



AMERI-CAN
MACHINERY LTD.

CM50 and CM50P Corner Crimper



2650 MEADOWVALE BLVD., UNIT 5, MISSISSAUGA, ONTARIO, CANADA, L5N 6M5
PHONE (905)-542-2055, FAX (905)-542-2261, Toll Free# 1-877-829-5219
WEB SITE: www.ameri-can.ca E-MAIL: sales@ameri-can.ca

	MACHINE REQUIREMENTS	
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- Electric supply 110 V – 50/60 Hz. (U.S.A. and Canada)

- Pneumatic supply 7 Bar - 700 KPa – (optimal running)
..... (Minimal requirement 6 Bar – 600 KPa -)

- Air consumption per machining cycle ca. 10 NI/cycle

Noise.....<78 dB

- Optimal machining conditions:

Temperature.....-15 / + 60° C - (+5 / +140° F)

Relative humidity>30% e <90%

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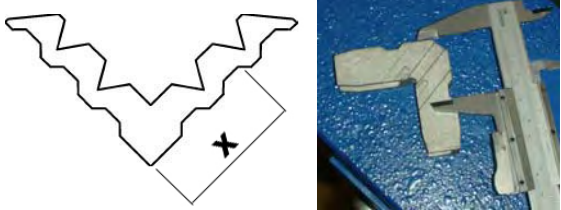


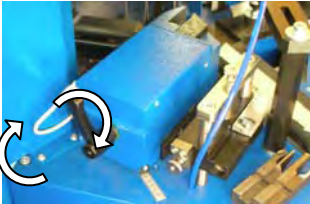
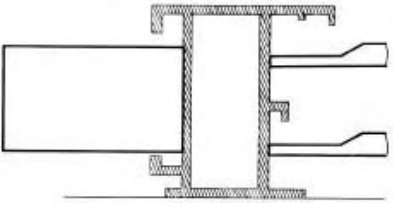
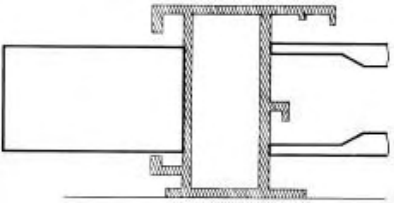
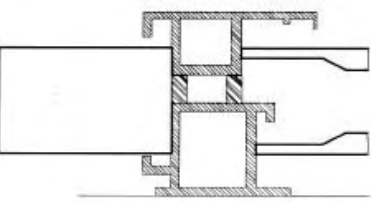
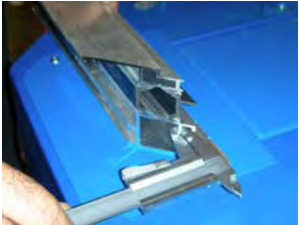

File 007 - Exploded view longitudinal section

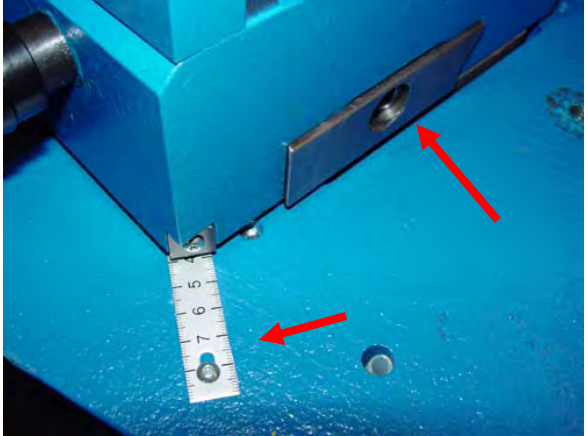
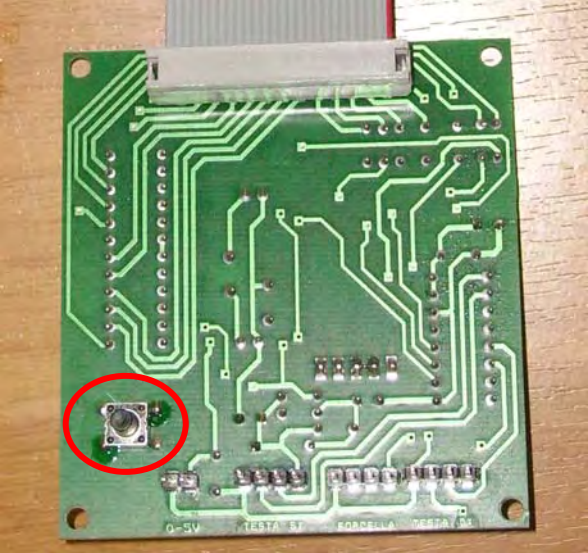
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File 001 - Spare parts list

File 002 - Tools and normal use materials list

File 001	Adjustments	Knives and machine references	
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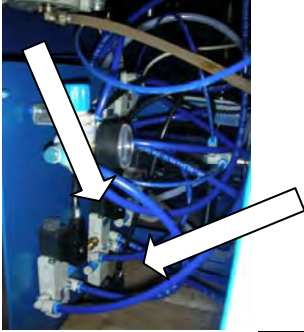

Ref.	Action	Description	Images	
1	Quota measurement	Measure by means of a sliding gauge the crimping quota ("Quota X", see drawing)		
2	Quota input	Unloose the screw behind crimping heads		
3	Quota input	Move the crimping heads until you obtain the requested quota (measured in point 1)		
4	Vertical regulation	It is necessary to regulate crimping knives height so that the machining point is as indicated in the image. The regulation is made by unloosing knives block and positioning knives at the required height, blocking the knives again.		
		 <i>Double knives configuration</i>	 <i>Opposite knives configuration</i>	 <i>Staggered knives configuration</i>
5	Profile thickness measurement	Measure the profile thickness by means of a sliding gauge.		
6	Thickness quota input	Add 0,5 mm to the measured quota and adjust the reference on the obtained quota. Ex: measured quota 1,6mm Add 0,5mm (1,6+0,5=2.1mm) Insert the obtained quota (2.1mm) on the reference. Repeat the operation for both profile references.		

Ref.	Description	Images
1	<p>Move by hand both crimping heads, until the measure of 25 mm will reach – Verify the measure on metrical scale.</p> <p>Move the reference fork until it reaches the measure of 0 mm.</p>	
2	<p>Open the back commands panel. Press the button on the electronic card, wait about 10 seconds and press it again.</p>	
3	<p>Adjust crimping heads on 65 mm. Adjust the fork on 5 mm.</p> <p>Press another time the button, at display restarting the calibration procedure is finished. If calibration procedure has been correctly made, the display will visualize 65 mm on both crimping heads.</p> <p>NB. If the display doesn't visualize correctly these data, repeat another time the procedure.</p>	

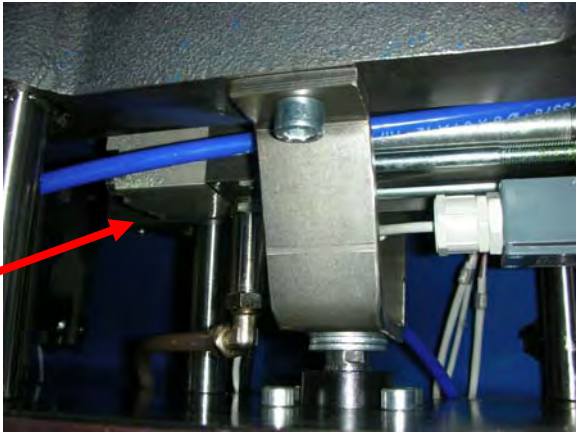
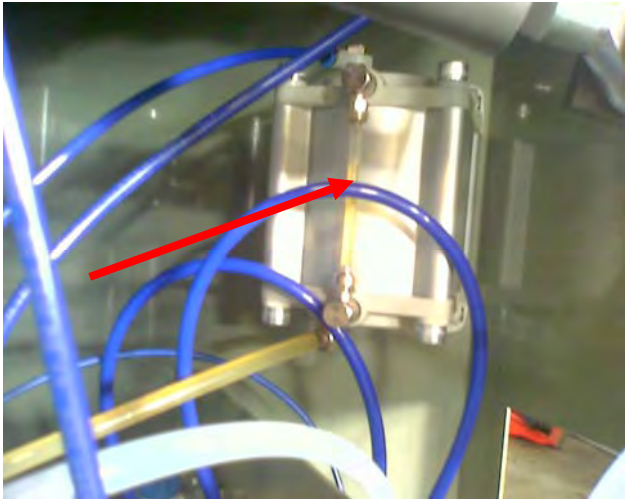
File 001	ANOMALIES	- At the end of the crimping the air-oil cylinder stays blocked in "ahead" position	
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<i>Ref.</i>	<i>Cause</i>	<i>Images</i>
1	<p>Faulty cylinder (ask for substitution- See File ANOMALIES 008)</p> <p>[Piston's positioning under the crimping bank of the machine]</p> <p>Art. N°: PMX 01 018 01</p>	

File 002	ANOMALIES	-While the operator is pushing the pedal, the bracing clamp doesn't move-	
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Ref.	Description	Images
1	<p>The valve (switch for electrical machines) of the safety carter doesn't function properly.</p> <p>Verify the correct closing of the bracket.</p> <p>Art.N°: CEX.01.500.02</p>	
2	<p>The carter is obstructed by some obstacle</p> <p>Remove it.</p>	
3	<p>The coil of electro valve EL1 – EL2 doesn't run.</p> <p>Art. N°: CEX 01 718 01</p>	
4	<p>Electro valve EL1 – EL2 doesn't function (try ion manual mode, see File 003)</p> <p>Art. N°: CPX S1 604 00</p>	
5	<p>Air is missing. Verify the correct connection and pressure level (Min. 6 bar).</p>	


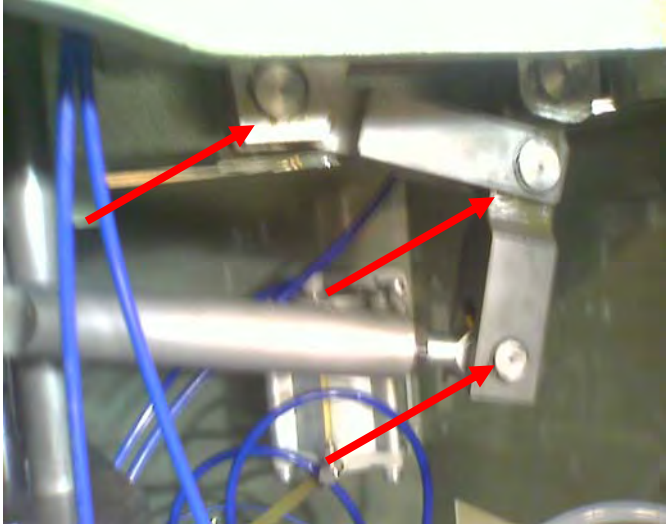

File 003	ANOMALIES	- The bracing clamp moves back during crimping-	
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Ref.	Description	Images
1	<p><i>Possible damage of the air-oil cylinder</i></p> <p>Replace it (File ANOMALIES 008).</p>	
2	<p><i>Too low oil level inside the tank.</i></p> <ol style="list-style-type: none"> 1. Re-add the oil 2. Check that fittings are not becoming loose. <p>Art.N°: OIL006 Description: Hydraulic oil T46</p>	

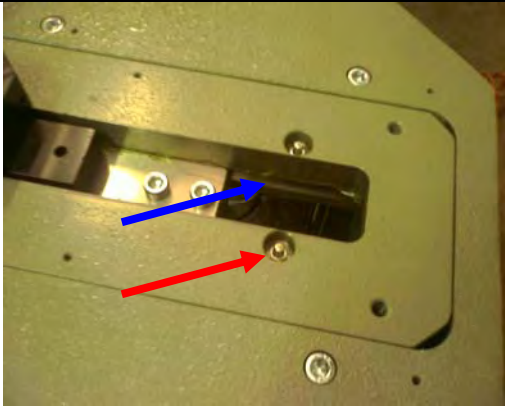
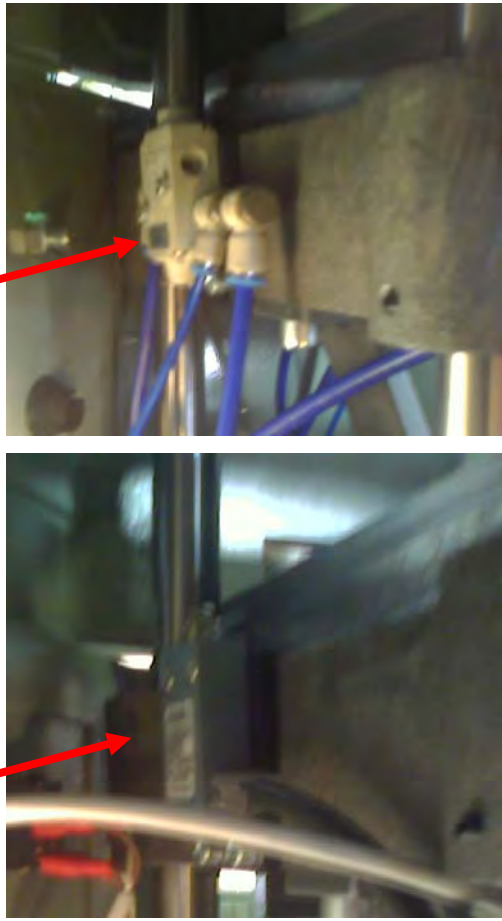

File 004

ANOMALIES

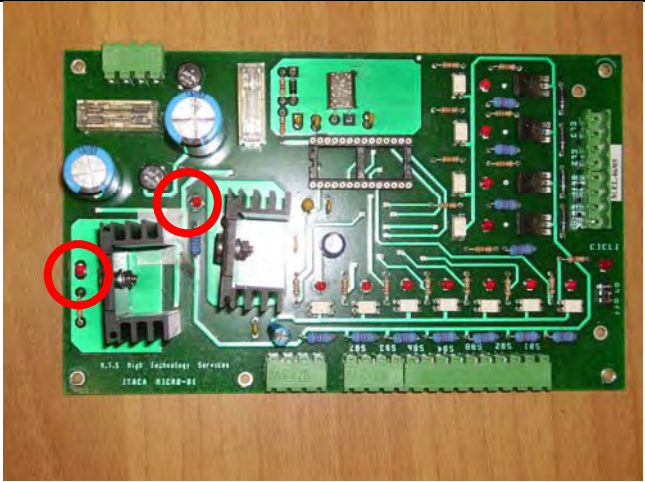
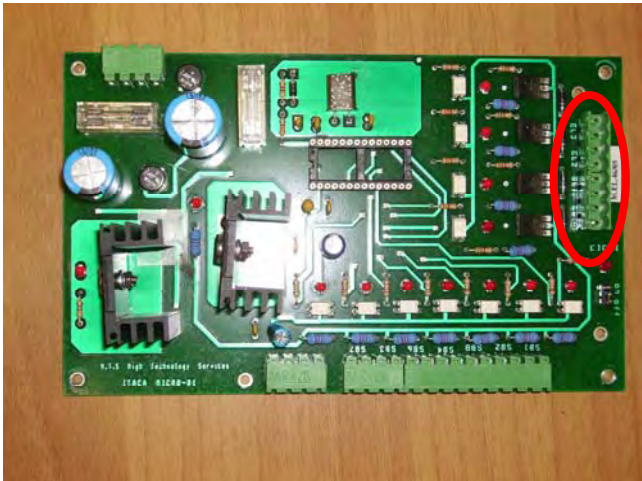
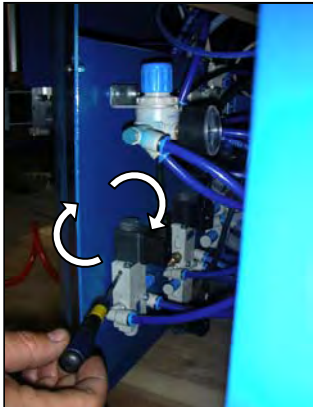
During crimping phases the cylinder does not move up regularly and the crimping is not executed in a correct way

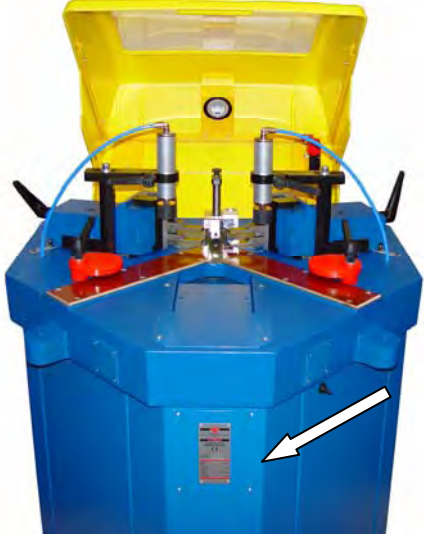
Ref.	Description	Images
1	<p><i>Air missing inside the system</i> Connect the pneumatic supply. Check that pressure is not altered during the crimping (it must be around 6 Bar). If it is altered, it means that air is not arriving from the system.</p>	 A photograph of a blue pneumatic supply unit. It features a pressure gauge and two vertical air filters. A red arrow points to a connection point on the left side of the unit.
2	<p><i>A pin of the handling unit is blocked</i></p> <ol style="list-style-type: none">1. Disassemble the pins one by one.2. Check the good status of housings and pins (they do not have scorings). In case they have, replace them.3. Verify that pins are not blocked, by moving them manually and greasing the blocked ones.	 A close-up photograph of a mechanical assembly. A horizontal metal pin is visible, with three red arrows pointing to it from different angles. The background shows various mechanical components and blue hoses.
3	<p><i>Pneumatic cylinder is defective.</i> Replace it.</p> <p>Art. N°: CPX.01.633.00 Description: PNEUMATIC CYLINDER 125/100 ISO</p>	 A photograph of a pneumatic cylinder mounted on a blue machine frame. A red arrow points to the cylinder. Blue hoses and other mechanical parts are visible in the background.

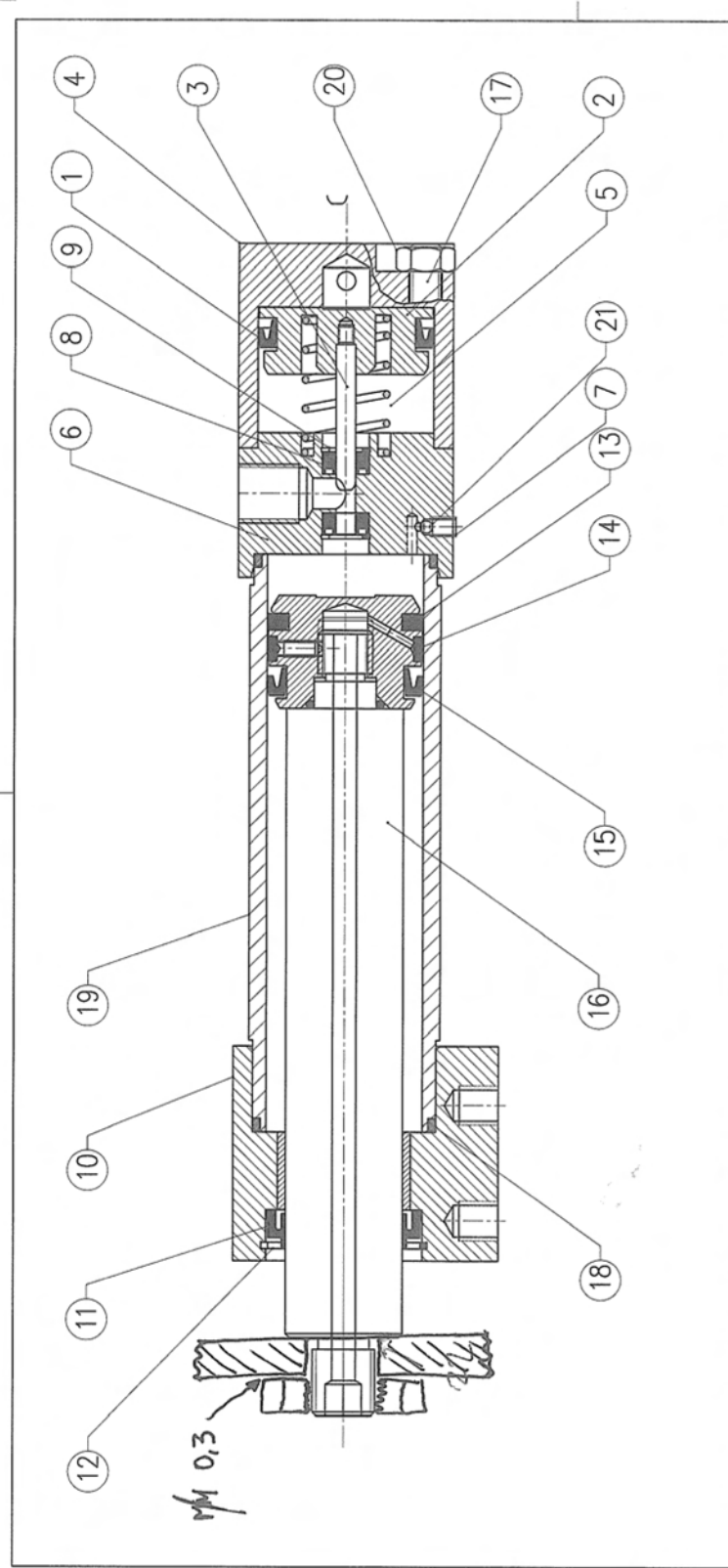
File 005	ANOMALIES	- Bracing clamp goes up but doesn't go ahead-	
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Ref.	Description	Images
1	<p><i>The slide is dirty or obstructed</i></p> <p>Clean (blue arrow) and grease (red arrow) the slide or remove foreign matters.</p>	
2	<p><i>Electrical end stroke is not pushed</i></p> <ol style="list-style-type: none"> 1. Open the back panel 2. Check the correct positioning of bracing clamp 3. Control the correct closing of the valve's support plate. 4. Verify the correct closing of the locknut. <p>Art.N° : CEX.01.728.01</p>	
3	<p><i>Raising unit doesn't arrive at bracing clamp level</i></p> <ol style="list-style-type: none"> 1. Unscrew the cylinder shaft, raising the unit until it is at the same level of crimping table. 2. Screw another time the locknut. 	

File 006	ANOMALIES	-The key of the safe switch doesn't fit correctly in the relative housing-	
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Ref.	Description	Images
1	<p><i>There are impediments for carter closing</i></p> <p>Remove foreign matters.</p>	
2	<p><i>Check the electrical contacts of pedals.</i></p> <p>Inspect with the tester if contacts don't run, otherwise replace the pedals.</p>	
3	<p><i>Control electronic card</i></p> <p>Verify that the 2 LED are on and that fuses are not burnt-out. Otherwise, replace the electronic card.</p> <p>Art.N°: GNX.IP.001.00</p>	
4	<p><i>Verify that the connector between card and solenoid valve is not disconnected.</i></p>	
5	<p><i>Control the solenoid valve correct functioning.</i></p> <p>See File 001 section Controls – ANOMALIES</p> <p>Art.N°: Description:</p>	

Ref.	Description
1	Take out air from the machine.
2	Remove the back panel. 
3	Loosen the nut with the wrench M24.
4	Demount the electrical switch.
5	Disconnect air pipes and oil pipe.
6	Loosen the two screws that support the cylinder and remove the cylinder.
7	Mount the cylinder following the operations in reverse order.
8	<p>AFTER THE MOUNTING Let 2/3 tenths backlash between the cylinder spindle and the nut.</p> <p>Remove the aluminium block of the bracing clamp. There's a visible M5 nut (n°21 on the cylinder) to loosen. DO NOT REMOVE IT.</p> <p>Let the bracing clamp coming up and let it going ahead* to make air coming out from the cylinder</p> <p>Repeat the operation until no air comes out.</p> <p>* We suggest you to hold the bracing clamp in yours hand TO AVOID ITS END STROKE PROGRESS.</p>

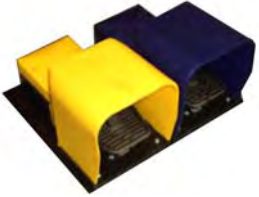
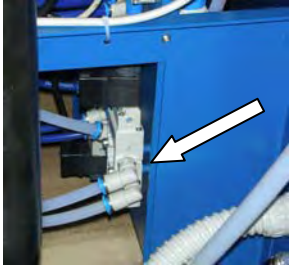



21	PZ	CMX.01.513.00	SFERA SKF 1/8 MM3,175	1	5	PZ	CMX.01.510.00	MOLLA PISTONE DI BLOCCO	1
20	PZ	UMX.00.815.12	DADO M8	4	4	PZ	PMX.01.345.00	CILINDRO DI BLOCCAGGIO	1
19	PZ	PMX.01.339.01	CILINDRO	1	3	PZ	PMX.01.340.01	PISTONCINO	1
18	PZ	CMX.01.508.00	GUARNIZIONE OR 3168 42,52X2,62	2	2	PZ	PMX.01.346.02	PISTONE DI BLOCCAGGIO	1
17	MT	PMX.01.352.00	BARRA FILETTATA M8 TAGLIATA A 220MM	1	1	PZ	CMX.01.500.00	GUARNIZIONE PISTONE DI BLOCCO DE175	1
16	PZ	GMX.01.032.00	GRUPPO PISTONE CIL A/O	1	RIF.	U.M.	CODICE	DESCRIZIONE	Q.TA
15	PZ	CMX.01.504.00	GUARNIZIONE PISTONE 30X40X7	1					
14	PZ	CMX.01.506.00	ANELLO DI GUIDA TEFLON	1	ZONA		DESCRIZIONE MODIFICA		
13	PZ	CMX.01.505.00	GUARNIZIONE BRONZO+OR	1	SOTTORILEV. R.				
12	PZ	UMX.00.835.09	SEGER INTERNO 40 TIPO JV	1	MATERIALE				
11	PZ	CMX.01.503.00	GUARNIZIONE USCITA STELO	1	TRATTAMENTO				
10	PZ	GMX.01.031.00	GRUPPO FLANGIA LATO STELO	1	ESALVANZE GENERALI SECONDO:				
9	PZ	UMX.00.835.07	SEGER INTERNO 12	2	SK. E. R. MOD. QUOTATI SK. R.				
8	PZ	CMX.01.501.00	GUARNIZIONE PISTONCINO DI BLOCCO 5X12X5.5	2	NOTE				
7	PZ	UMX.00.830.01	GRANO M5 X6 SENZA PUNTA BRUNITO	1	DIS. PALCETTI 01/05/04				
6	PZ	PMX.01.347.02	PIASTRA INGRESSO OLIO	1	CONTR. U. R. O.				
RIF.	U.M.	CODICE	DESCRIZIONE	Q.TA	APPR.				


A TUTTI I DIRITTI RISERVATI LA PROPRIETA' IN TUTTI I PAESI
 IL DIRITTO DI RIPRODUZIONE E' RISERVATO ALL'INDUSTRIA
 COMPLESSIVA SENZA LA NOSTRA AUTORIZZAZIONE

NOME E COGNOME: **GRUPPO CILINDRO A/O**
 CODICE: **GMX.01.030.01**
 DATA: **11/05/04**
 SCALA: **1:1**


File 008	ANOMALIES	- Crimping missing -	
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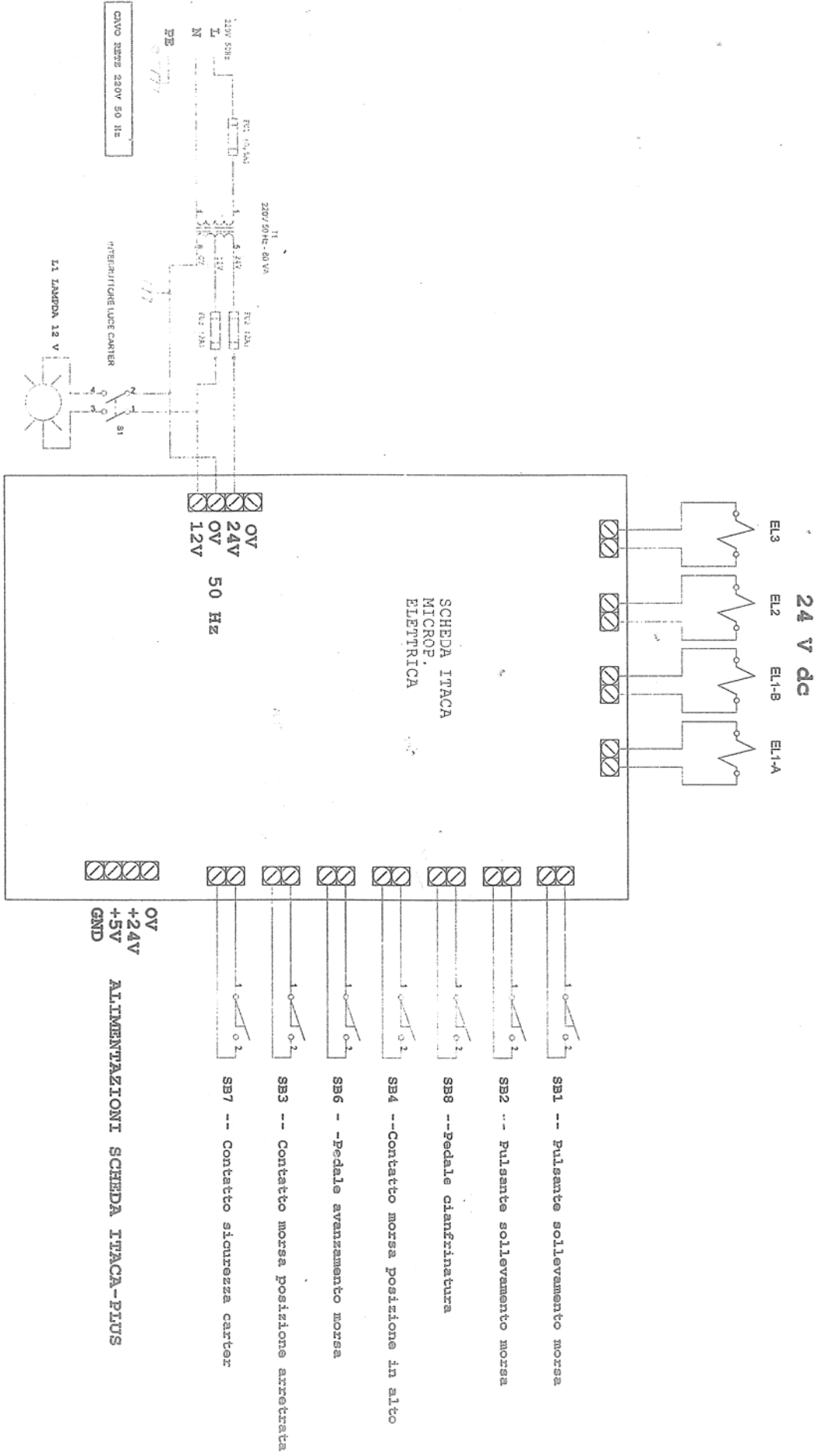
Ref.	Cause	Images
1	Faulty pedals. Art.N° : CEX 01 733 00	
2	Check the solenoid valve functioning (see File 003). Art.N° : CPX.S1.605.00 Description : SOLENOID VALVE 5/2 1/4" MONOSTABLE [Access from machine back panel]	
3	Faulty cylinder needs replacement. 1). Disconnect air to the machine. 2). Remove the back closing panel. 3). Unloose the lock nut (wrench mm. 41), at the cylinder shaft. 4). Detach air pipes/pipes connected to the cylinder. 5). Remove the 4 fastening screws from the plate. 6). Unscrew the cylinder from the attack cylinder block. 7). Insert the new cylinder 8). Execute the operations in the reverse order to reassemble the whole. Art. N° : CPX 01 633 00 Description : PNEUMATIC CYLINDER 125/100 ISO	

File 001	CONTROLS – MAINTENANCE	Solenoid valve functioning	
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<i>Ref.</i>	<i>Action</i>	<i>Description</i>	<i>Images</i>
1	Manual movement solenoid valves	All solenoid valves can be manually controlled. Use a screwdriver on relative command screw.	

File 002	CONTROLS – MAINTENANCE	Oil level filter unit	
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Ref.	Action	Description	Images
1	Verify the condensation level	<p>Verify if there is the condensation in the filter of air treatment unit (external of machine). If there is some, open the plug to discharge the air.</p> <p><u>External Filter Art.N°:</u> CPX 01 601 03</p>	



File 002	DIAGRAMS	ELECTRIC CIRCUIT DIAGRAM	
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DESCRIPTION OF ELECTRONIC CARD'S LEDES

<i>LED</i>	<i>Function description</i>
SB1	BRACING CLAMP GOES UP
SB2	BRACING CLAMP LOWERING
SB8	CRIMPING PEDAL
SB4	CONTACT BRACING CLAMP HIGH POSITION
SB6	BRACING CLAMP PROGRESS PEDAL
SB3	CONTACT BRACING CLAMP BACK POSITION
SB7	CONTACT FRONT SAFE CARTER

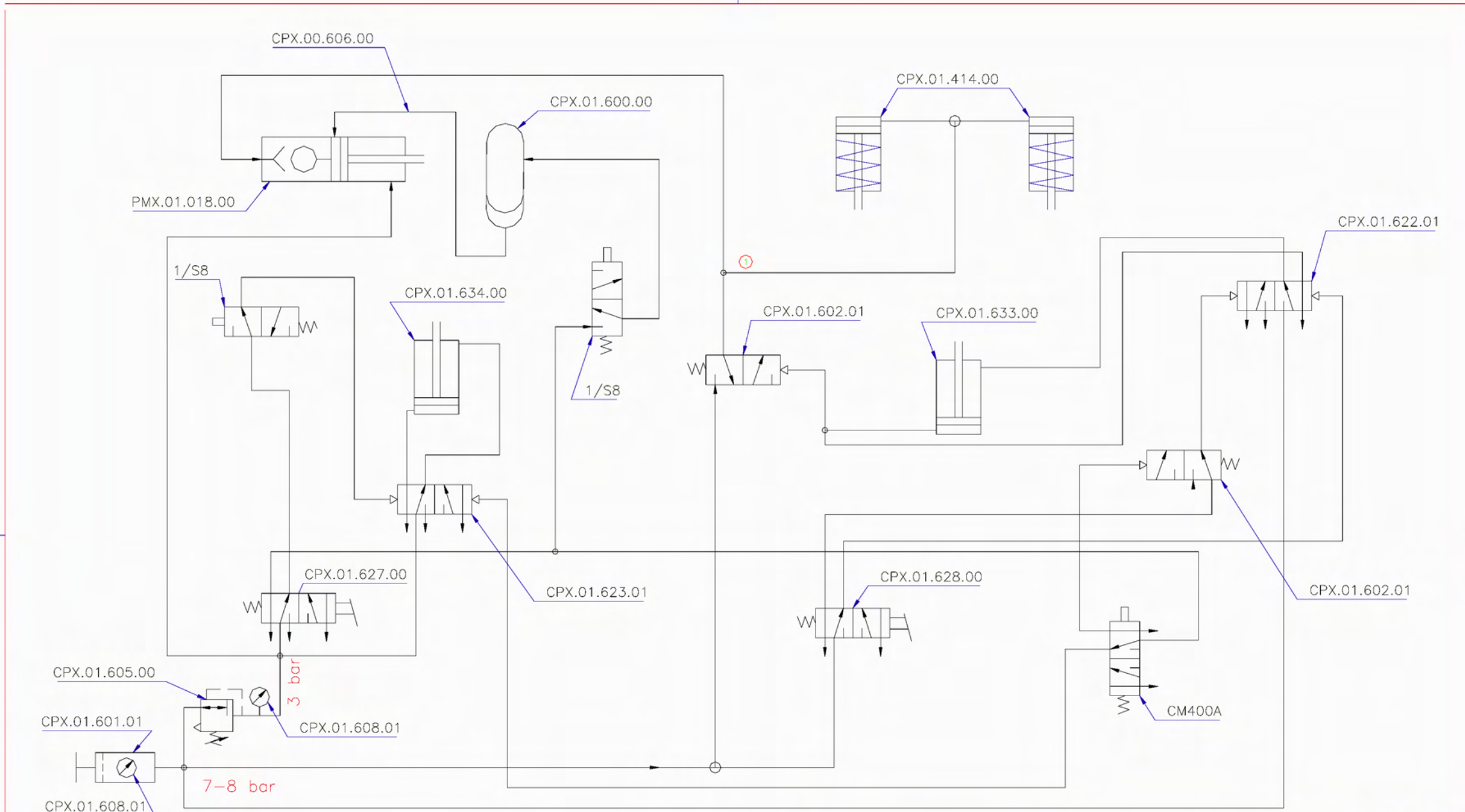
When the machine runs properly in all its parts, the relative LEDES are on.

Ex. 1. When the machine is crimping LED SB8 is on. At the end of the process, it switches off.

LED SB7 (safety carter contact) must be always on otherwise the machine doesn't run.

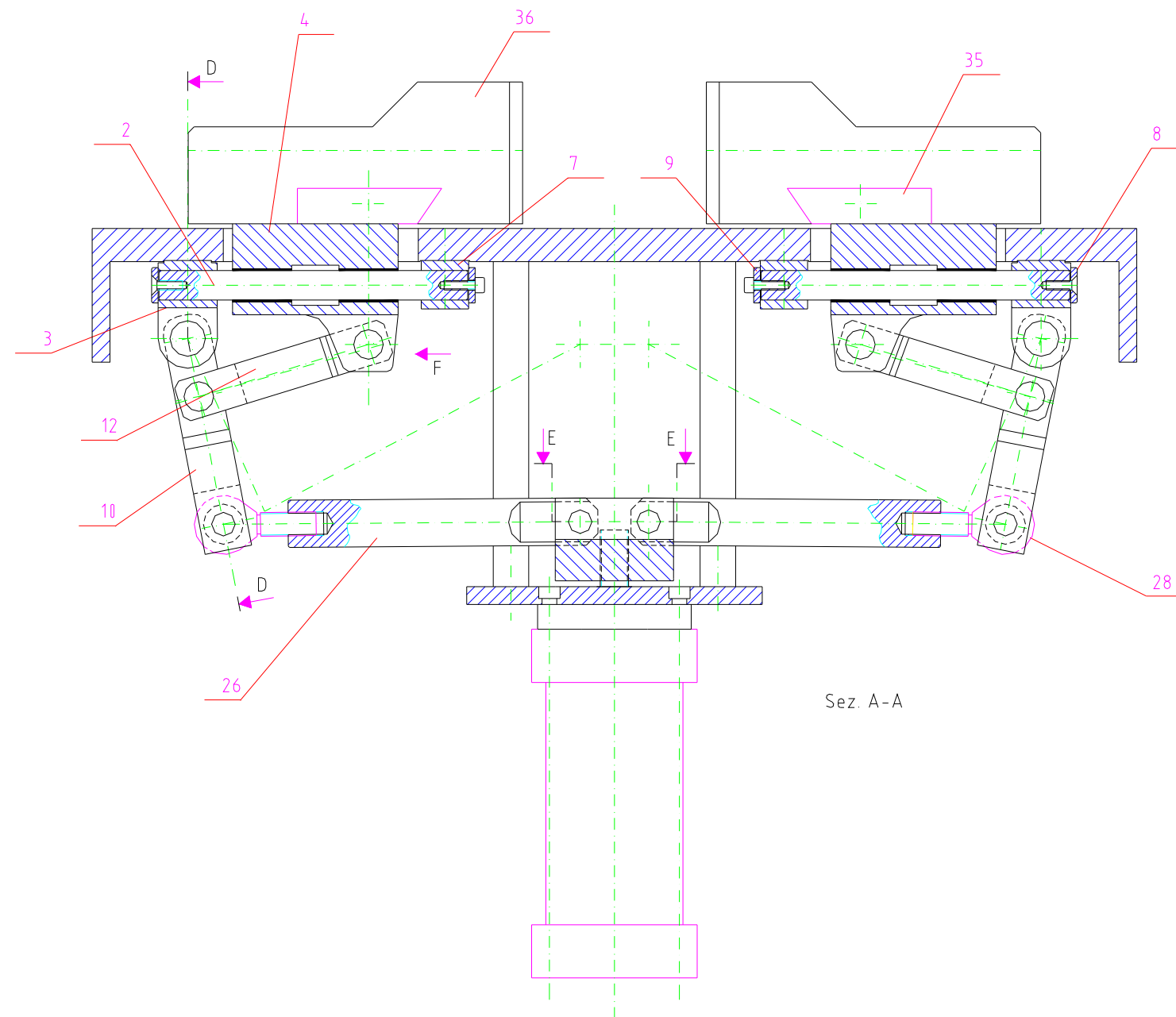
SOLENOID VALVES CONNECTION DESCRIPTION

<i>SOLENOID VALVES</i>	<i>Function description</i>
EL3	CRIMPING
EL2	BRACING CLAMP PROGRESS
EL1-B	BRACING CLAMP DOWN
EL1-A	BRACING CLAMP UP

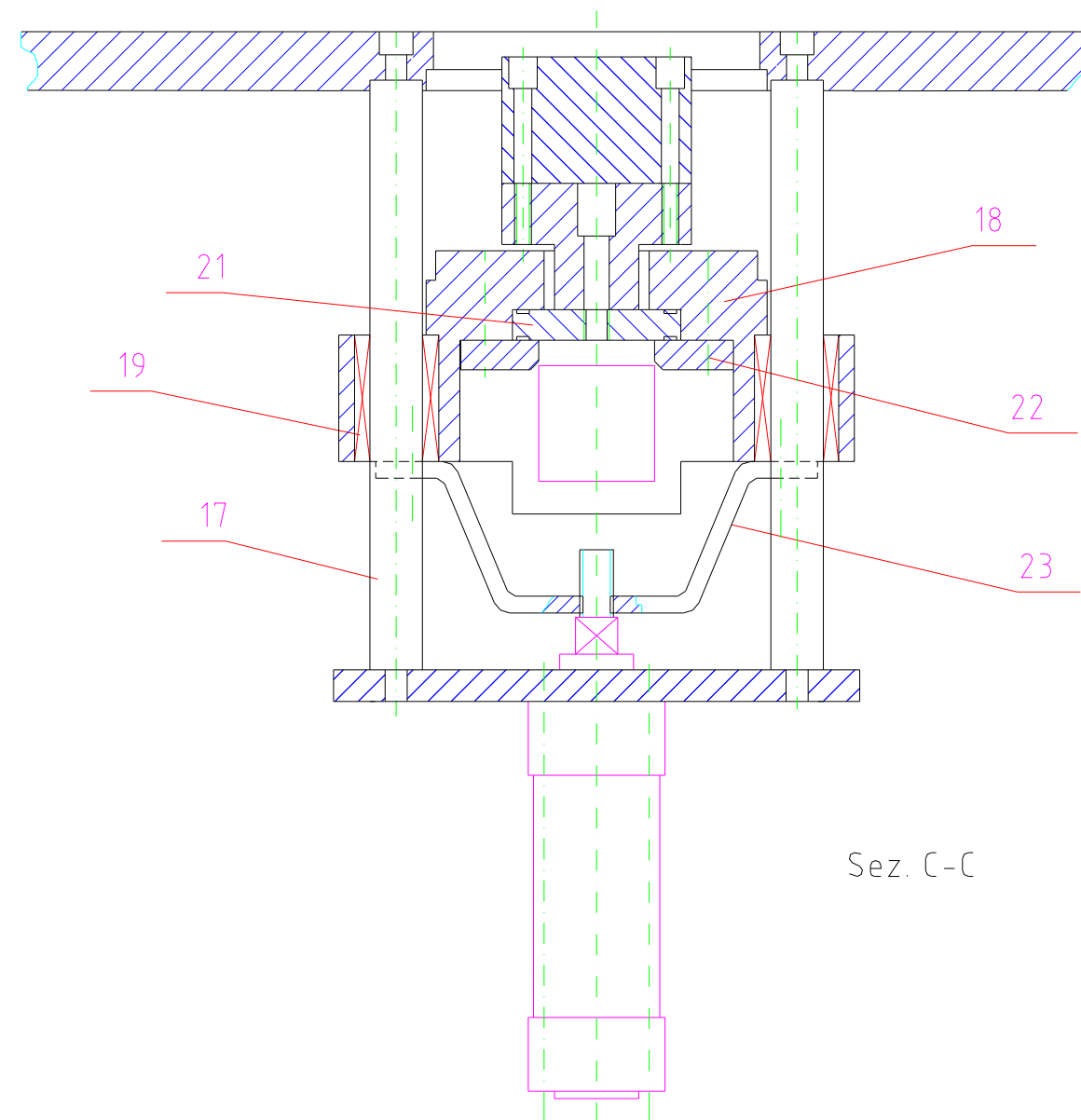


A TERMINI DI LEGGE CI RISERVAMO LA PROPRIETA' DI QUESTO
 DISCORSO CON DIVIETO DI RIPRODURLO O DI RENDERSI
 COMUNQUE NOTO A TERZI SENZA LA NOSTRA AUTORIZZAZIONE

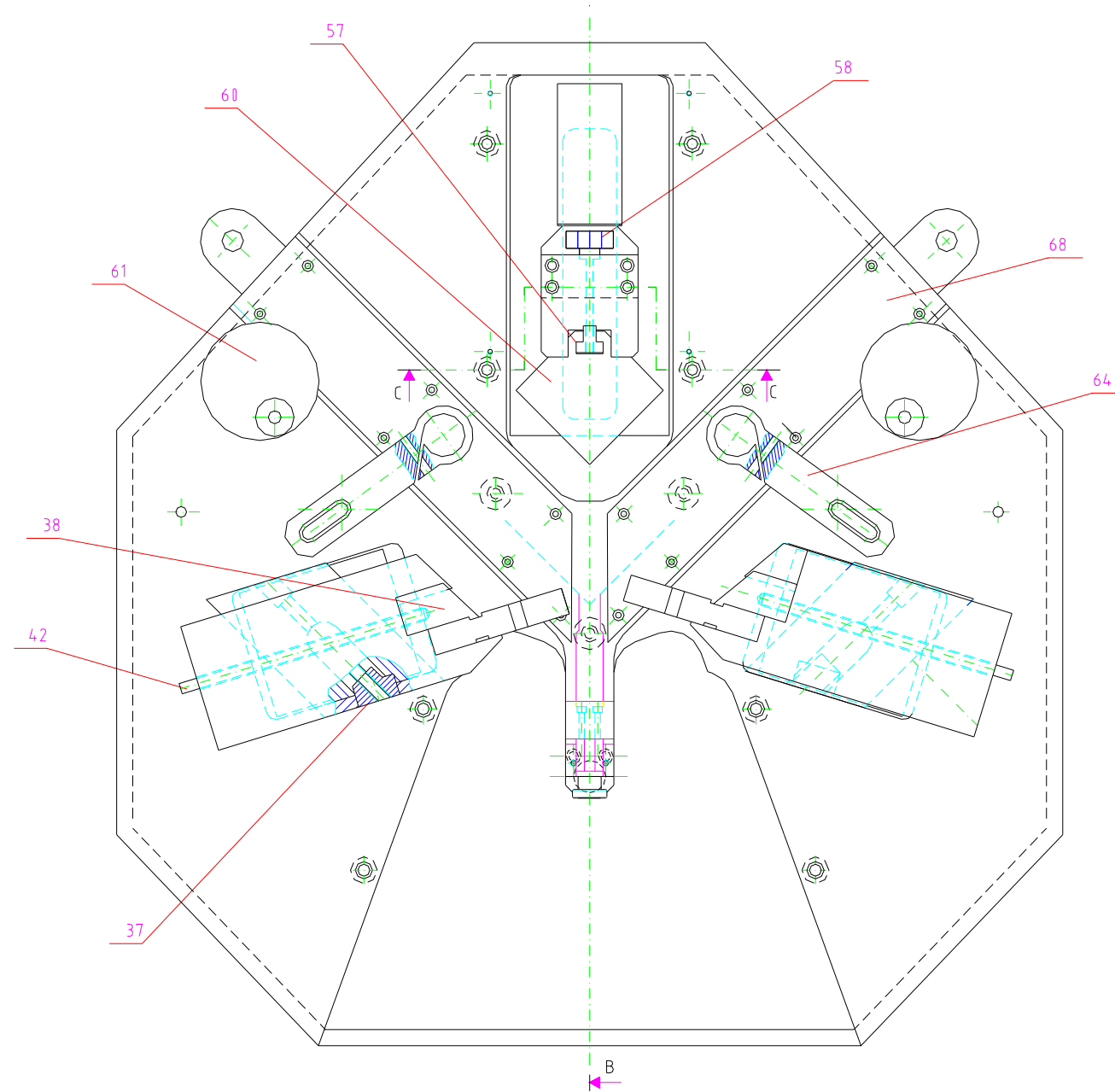
1		TOLTA ALIMENTAZIONE PRESSELLI SUL LATO SPINTA DEL CILINDRO 125		11/3/98	sarma
ZONA	DESCRIZIONE MODIFICA			DATA	DIS. APPR.
SOSTITUISCE IL					
MATERIALE	TOLLERANZE GENERALI SECONDO:	TRATTAMENTO		√(√√√√)	
NOTE	SM. E R. NON QUOTATI SM. R.	NOMENCLATURA IMPIANTO PNEUMATICO ITACA			
DIS.	sarma	COD.	GMI.01.001.00		
CONTR.		COD. FILE	IMPIANTO	FOGLIO 2	FORMATO A3
APPR.		VISTO D A Q		DI	SCALA



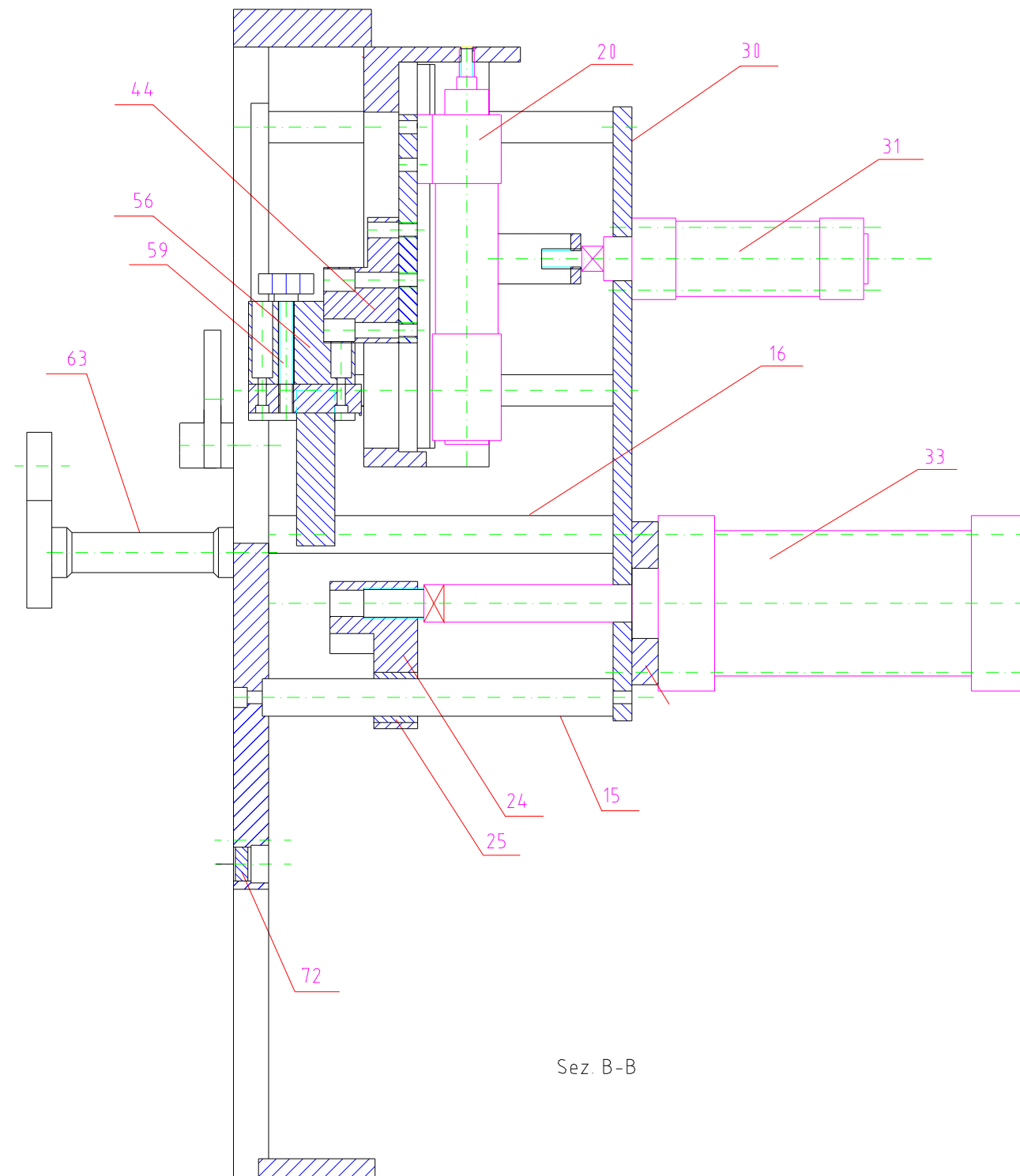
POS.	ARTICLE N°	NAME
2	PMX.01.002.01	Slide way for crimping head
3	PMX.01.003.00	Slide ways external support
4	PMX.01.004.01	Right slide block
4	PMX.01.004.02	Left slide block
7	PMX.01.006.03	Slide ways internal support
9	PMX.01.008.01	Plaque for crimping heads springing
10	PMX.01.009.00	Crank
12	PMX.01.011.03	Connecting rod
26	PMX.01.023.00	Thrust arm
28	UMX.00.822.01	Articulated joint M20 pitch 1.5 UNI 6058
35	PMT.IP.063.01	Right crimping head gib
35	PMT.IP.062.01	Left crimping head gib
36	PMX.01.031.06	Right crimping head
36	PMX.01.031.05	Left crimping head



POS.	ARTICLE N°	NAME
17	PMX.01.016.00	Cylinder 50/100 tie rod
18	PMX.01.017.03	A/O cylinder unit
19	CMX.01.401.00	Linear ball bearings
21	PMX.01.019.04	Sliding plate
22	PMX.01.020.00	Sliding plate guide
23	PMX.01.021.01	Bracket connection piston 50/100



POS.	ARTICLE N°	NAME
1	PMX.01.016.00	Cylinder 50/100 tie rod
37	PMT.01.032.05	Right crimping head adjustment block
37	PMT.01.032.06	Left crimping head adjustment block
38	PMT.01.033.05	Right knife block
38	PMT.01.033.05	Left knife block
42	GMX.01.023.00	Crimping head bar handle group
57	PMT.01.045.00	Selvage tighten guide
60	PMX.01.046.02	Selvage thickness 30 MM.
61	PMX.01.314.00	Eccentric
61	PMX.01.315.00	Eccentric upper washer
61	PMX.01.316.00	Eccentric lower washer
64	CMX.00.550.00	Right and left piston bracket
68	PMX.01.050.01	Right plate for casing bearing
68	PMX.01.050.02	Left plate for casing bearing



POS.	ARTICLE N°	NAME
15	PMX.01.014.00	Piston 125/150 tie rod
16	PMX.01.015.00	Piston 125/150 tie rod
20	PMX.01.018.01	Air oil cylinder 40/120
24	PMX.01.022.01	Piston 125/150 connection block
25	CMX.01.402.00	Bearing brass 30-40-50-42
30	PMX.01.026.01	Pistons plate
31	CPX.01.403.00	Pneumatic cylinder 50/100
33	CPX.01.633.00	Cylinder 125/100
44	PMT.01.034.04	Bracing clamp burnished support
56	PMX.01.044.02	Bracing clamp head
63	PMT.S1.048.04	Support bracket piston pliers

File 001	SPARE PARTS	Spare parts list	
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<i>Electrical and electronic parts</i>		
<i>Art.N°</i>	<i>Description</i>	<i>File</i>
CEX.01.500.02	SAFETY END STROKE PIZZATO FR 692-D2	2
CEX.01.728.01	END STROKE PIZZATO FA 4101	6
CEX.01.733.00	WIRED PEDALS WITH CONNECTOR	9
GNX.IP.001.00	ELETTRONIC CARD (CM50 P Version Only)	7
GNX.IP.002.00	POTENTIOMETER CARD UNIT IP	7

<i>Pneumatic parts</i>		
<i>Art.N°</i>	<i>Description</i>	<i>File</i>
CPX.01.601.03	FILTER UNIT FR+L 1/4"	2
CPX.01.622.02	VALVE PN 5/2 1/4" BIST. KPM	2-5
CEX.01.718.01	LOW ABSORTION COIL 3,5W	2
CMJ.04.534.01	VALVE 3/2" 1/8" WITH FERRULE KPM	6
CPX.01.633.00	PNEUMATIC CYLINDER 125/100 ISO	4-5-9
CPX.GM.026.00	PNEUMATIC PEDAL	2
CPX.S1.604.00	SOLENOID VALVE 5/2 1/8" BISTABLE	2
CPX.S1.605.00	SOLENOID VALVE 5/2 1/4" MONOSTABLE 454-	5-9
PMX.01.018.01	AIR OIL CYLINDER 40/120 WITH BLOCK	1-8

File 002	SPARE PARTS	Tools and normal use materials list	
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<i>Art.N°</i>	<i>Description</i>	<i>Number</i>
ATL5001	STANDARD KNIVES PAIR MM. 3	6028.00
ATL5002	STANDARD KNIVES PAIR MM. 5	6028.01
ATL5003	STANDARD KNIVES PAIR MM. 7	6028.02
OIL006	HYDRAULIC OIL T46	