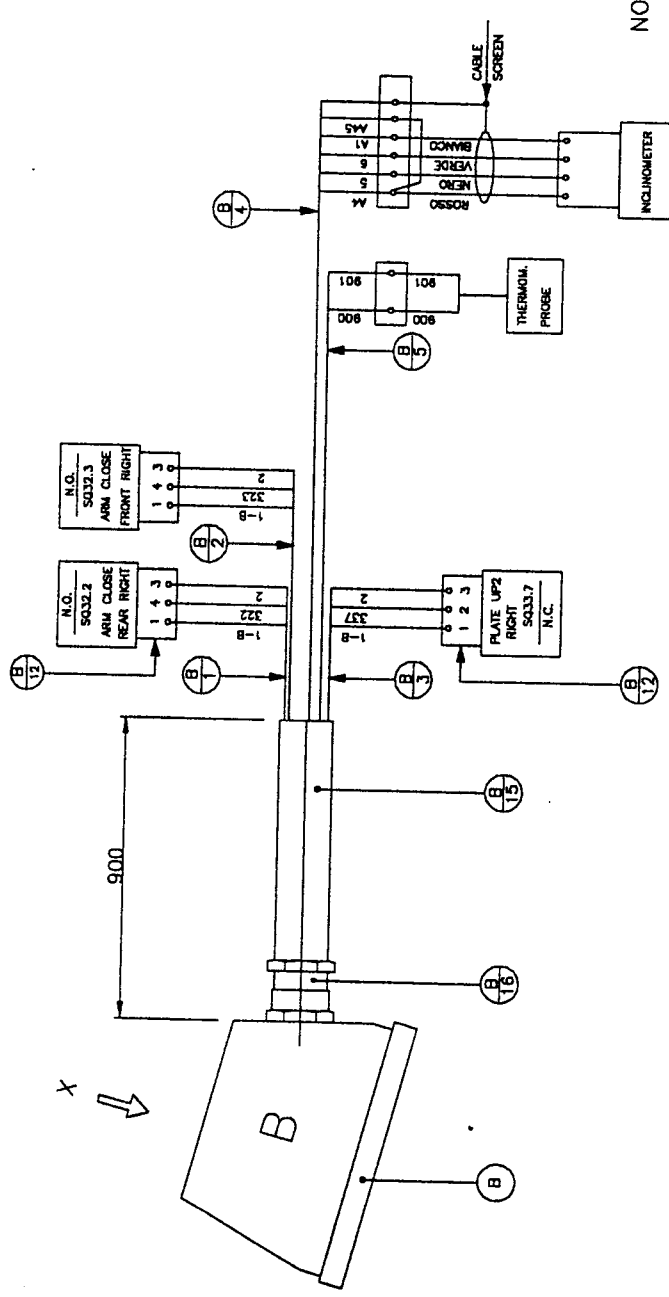
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TITLE	CABLES TYPE "A" LEFT SIDE	DRAWING NUMBER	193720/1
CLIENT	MEISTER (PM/9)	SHEET	1 OF 3
ORDER No.	007A	IT REPLACES DATE	01/01/98



1	REFATTO DISEGNO A CAD E CAMBIATA NUMERAZIONE CAVI	7.01.98	SE.
POS.	DESCRIPTION OF MODIFICATION	DATE	DRWG.

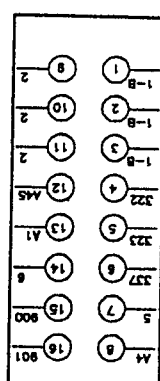




NOTE:

- ALL CABLES ARE IDENTIFIED WITH CABLE NUMBER AND PLC ADDRESS

PIN CONNECTOIONS  
VIEW FROM "X "

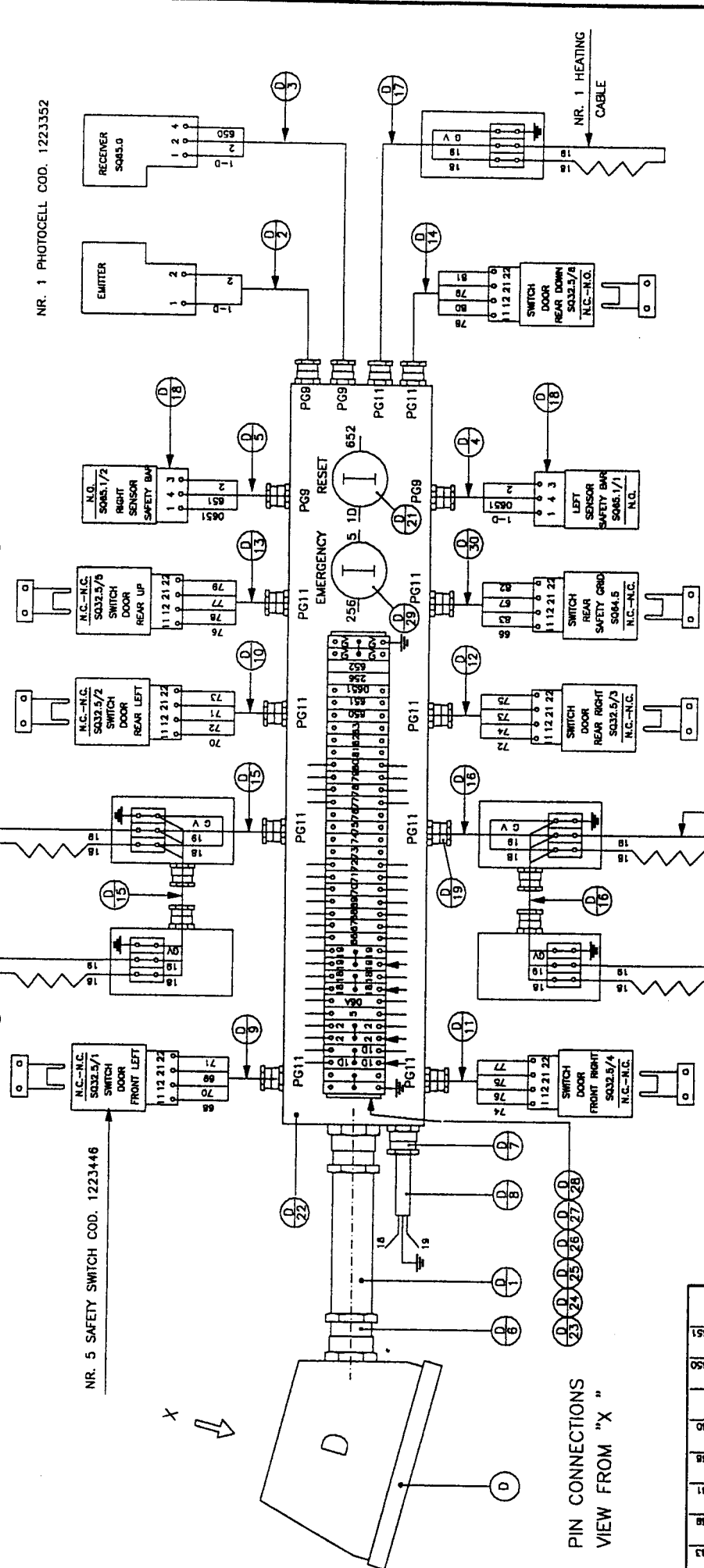


PLC	DESCRIPTION	CODE	QUANTITY	NO. PCB	MATERIAL
B16	CABLE SHEATH FITTING DIA. 33 P236				
B15	CABLE SHEATH DIA. 33mm				
B14					
B13					
B12	SENSOR CONNECTOR	1223360	3		
B11					
B9					
B8					
B7					
B6					
B5	LOW TEMPERATURE CABLE SECTION 3 X 0.75	3011357	1		
B4	LOW TEMPER. SCREENED CABLE SECT. 5 X 0.75	3011357	1		
B3	LOW TEMPERATURE CABLE SECTION 3 X 0.75	3011357	1		
B2		3011357	1		
B1	LOW TEMPERATURE CABLE SECTION 3 X 0.75	3011357	1		
B	MULTIPIN CONNECTOR (16 PIN)	1223414	1		

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TITLE: CABLES TYPE "B" RIGHT SIDE  
 DRAWING NUMBER: 193720/1  
 CLIENT: MEESTER (FM/9)  
 SHEET 2 OF 3  
 ORDER No: EX000  
 DATE: 07/01/98  
 DRAWN BY: APPROVED BY:

1 RIFATTO DISEGNO A CAD E VARIATO NUMERAZIONE CAVI  
 7.01.98 SE.  
 DESCRIPTION OF MODIFICATION  
 DATE DATE  
 DRWG DRWG



POS.	DESCRIPTION	QUANTITY	MATERIA.
D18	SENSOR CONNECTOR "BRIDGE" TYPE 3R X 15-02	1223390	ML 3.5
D17	CABLE - SECTION 2 X 1.5 + 1		1
D16	CABLE - SECTION 2 X 1.5 + 1		1
D15	CABLE - SECTION 4 X 1 + 1		1
D14	CABLE - SECTION 4 X 1 + 1		1
D13	CABLE - SECTION 3 X 0.75		1
D12	CABLE - SECTION 3 X 0.75		1
D11	CABLE - SECTION 4 X 1 + 1		1
D10	CABLE - SECTION 2 X 2.5 + 1		1
D9	CABLE - SECTION 2 X 2.5 + 1		1
D8	CABLE FITTING "GEWISS" PG 13.0 - P48	301312	NYLON
D7	CABLE FITTING "GEWISS" PG 21 - P48	301324	NYLON
D6	CABLE - SECTION 3 X 0.75	301389	ML 2.5
D5	CABLE - SECTION 3 X 0.75	301358	ML 1
D4	CABLE - SECTION 3 X 0.75	301358	ML 2
D3	CABLE - SECTION 3 X 0.75	301358	ML 3.5
D2	CABLE - SECTION 10 X 1.5	301318	ML 0.5
D1	MULTIPIN CONNECTOR (18 PIN)	1223414	ML 0.5

POS.	DESCRIPTION	QUANTITY	MATERIA.
D30	CABLE - SECTION 3 X 0.75	ML 1.0	1
D29	EMERGENCY PUSH BUTTON "TELEMECANIQUE"	1	1
D28	BRIDGE "MEDANULLER" TYPE 36840	21	ML 0.20
D27	TERMINALS FIBRO BAR TYPE DM	2	1
D26	LOCK PLATE FOR TERMINALS TYPE AP	301371	1
D25	STUD FOR TERMINALS "MEDANULLER" 2081.6	301358	2
D24	EARTH TERMINALS 37371	301337	21
D23	TERMINALS "MEDANULLER" TYPE D4X/32	301370	18
D22	"CASE" "WEBER" J60 + COVER IP65	301342	1
D21	BUTTON "BREITER" TYPE R4010	301313	1
D20	CABLE FITTING "GEWISS" PG11 P48	301313	3
D19	CABLE FITTING "GEWISS" PG8 P48	301346	8

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TITLE: CABLES TYPE "D" SIDE AND REAR DOORS SWITCHES

CLIENT: MEESTER (FM/9)

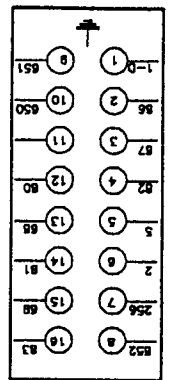
ORDER No: 007A

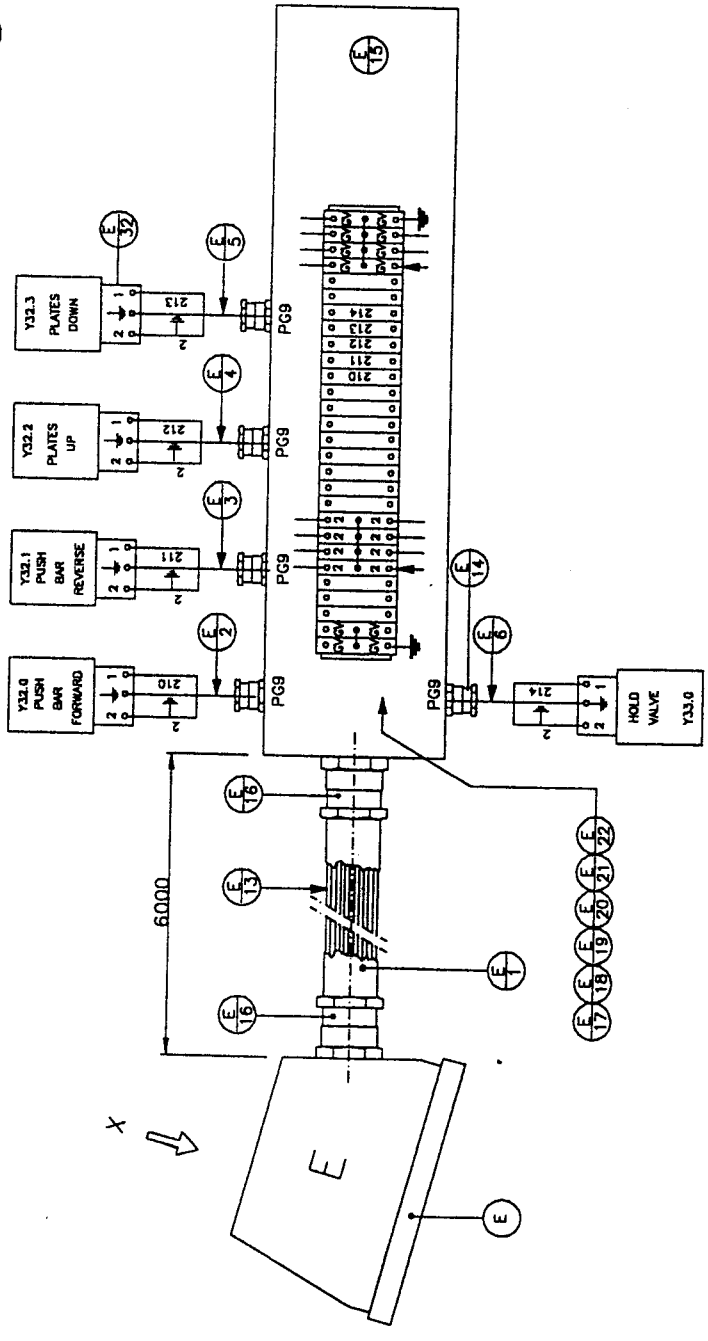
DRAWING NUMBER: 193720/1

SHEET 3 OF 3

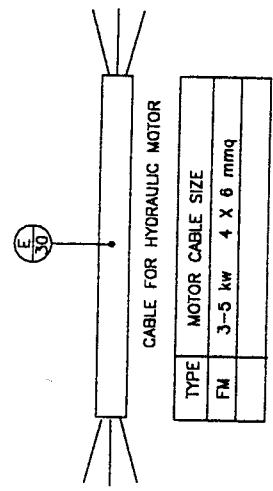
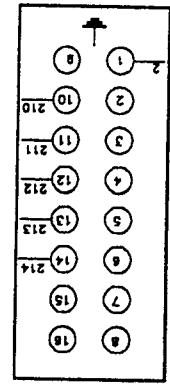
DATE: 25/06/98

-- ALL CABLES ARE IDENTIFIED WITH CABLE NUMBER AND PLC ADDRESS





PIN CONNECTIONS  
VIEW FROM "X"



NOTE: - ALL CABLES ARE IDENTIFIED WITH CABLE NUMBER AND PLC ADDRESS

PLC	DESCRIPTION	QTY	UNIT	CODE	QTY	UNIT	MATERIAL
E18	HEART COMPOUND TERMINAL TYPE 37371	2		3011337			
E17	COMPOUND TERMINAL WEDMULLER TYPE DM4/32	18		3011370			
E16	SHEATH CONNECTOR CANOPEX DIA. PG21 RF.844023	2					NYLON
E15	CASE BINDER CR + COVER PMA P103	1		3011387			PVC
E14	CABLE FITTING DENVER PG 8 - P108	5		3011348			NYLON
E13	FLEXIBLE WIRE SECTION 1 mmq						See tab. 13
E12							
E11							
E10							
E9							
E8							
E7							
E6	CABLE SECTION 2 X 1.5 + 7	1		3011278			ML 1.3
E5		1		3011278			ML 1.2
E4		1		3011278			ML 1.2
E3		1		3011278			ML 1.7
E2	CABLE SECTION 2 X 1.5 + 7	1		3011278			ML 1.7
E1	SHEATH CANOPEX DIA. 32 RF.150022 (BLACK COLOR)	1		3011278			ML 1.7
E	MULTIPLY CONNECTOR LINE ONE18 V0 + FRUIT 16-F3	1		1223414			See tab. 1

PLC	DESCRIPTION	QTY	UNIT	CODE	QTY	UNIT	MATERIAL
E32	CONNECTOR FOR ELECTROVALVE						
E31							
E30	CABLE FOR MOTOR Type NEOPRENE F00K3 (See tab.)						See tab. 1
E29							
E28							
E26							
E25							
E24							
E23							
E22	PLATE PREASSEMBLED BRIDGE RF. 306610	2					
E21	PLATE FOR COMPOUND TERMINAL	2					
E20	TERMINAL PLATE FOR COMPOUND TERMINAL TYPE AP	2					ML 0.25
E19	SHAFT FOR COMPOUND TERMINAL WEDMULLER 2081.8	2		3011371			3011338

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TITLE: CABLE TYPE "E" HYDRAULIC STATION  
 CLIENT: MEESTER (FM/9)  
 ORDER No: 007A

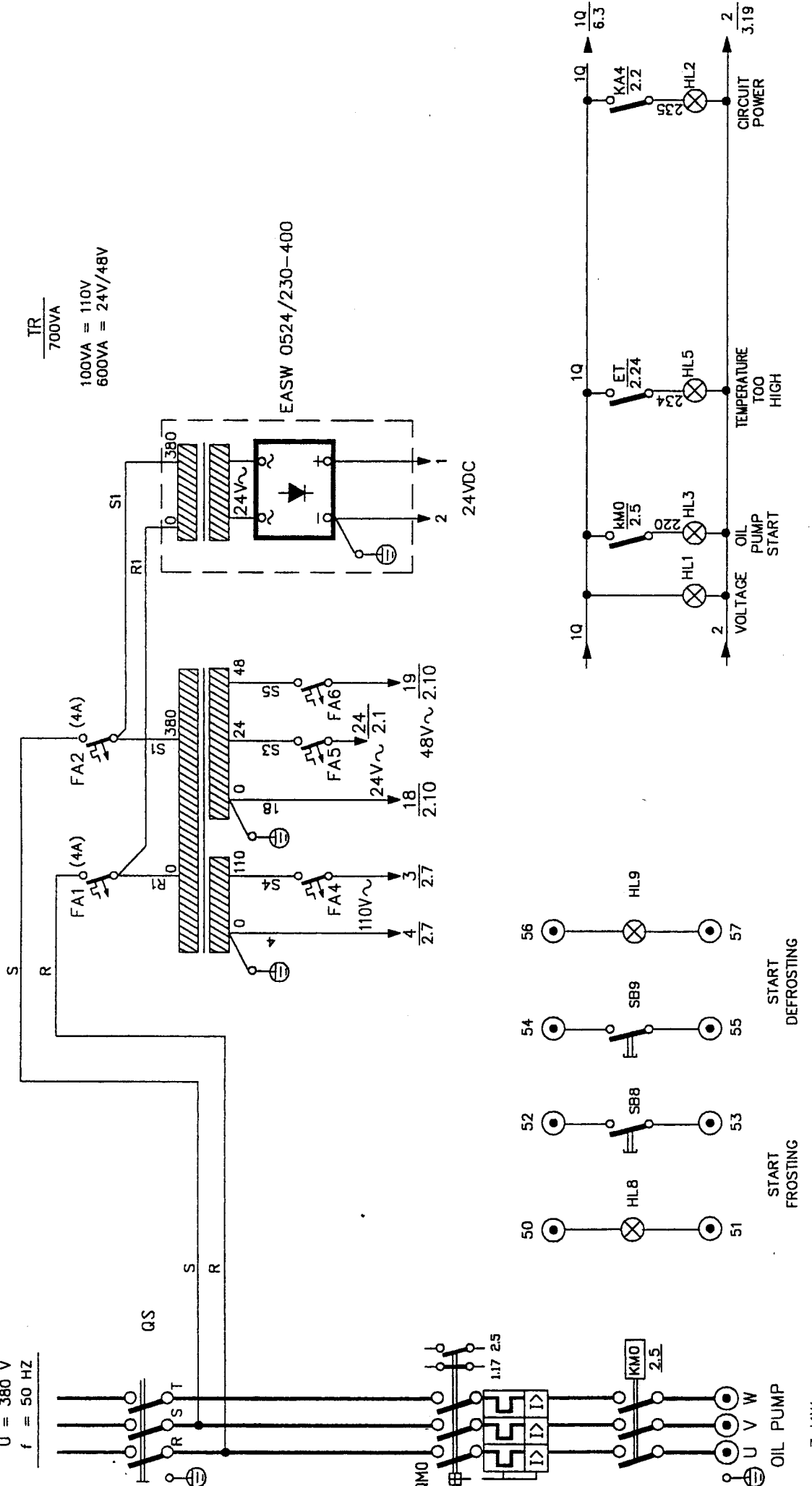
DRAWING NUMBER: 193728/1  
 SHEET 1 OF 1  
 IT REPLACES DATE: 09/30/98

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

U = 380 V  
f = 50 HZ

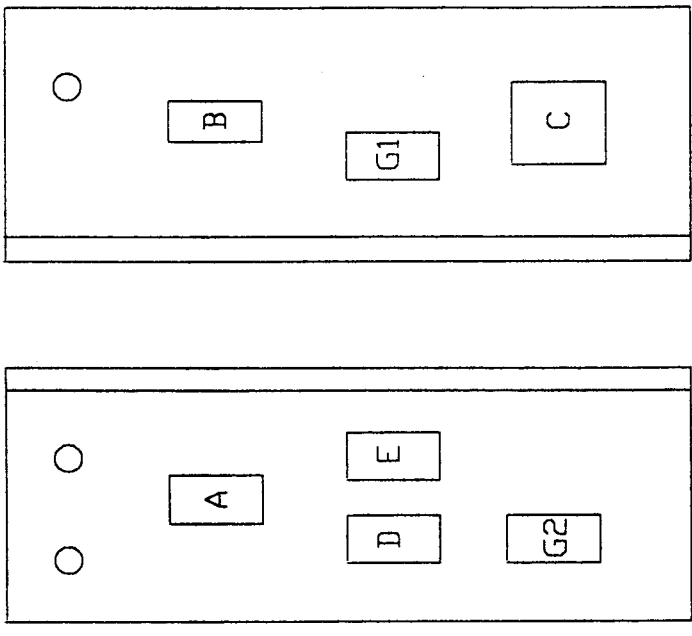
TR  
700VA  
100VA = 110V  
600VA = 24V/48V

EASW 0524/230-400



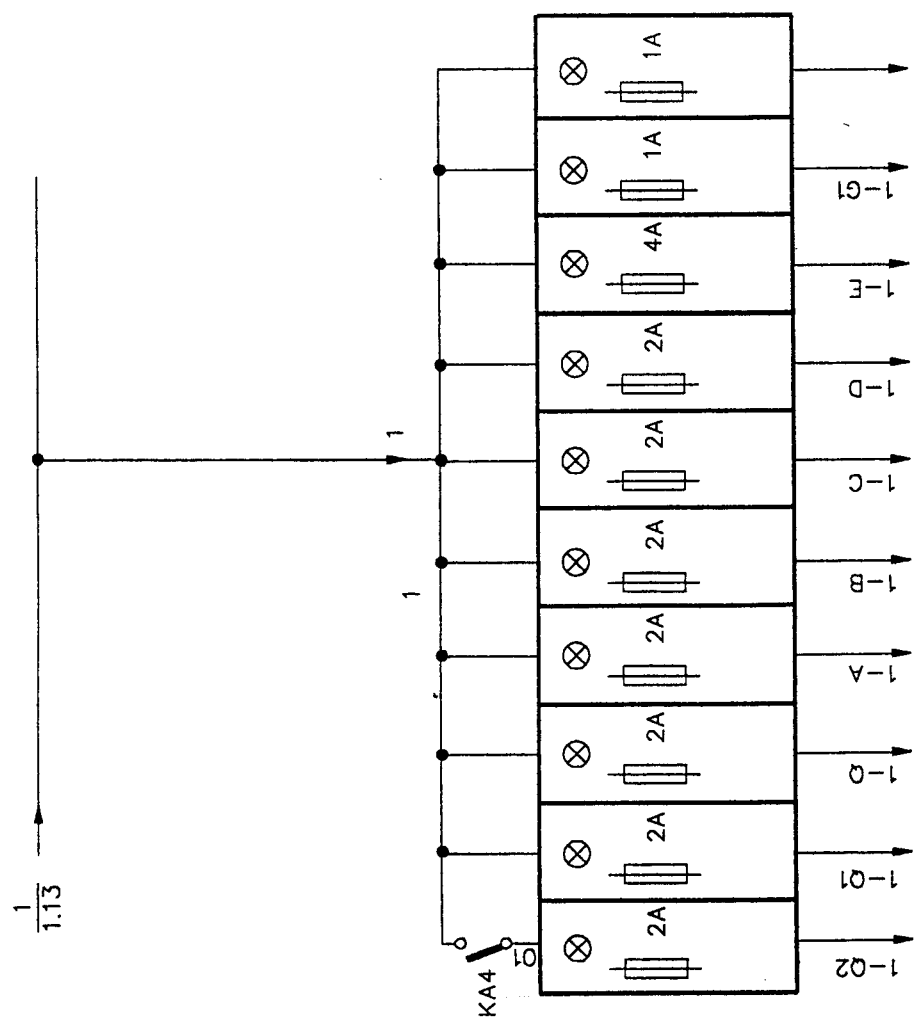
2	Aggiornato disegno con rele' sicurezza parte e con CPU 95S	27/04/98	date	issue	by	SE.
EXP.	DESCRIPTION OF MODIFICATION					
THIS DRAWING IS EXCLUSIVE PROPERTY OF SAMFI FREEZERS S.r.l. IT MAY NOT BE COPIED LENT REPRODUCED OR MODIFIED IN ANY WAY WITHOUT WRITTEN APPROVAL						
TITLE WIRING ELECTRIC DIAGRAM WITH						
SIMATIC SS-95S FOR PLATEMATIC FM						
CLIENT MEESTER (FM/9)						
DRAWING NUMBER 193402/2						
SHEET 1 OF 9						
IT REPLACES DATE 193402/1 27/12/97						
ORDER NO 007A						
DRAWN BY APPROVED BY						

CONNECTORS POSITION  
ON CONTROL PANEL



RIGHT SIDE

LEFT SIDE

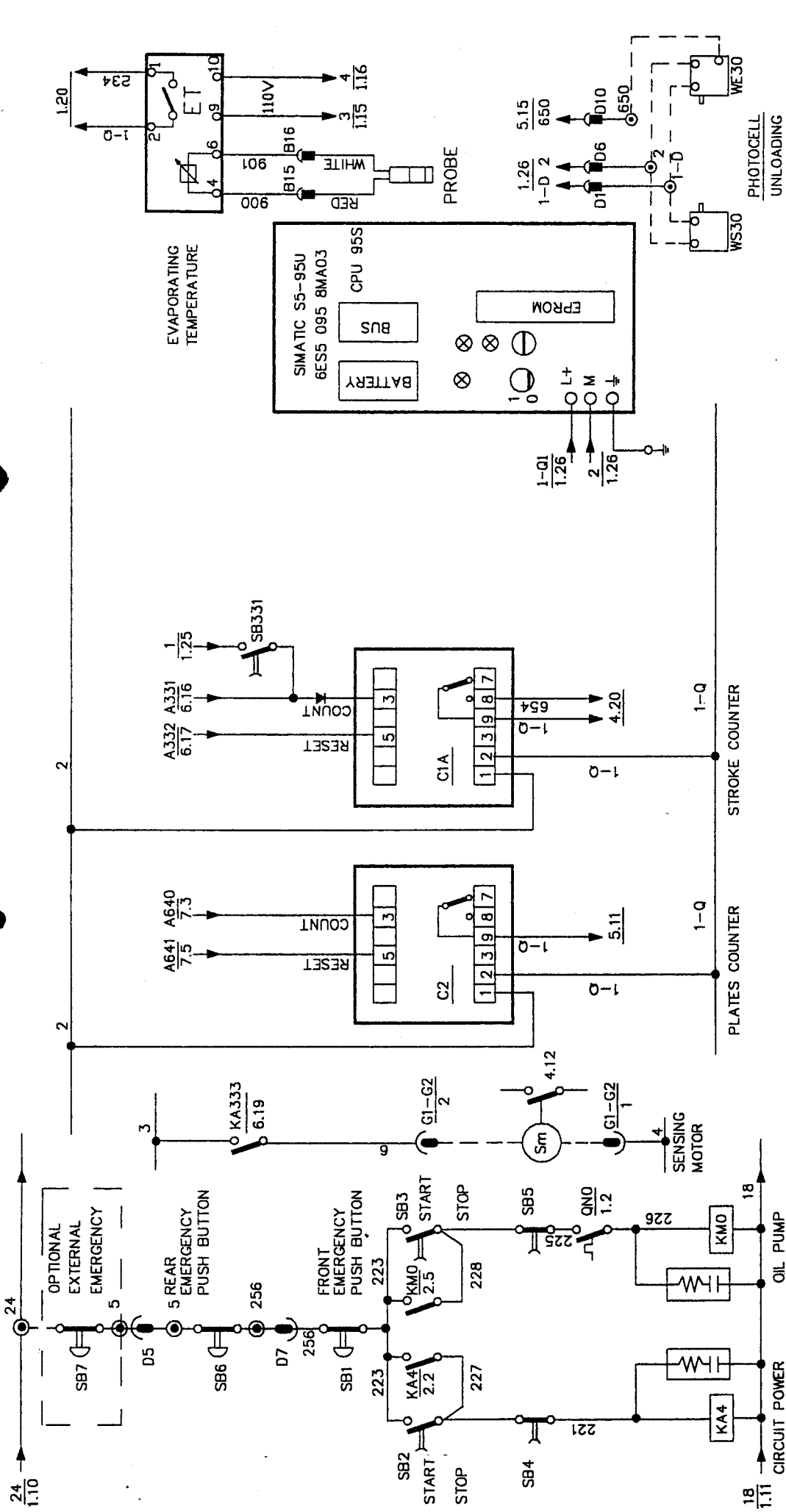


- COMMUN PLC OUTPUT
- COMMUN PLC INPUT AND CPU
- COMMUN CONTROL PANEL
- COMMUN CONNECTOR "A"
- COMMUN CONNECTOR "B"
- COMMUN CONNECTOR "C"
- COMMUN CONNECTOR "D"
- COMMUN COLS CONNECTOR "E"
- COMMUN CONNECTOR "G2"
- COMMUN CONNECTOR "H"

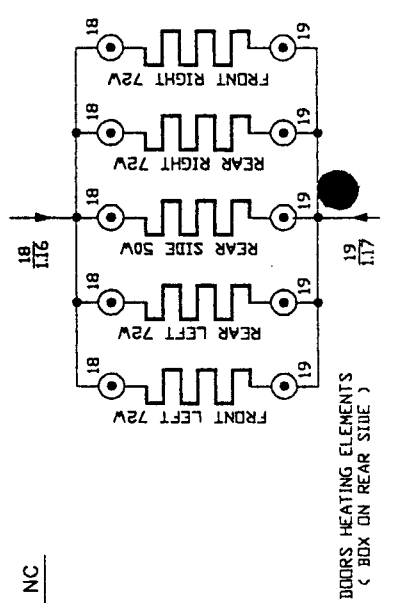
EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
	THIS DRAWING IS EXCLUSIVE PROPERTY OF SAMIFI FREEZERS S.r.l. IT MAY NOT BE COPIED LENT REPRODUCED OR MODIFIED IN ANY WAY WHATEVER WITHOUT WRITTEN APPROVAL			
TITLE WIRING ELECTRIC DIAGRAM WITH				
SIMATIC S5-95S FOR PLATEMATIC FM				
CLIENT MEESTER (FM/9)				
DRAWING NUMBER 193402/2				
SHEET 1 OF 9				
IT REPLACES DATE 27/12/97				
DRAWN BY APPROVED BY				
SE. Spotti				
ORDER No 007A				
SAMIFI FREEZERS S.r.l. - Melzo (MILANO)				

FUSES ASSEGNATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

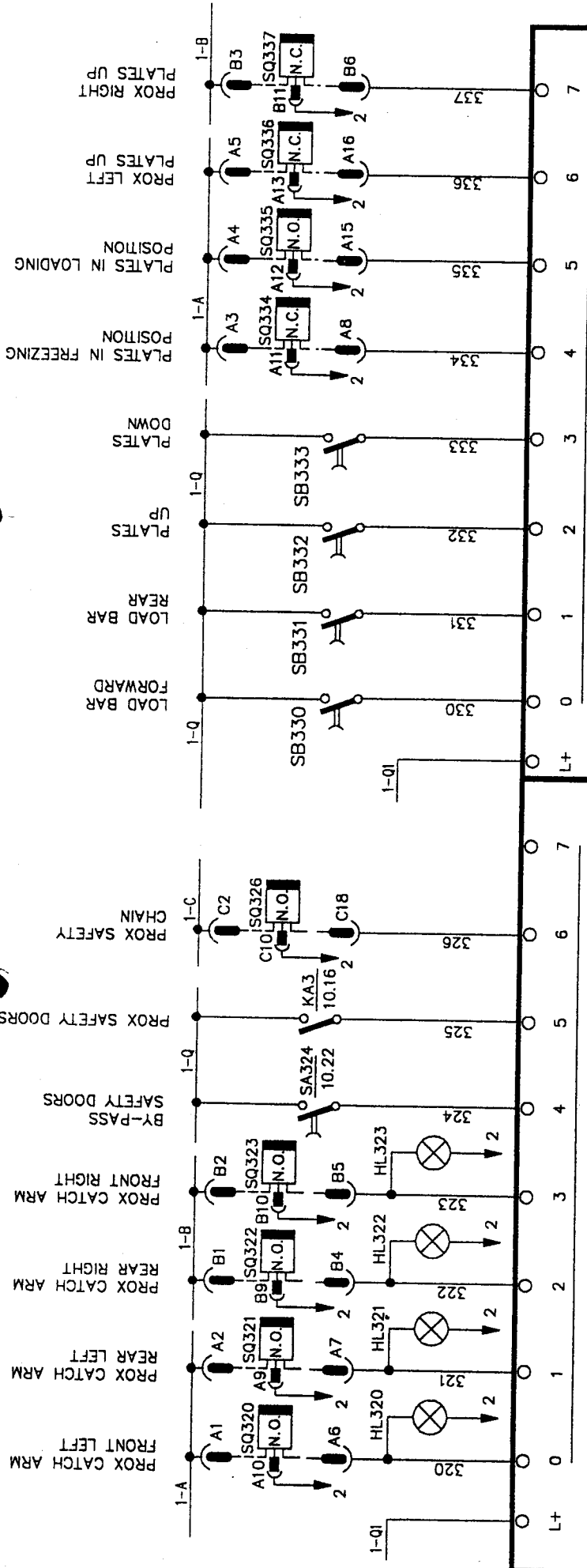


EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
	THIS DRAWING IS EXCLUSIVE PROPERTY OF SAMIFI FREEZERS S.r.l. IT MAY NOT BE COPIED LENT REPRODUCED OR MODIFIED IN ANY WAY WITHOUT WRITTEN APPROVAL			
TITLE WIRING ELECTRIC DIAGRAM WITH				
SIMATIC S5-95S FOR PLATEMATIC FM				
CLIENT MEESTER (FM/9)				
DRAWING NUMBER 193402/2				
SHEET 2 OF 9				
IT REPLACES DATE 27/12/97				
DRAWN BY SF.				
APPROVED BY Spotti				
ORDER No 007A				
SAMIFI FREEZERS S.r.l. - Melzo (MILANO)				



**DOORS HEATING ELEMENTS ( BOX ON REAR SIDE )**

NO	NC	NO	NC
1.22		1.2	
1.22		1.2	
2.3		1.3	
4.26		1.16	
		2.4	

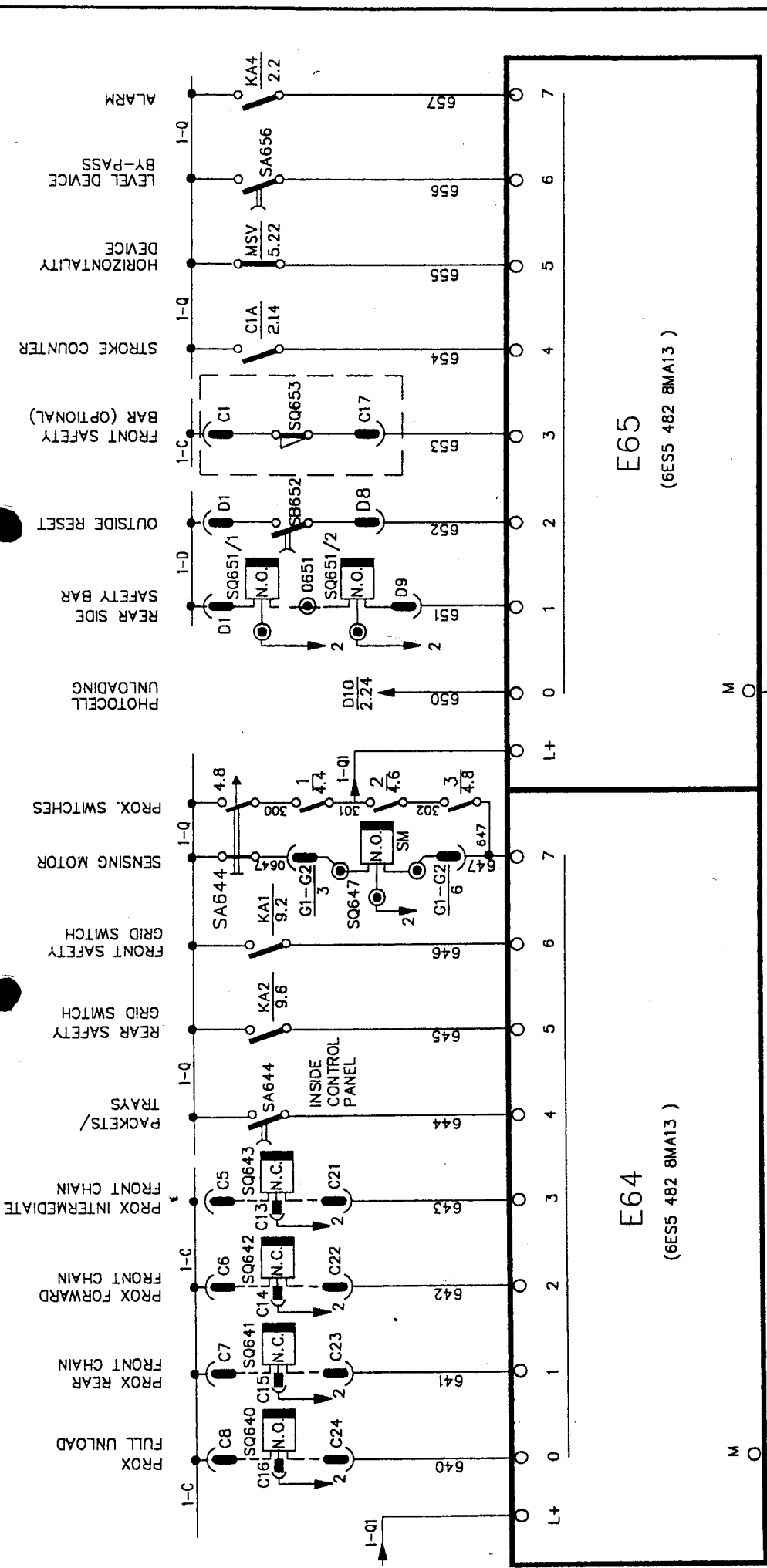


E32 - CPU  
(6ES5 095 8MA03)

E33 - CPU  
(6ES5 095 8MA03)

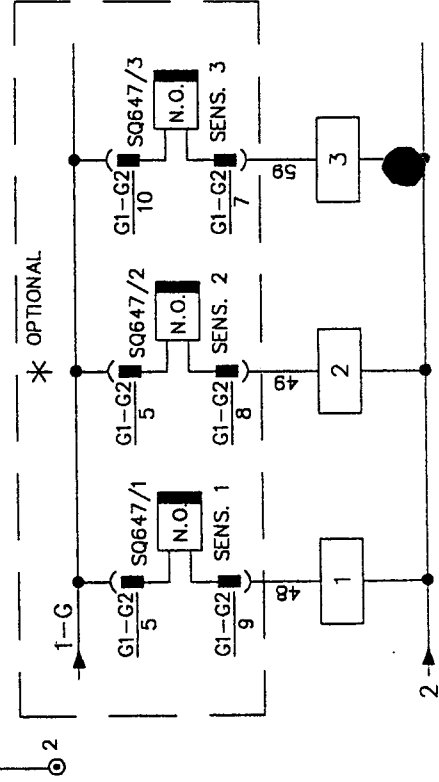
EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
	THIS DRAWING IS EXCLUSIVE PROPERTY OF SAMIFI FREEZERS S.r.l. IT MAY NOT BE COPIED LENT REPRODUCED OR MODIFIED IN ANY WAY WHATSOEVER WITHOUT WRITTEN APPROVAL.			
TITLE		DRAWING NUMBER		
WIRING ELECTRIC DIAGRAM WITH		193402/2		
SIMATIC S5-955 FOR PLATEMATIC FM		SHEET 3 OF 9		
CLIENT		MEESTER (FM/9)		
ORDER No		007A		
IT REPLACES		DATE		
193402/1		27/12/97		
DRAWN BY		APPROVED BY		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



E64  
(6ES5 482 8MA13 )

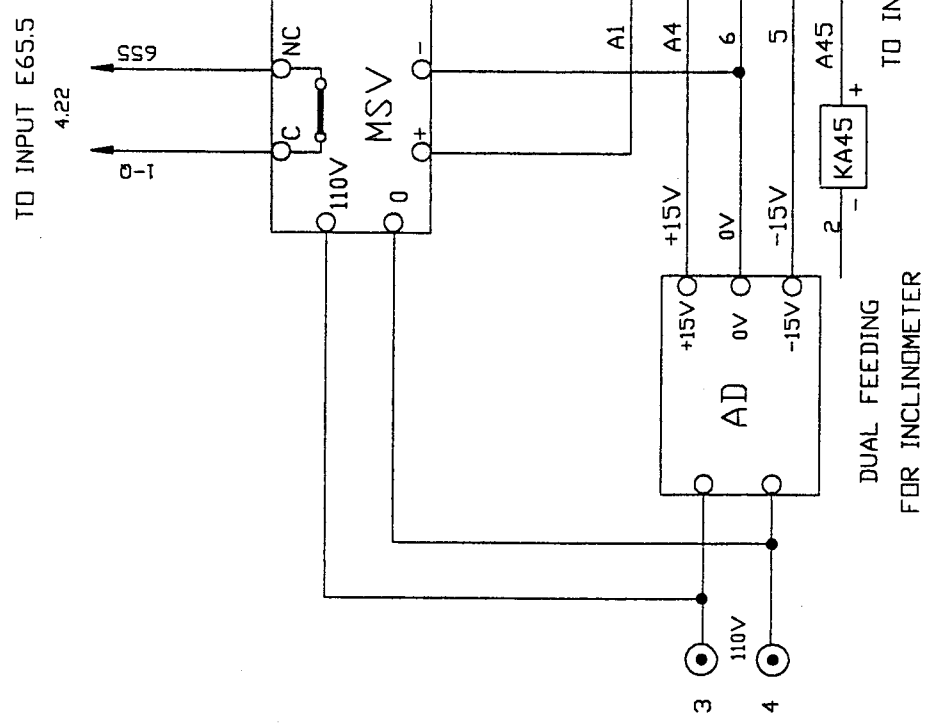
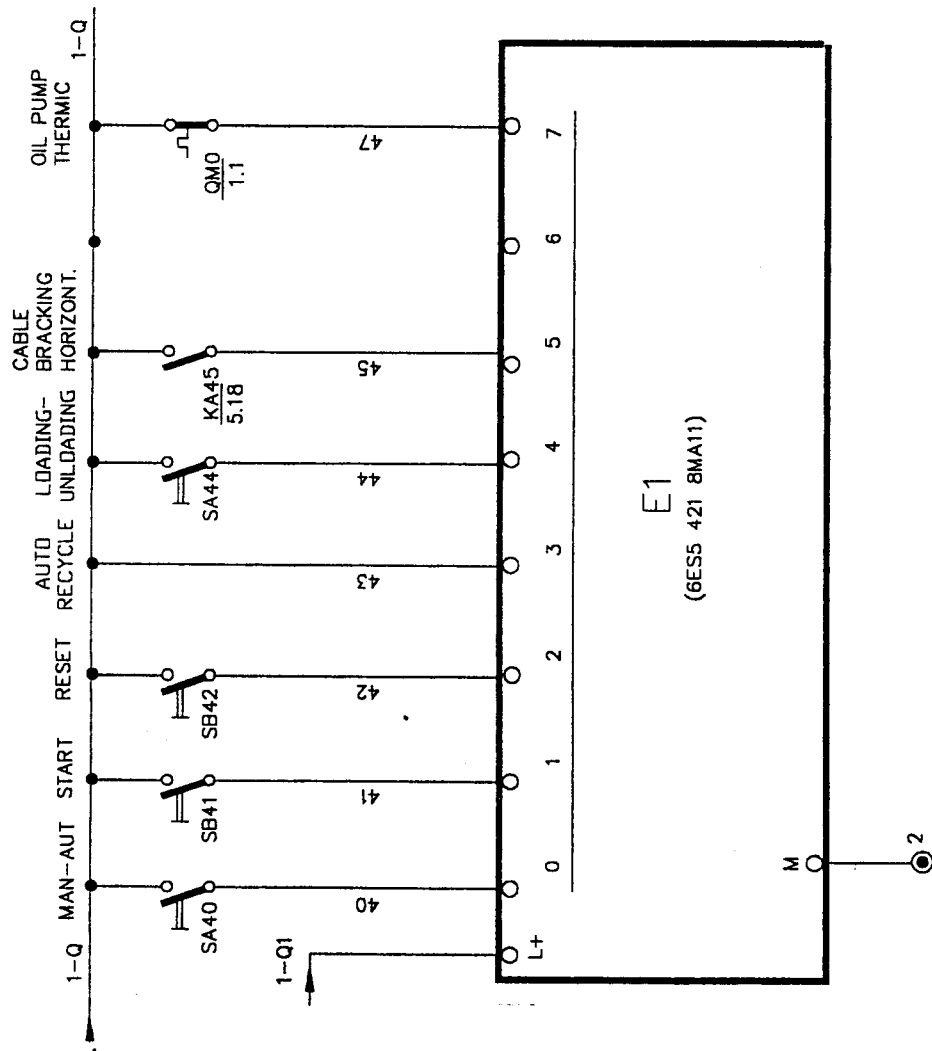
E65  
(6ES5 482 8MA13 )



\* PROXIMITY SWITCH FOR TRAYS OPERATION IN ALTERNATIVE TO SENSING MOTOR SWITCH. NUMBER OF SWITCH ACCORDING TO TRAY SIZE

EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
	THIS DRAWING IS EXCLUSIVE PROPERTY OF SAMIFI FREEZERS S.r.l. IT MAY NOT BE COPIED LENT REPRODUCED OR MODIFIED IN ANY WAY WHATEVER WITHOUT WRITTEN APPROVAL			
TITLE WIRING ELECTRIC DIAGRAM WITH				
SIMATIC S5-955 FOR PLATENATIC FM				
CLIENT MEESTER (FM/9)				
DRAWING NUMBER 193402/2				
SHEET 4 OF 9				
IT REPLACES DATE 27/12/97				
DRAWN BY 007A				
APPROVED BY Spotti				
SAMIFI FREEZERS S.r.l. - Mezzo (MILANO)				

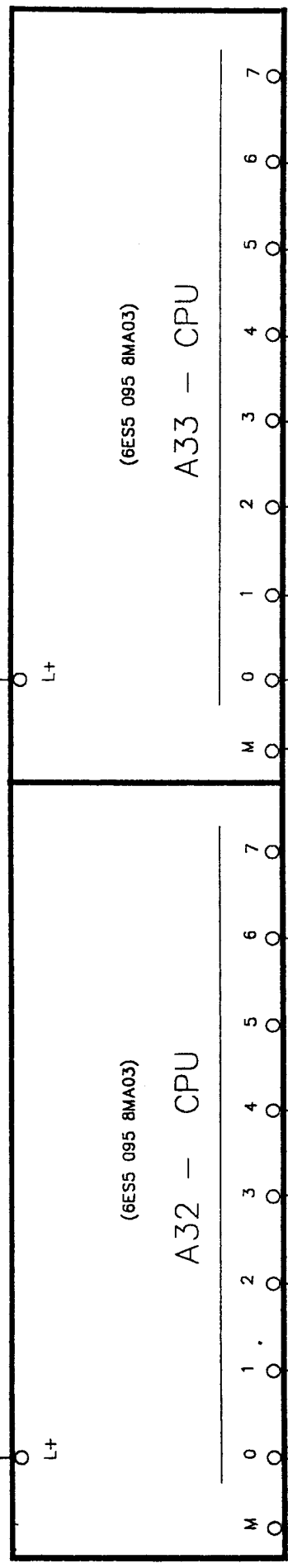




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SIMATIC S5-95S FOR PLATEMATIC FM				
CLIENT: MEESTER (FM/9)				
DRAWING NUMBER: 193402/2				
SHEET 5 OF 9				
IT REPLACES: DATE 27/12/97				
193402/1				
DRAWN BY: APPROVED BY: SE. Spotti				
ORDER No: 007A				
SAMIFI FREEZERS S.r.l. - Meizo (MILANO)				

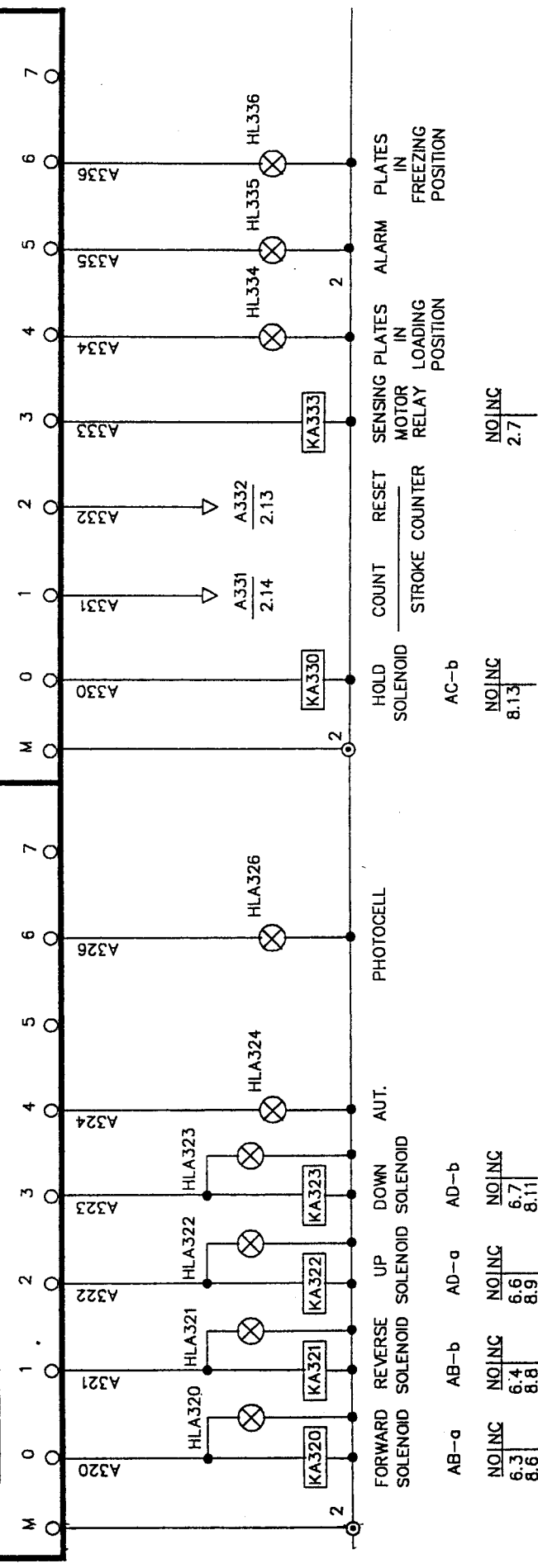
1-Q2

1-Q2



(6ES5 095 8MA03)  
A32 - CPU

(6ES5 095 8MA03)  
A33 - CPU



AB-a AB-b AD-a AD-b  
NO/NC 6.3 6.4 8.6 8.8  
6.3 6.4 8.6 8.8

NO/NC 8.13 8.13

NO/NC 2.7 2.7

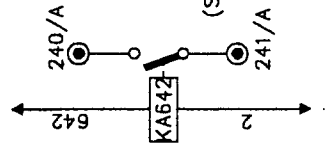
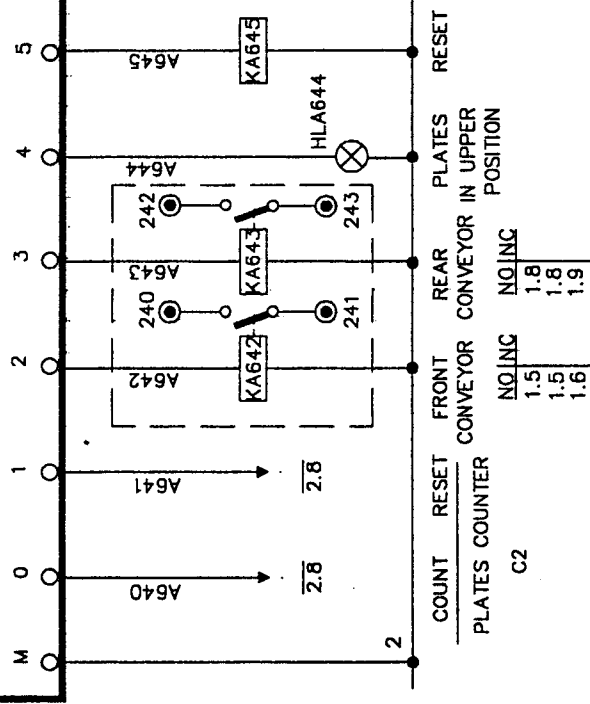
HOLD SOLENOID AC-b  
COUNT STROKE COUNTER  
RESET MOTOR RELAY  
SENSING PLATES IN LOADING POSITION  
ALARM PLATES IN FREEZING POSITION  
PHOTOCELL  
FORWARD REVERSE SOLENOID  
UP DOWN SOLENOID  
AUT.

EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
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TITLE WIRING ELECTRIC DIAGRAM WITH				
SIMATIC 55-855 FOR PLATEMATIC FM				
CLIENT MEESTER (FM/9)				
DRAWING NUMBER 193402/2				
SHEET 6 OF 9				
IT REPLACES DATE 27/12/97				
DRAWN BY APPROVED BY				
ORDER No 007A				
SAMIFI FREEZERS S.r.l. - Meizo (MI/ANO)				

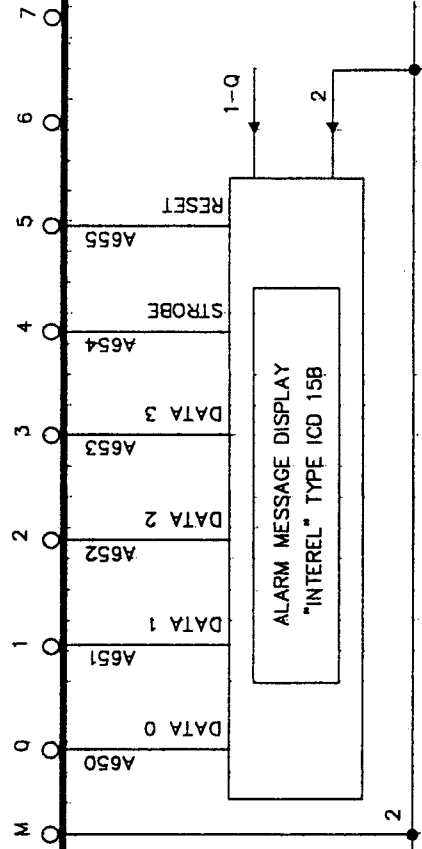
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(6ES5 482 8MA13)  
A64

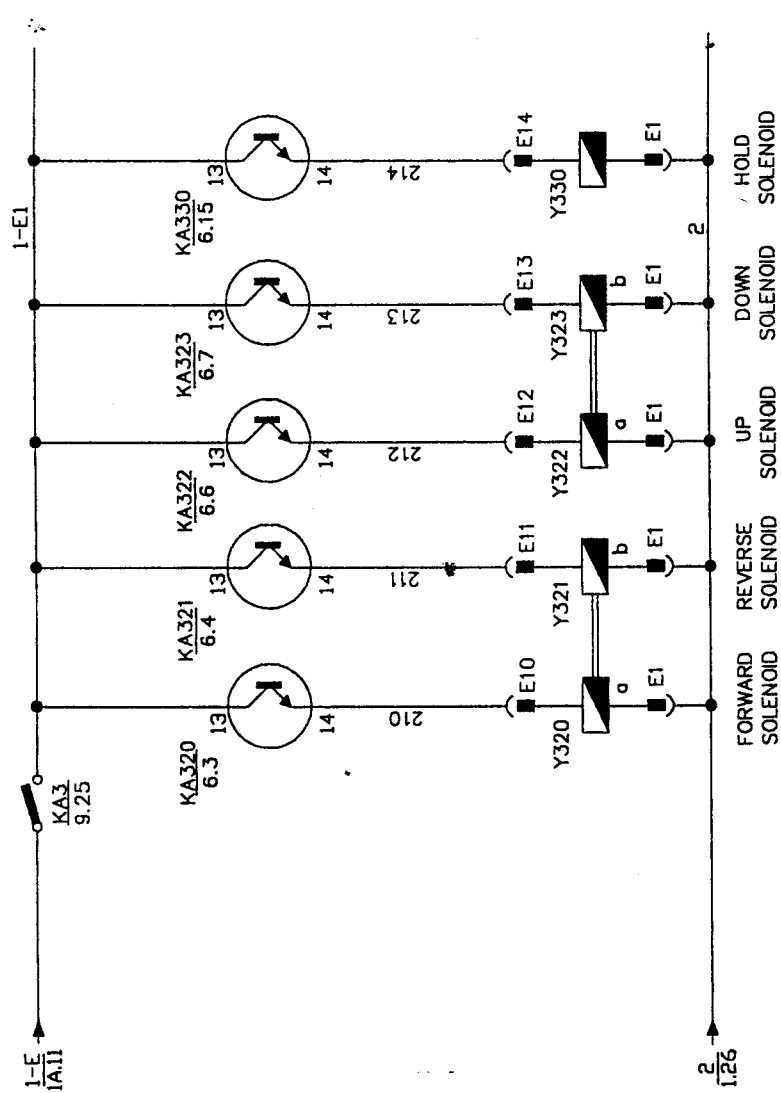


(6ES5 482 8MA13)  
A65



2  
COUNT REAR FRONT PLATES  
PLATES COUNTER  
CONVEYOR CONVEYOR IN UPPER POSITION  
C2  
RESET

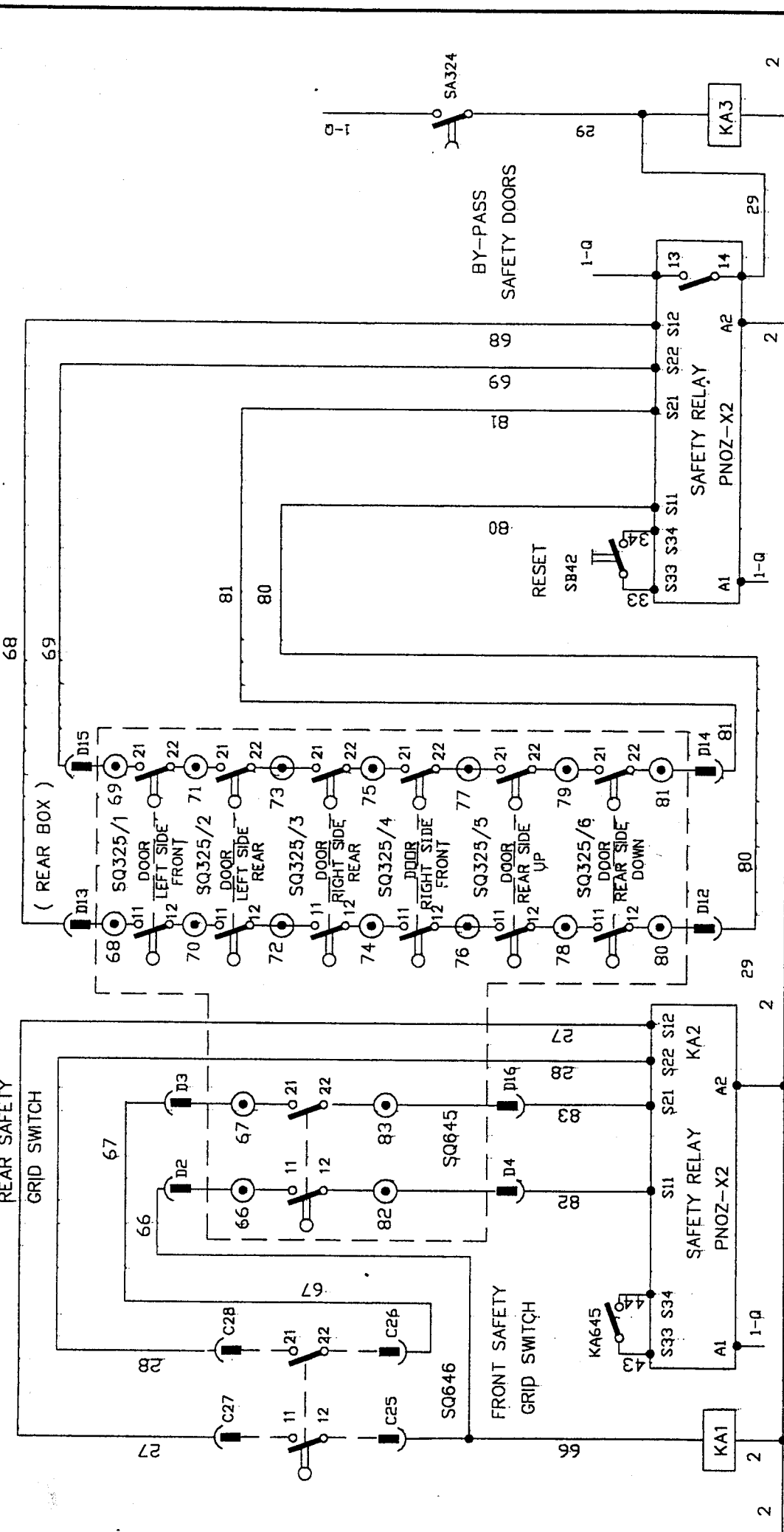
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SIMATIC S5-855 FOR PLATEMATIC FM				
CLIENT: MEESTER (FM/9)				
DRAWING NUMBER 193402/2				
SHEET 7 OF 9				
IT REPLACES DATE 193402/1 27/12/97				
DRAWN BY APPROVED BY 007A				
ORDER No				
CLIENT				
MEESTER (FM/9)				
DATE				
27/12/97				
DRAWN BY				
APPROVED BY				
SAMI FI FREEZERS S.r.l. - Melzo (MI/NO)				



AB-a AB-b AD-a AD-b AC-b

EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
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	TITLE	DRAWING NUMBER		
	WIRING ELECTRIC DIAGRAM WITH	193402/2		
	SIMATIC S5-95S FOR PLATEMATIC FM			
	CLIENT	SHEET 8 OF 9		
	MEESTER (FM/9)	IT REPLACES DATE		
	ORDER No	193402/1 27/12/97		
	007A	DRAWN BY APPROVED BY		
	SAMIFI FREEZERS S.r.l. - Melzo (MI) ANO			

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



EXP.	DESCRIPTION OF MODIFICATION	date	issue	by
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TITLE		DRAWING NUMBER		
WIRING ELECTRIC DIAGRAM WITH		193402/2		
SIMATIC S5-95S FOR PLATEMATIC FM				
CLIENT		SHEET 9 OF 9		
MEESTER (FM/9)		IT REPLACES DATE		
ORDER No 007A		193402/1 27/12/97		

RELAY FRONT RELAY REAR / FRONT RELAY SAFETY DOORS

SAFETY GRID SAFETY GRID SAFETY DOORS

MICRO SAFETY DOORS

POSITION OF SAFETY MICROSWITCH IS REFERRED AT CONDITION OF DOORS OPENED

PLATE FREEZERS - PLATEMATIC

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Cleaning bar

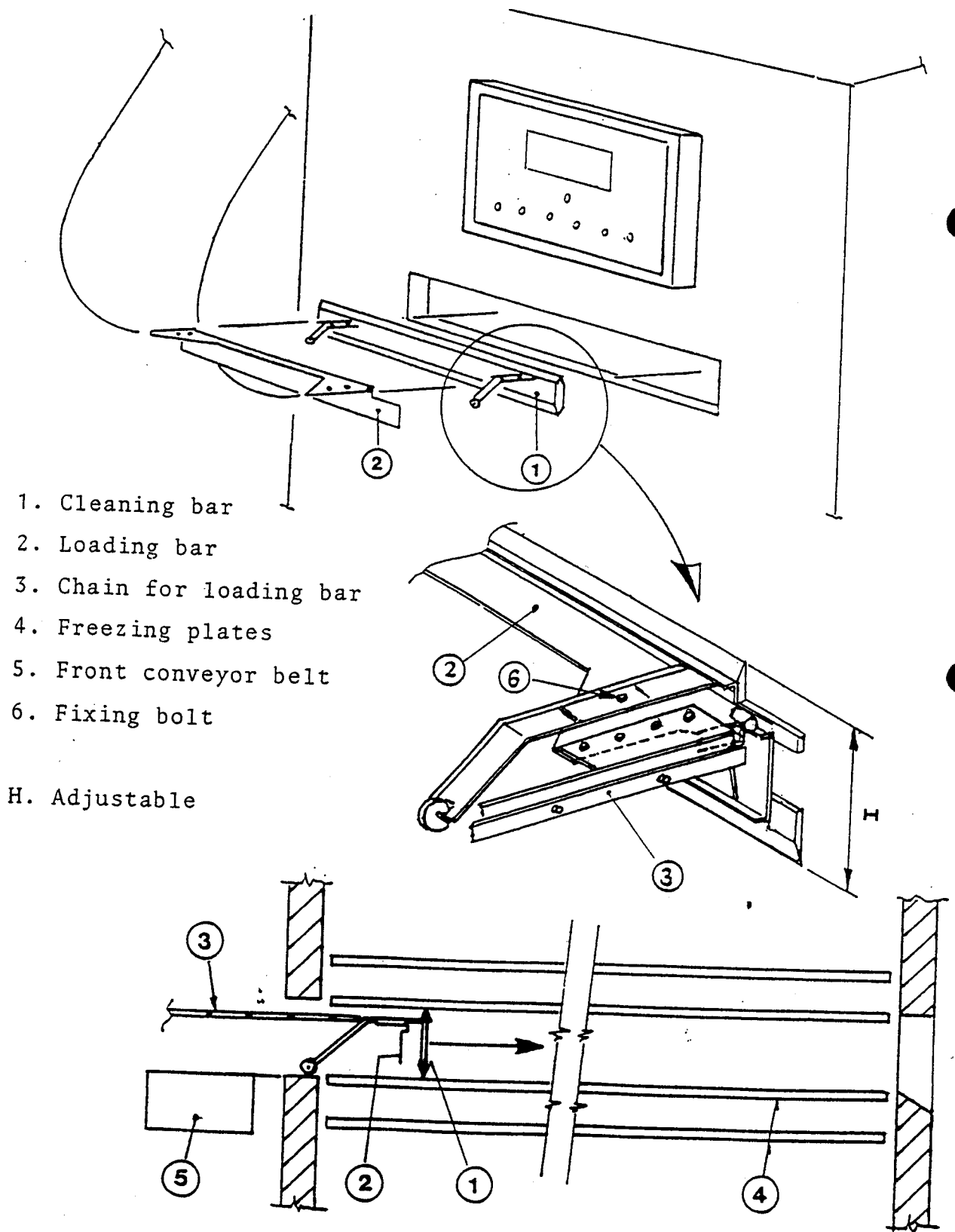
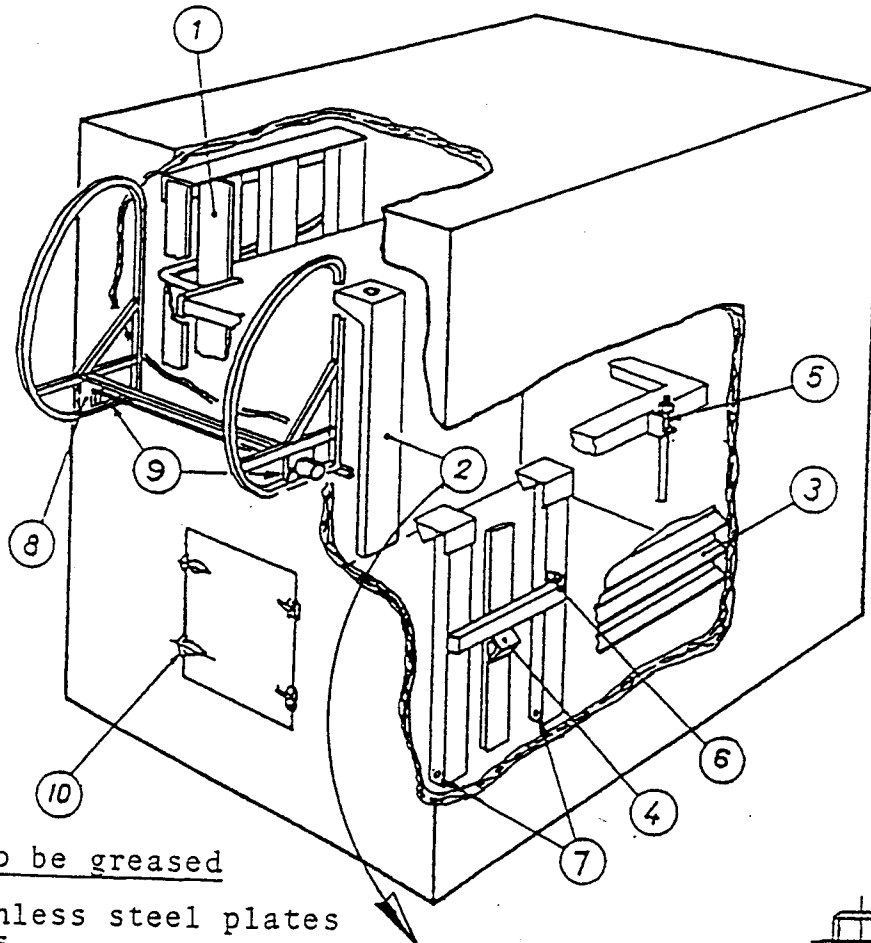


PLATE FREEZERS - PLATEMATIC

Lubrication



Parts to be greased

1. Stainless steel plates rails
2. Back of yokes
3. Plates side
4. Catch arms open devices
5. Threaded end of 8 holders
6. Catch arms spring
7. Catch arms pivot
8. Chain shaft bearing

Parts to be oiled

9. Chain of loading bar
10. Doors hinges and latches

Parts to be greased

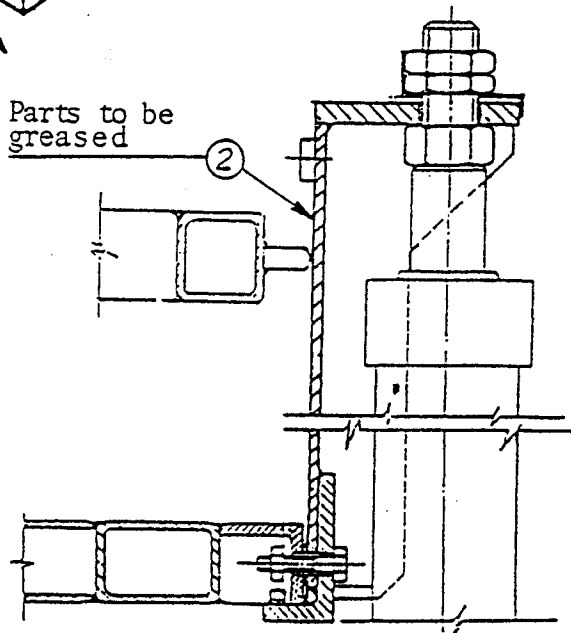


PLATE FREEZERS - PLATEMATIC

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Lubrication - Stainless steel plates rails

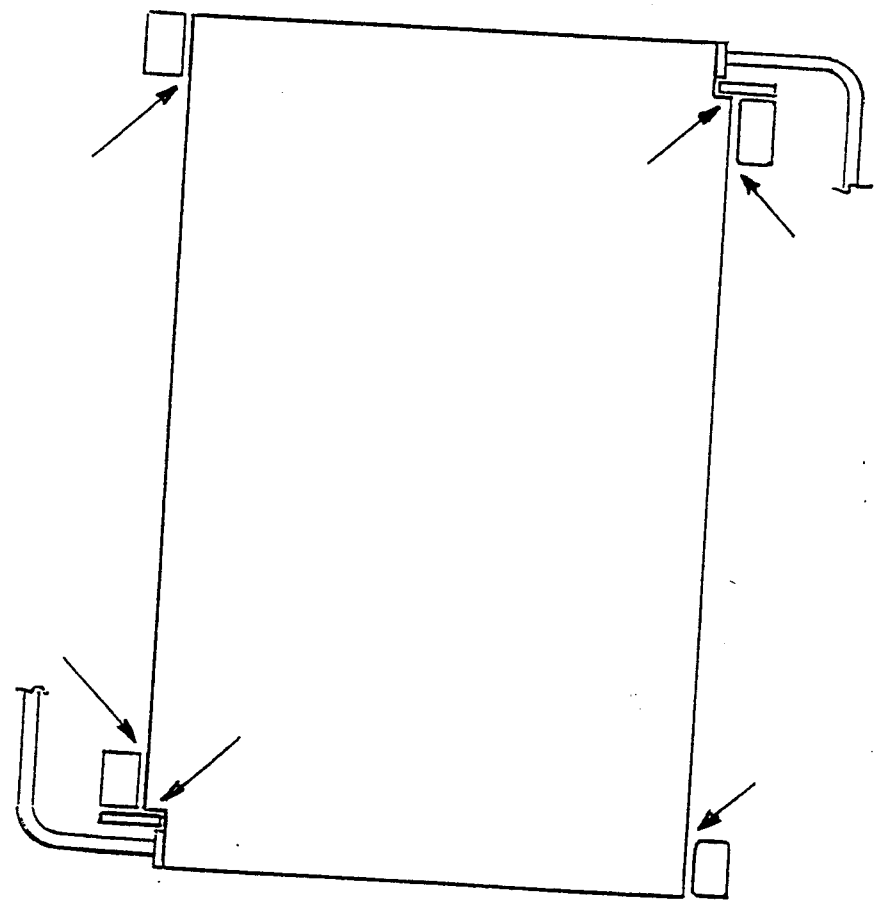
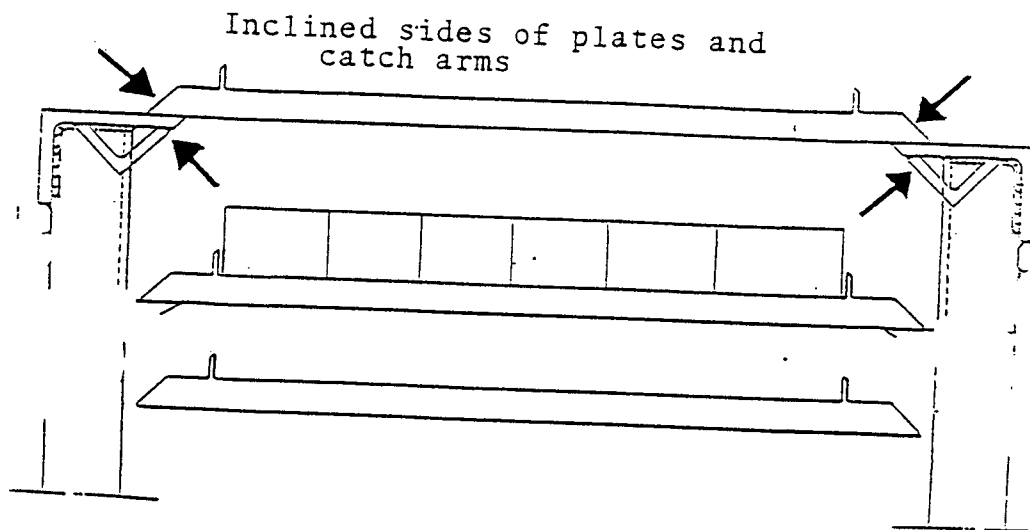




PLATE FREEZERS - PLATEMATIC

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Lubrication



Catch arms opening device

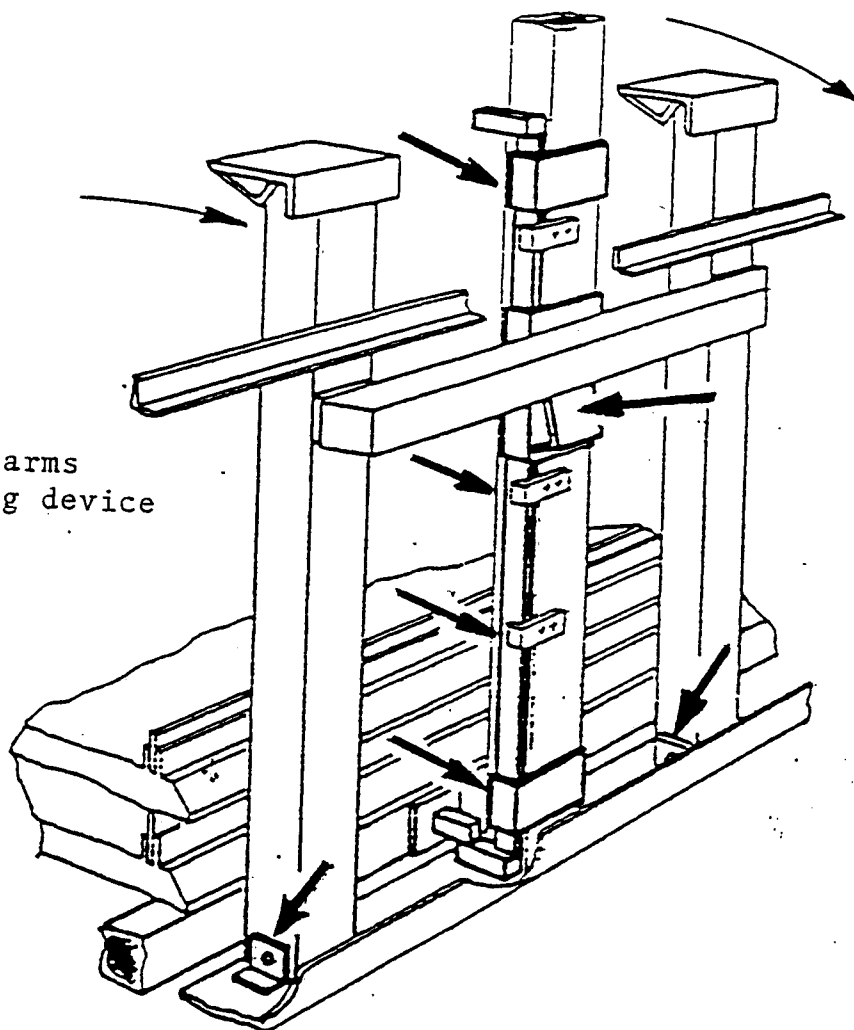
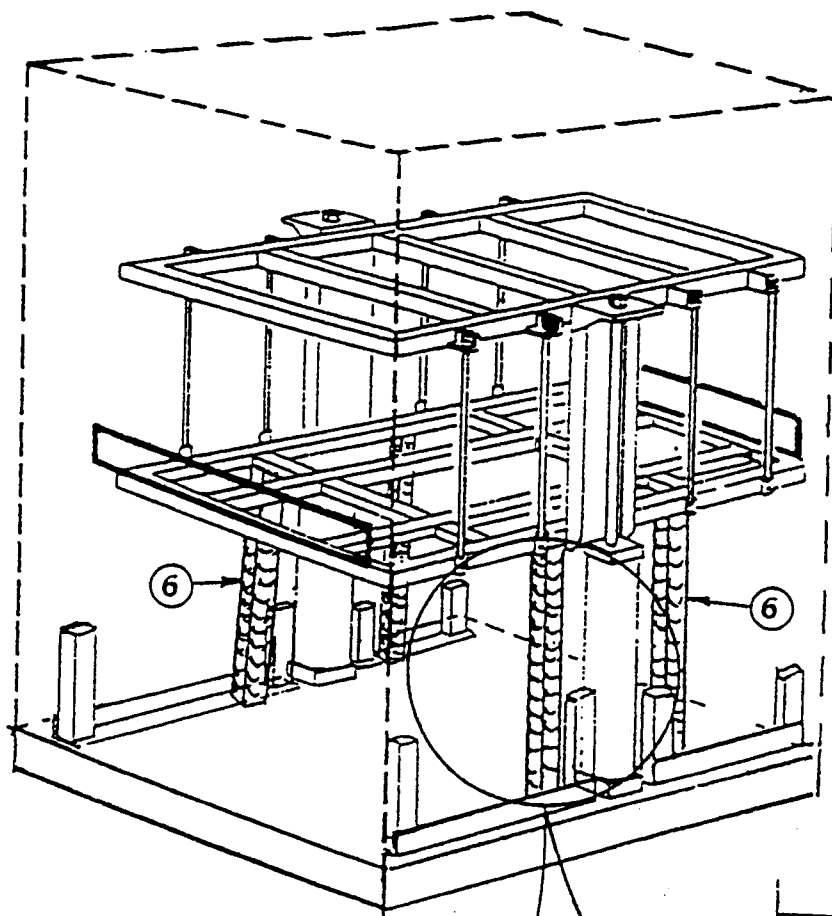


PLATE FREEZERS - PLATEMATIC

Control and safety procedures



- 1. Lower frame
- 2. Yoke
- 3. Cylinder
- 4. Side frame
- 5. Upper frame
- 6. Safety wood stock

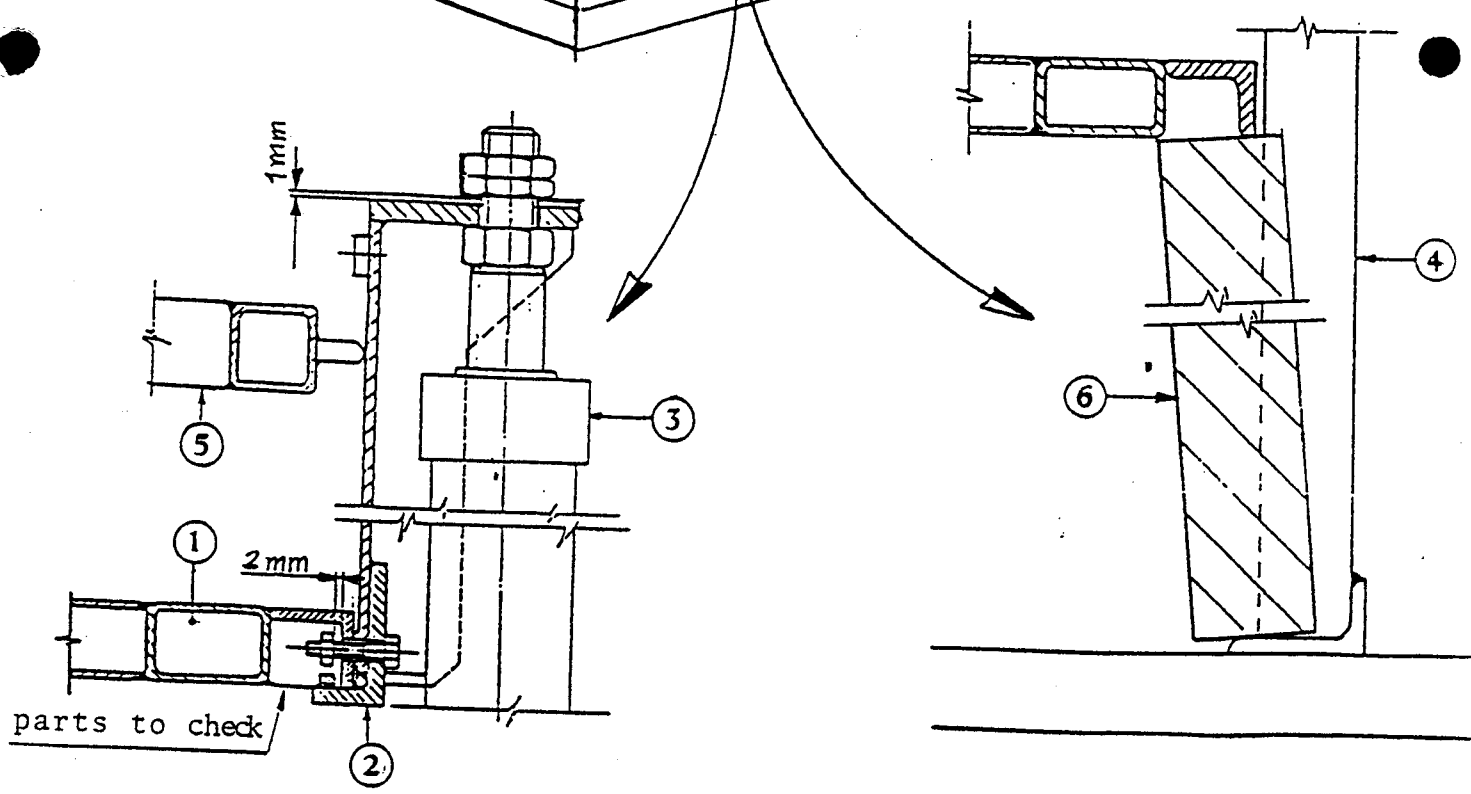
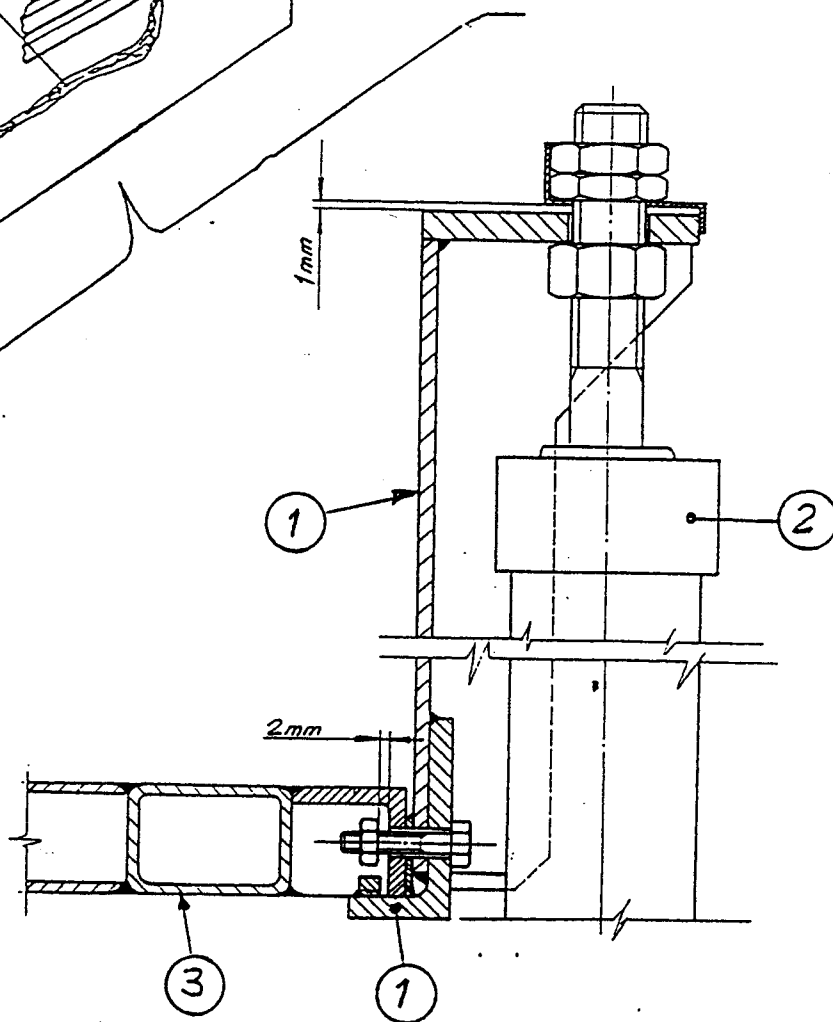
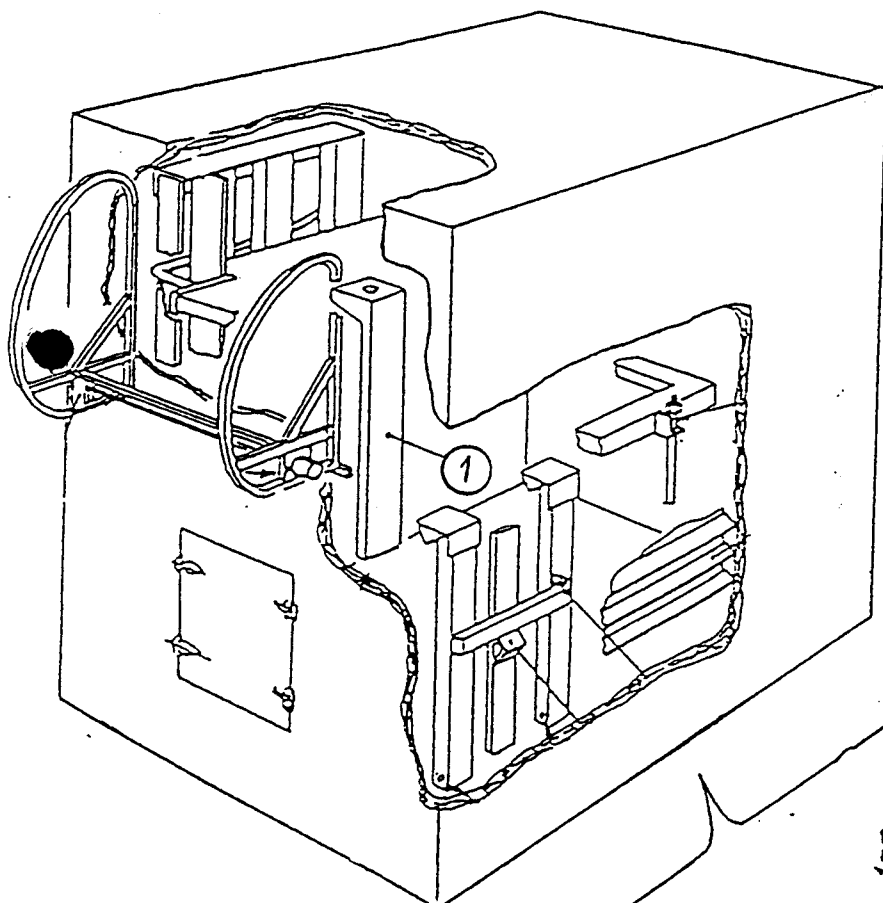


PLATE FREEZERS - PLATEMATIC

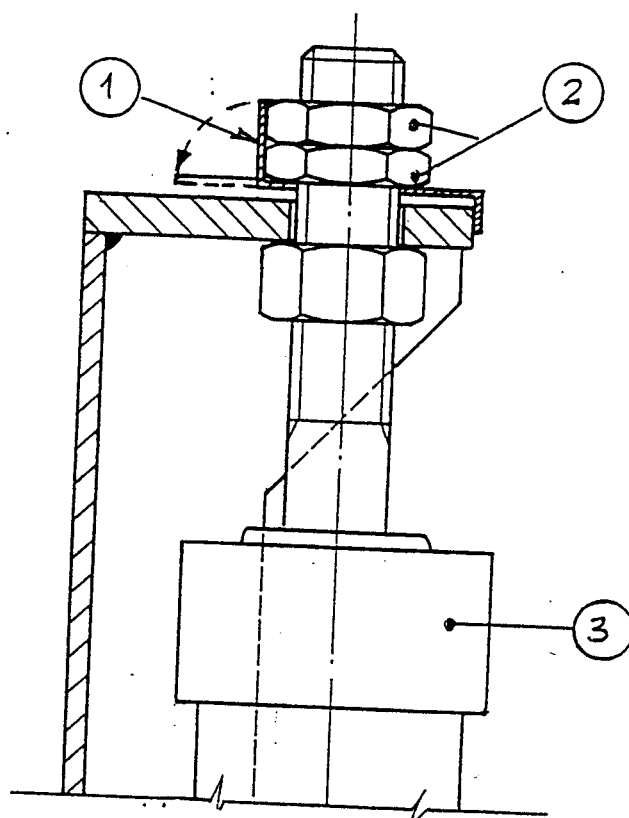
-----  
Instruction for disassembling/assembling hydraulic cylinder



- 1. Yoke
- 2. Cylinder
- 3. Mobile bottom frame

PLATE FREEZERS - PLATEMATIC

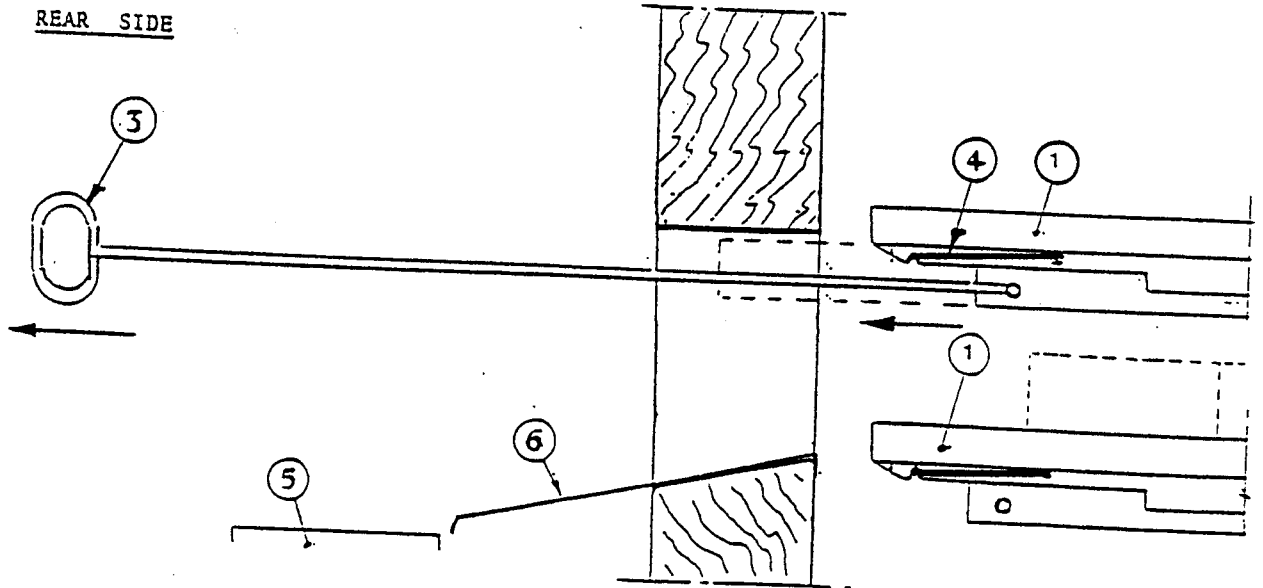
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Instruction for disassembling/assembling hydraulic cylinder



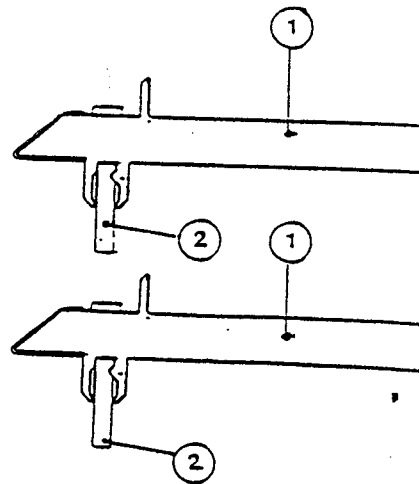
1. Bracking steel plate
2. Nuts
3. Cylinder

PLATE FREEZERS - PLATEMATIC

Spacers extraction device



DETAIL OF SPACERS CATCHING ON PLATES



- 1. Freezing plate
- 2. Spacers
- 3. Rod for driving out the spacers
- 4. Spring for spacers retainer
- 5. Unloading belt
- 6. Unloading chute









The shortening of the "ends" may be done by disassembling from the bar and then cutting them.

While adjusting the bar length, the gate position must be regulated as well as the package guide at the arrival, cabin side. It is very important to take care of the position of this guide (cabin side) having the task of stopping the package  $n + 1$  (of the row of  $n$  packages) destined to remain on their feed conveyor.

It is therefore necessary to take into consideration that the more accurate adjustment will be, the more regular and interruption free will be the freezer run.

Note : If required, loading bar ends can be supplied as spare for possible replacement, in case different lengths for other kind of packages should be necessary.

When packages or manufacturing requirements require often loading bar adjustments, a special adjustable end is available on option that can be set without disassembling (see table F.40.500).

The above special end has to be fitted only on side of loading bar corresponding to packages arrival, replacing the standard one.

On the opposite side the standard end of the loading bar properly sized will be left.

For ordering code please refer to chap. 10.