

OPERATOR'S MANUAL

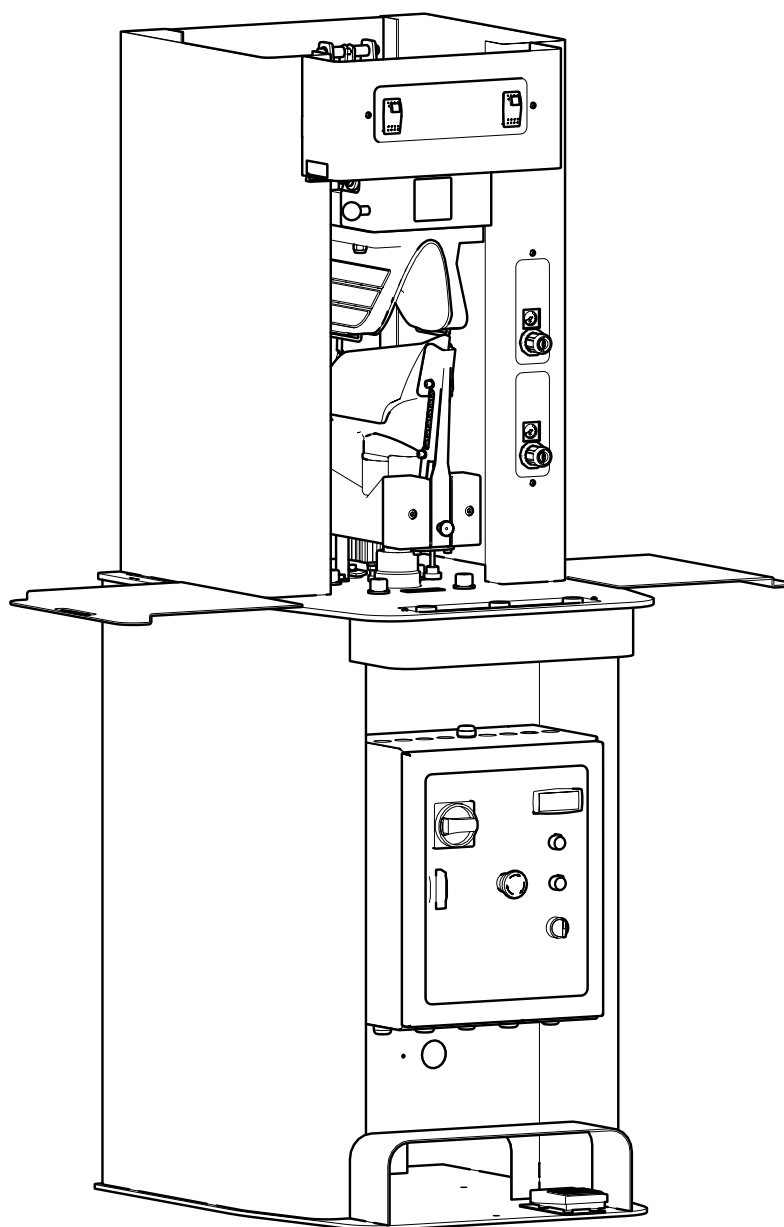


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Introduction

The purpose of this manual is to inform the owner of this machine for its operation, its maintenance and for all the safety regulations.

Please read carefully all the instructions and follow them in order to use the machine properly in the production and avoid any case of injuries.

Our company does not have any responsibility for any changes happened on the machine by the owner, or actions which are different to what this manual refers.

SAFETY REGULATIONS

This machine is intended for professional use only.



WARNING!

Only one operator may work on the machine at a time.



WARNING!

Read and follow carefully all the relative instructions to avoid serious injury.

Only qualified and authorized personnel must use the machine.

- Operators are expressly forbidden to use the machine under the influence of alcohol or drugs capable of affecting physical and mental capacity.
- Keep unauthorized persons away from the work area.
- Make sure that the machine has been installed in compliance with the established legislation and standards.
- Always keep this user manual in a place where it can be readily consulted when working on the machine. Consult it whenever you are in need of information or explanation.
- Do not remove or deface the safety, danger, warning or instruction signs. Replace any missing or illegible Danger, Warning or instructions signs.
- Never use the machine if you notice any damaged electric wires.
- Never install the machine outdoors or in any place with a lot of moisture.



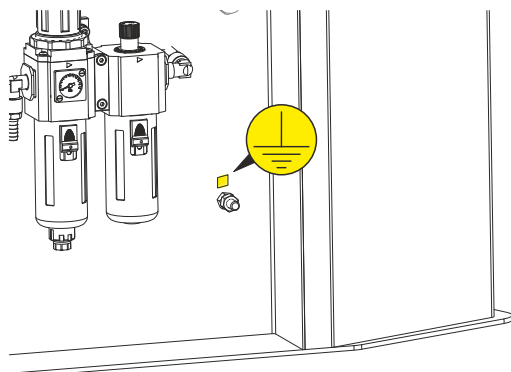
WARNING

Use only original spare parts, which can be supplied by the manufacturer or the local agent. Otherwise, your machine will not be a CE product.



WARNING

The machine frame must be earthed using the outside connection point marked according to the CE norms.

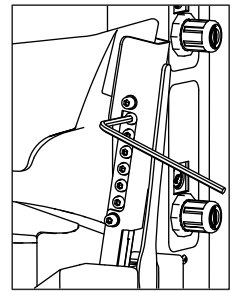


Note: Before operate the machine tight softly all the screws of the inflatable TUBOLAR (Air bag).

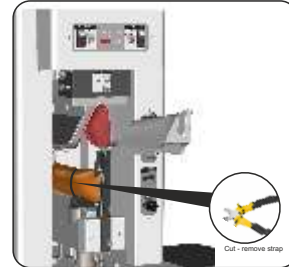


Warning

Too much tightening will destroy the TUBOLAR.

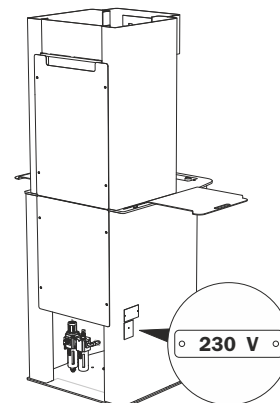


Note: Before connecting the machine to air pressure, cut the tubular transportation securing strap.



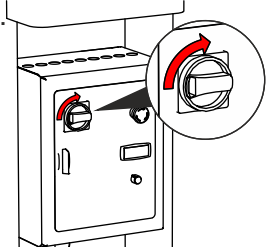
Electric and pneumatic connections

1. Connect the machine (SINGLE PHASE 230V - 50/60Hz).
2. Before plugging in the machine, check that the main supply voltage is the same as that indicated on the label situated on the back side of the machine.



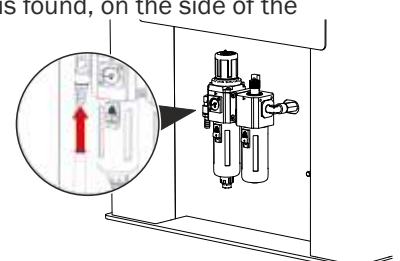
3. Check if the plug and socket have the same technical type. If not, use the suitable adapter after having consulted a certified electrician.

4. To disconnect the machine, turn the main switch off and remove the plug from the outlet.

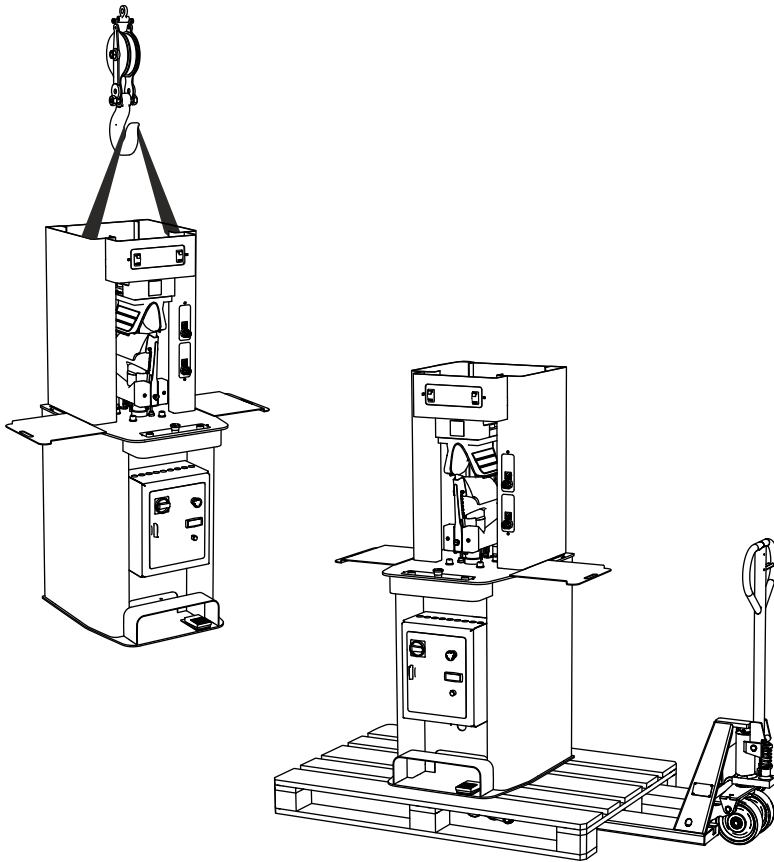


5. Connect the machine to air pressure 6 - 8bar.

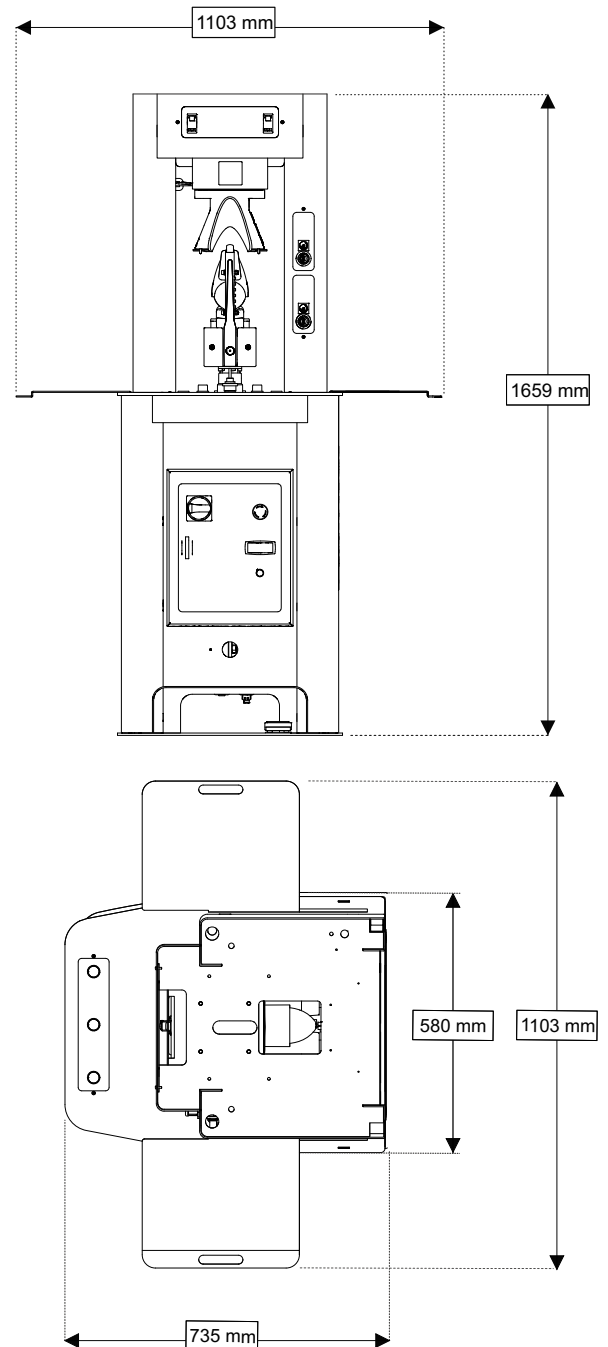
6. Connect the proper pneumatic hose. Set the main pressure regulator, which is found, on the side of the machine to 6 Bar.



Holding - transportation

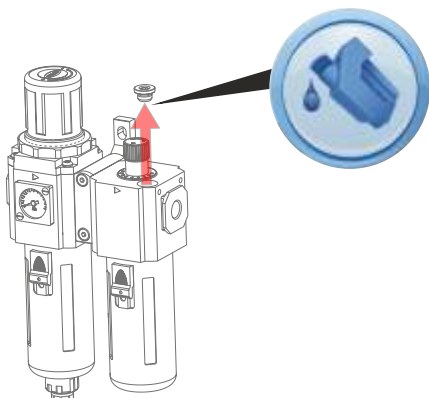


Technical Data & Dimensioning



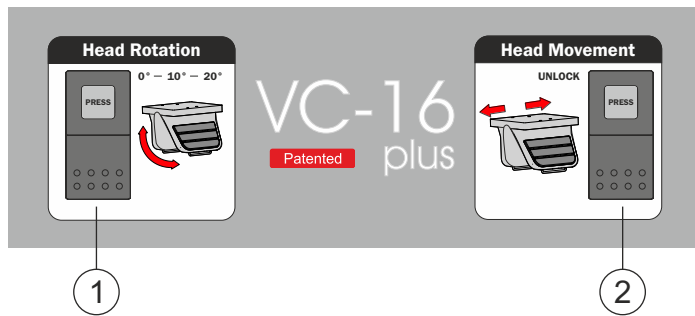
Lubrication

Keep the FRL (air-filter-regulator & lubricator) always filled with oil. We note that with 8 hours of work per day, the lubricator oil is consumed within 20-25 days approximately. If this does not occur, adjust the oil flow using the adjuster on upper part of lubricator. We recommend the use of pneumatic oil. Once per week lubricate all moving parts of the machine.



Technical Data	VC-16 PLUS
OPERATION	Electric-Pneumatic
PRESSURE	6 Bar
VOLTAGE	230V single phase 50Hz
POWER CONSUMPTION	1000 W
CAPACITY	150 pairs per hour
DIMENSIONS (mm)	735 X 1103 X 1659
DIMENSIONS (mm) - with tables folded	735 X 580 X 1659
WEIGHT	202Kgs

Panels Adjustments

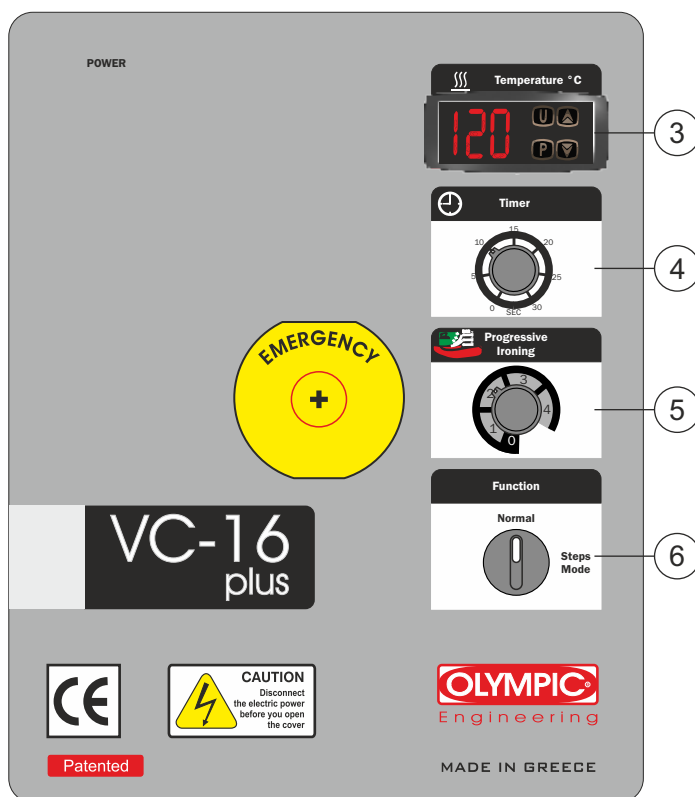


1. Head Rotation

- Pressing the button once, will tilt the head 10°.
- Pressing the button twice, will tilt the head 20°.
- Pressing the button a third time, will put the head in normal level position.

2. Head Movement

Pressing the button releases the head for 3 seconds, allowing you its manual movement.



3. Hot Station Temperature:

Without silicon head protection, set the temperature from 100 to 120 °C. With silicon head protection, set the temperature from 160 to 180 °C. Temperature is a basic factor for the crimping. Choose the higher temperature (according the material you use) for higher crimping result. (Suggested Temperature 120 °C).

To adjust thermoregulator press the DOWN arrow. When the digits start blinking use the UP and DOWN arrows to adjust the temperature.

Then you press instantly the **P** button.

4. Timer:

Set the timer from 5 to 30 sec. By increasing the time a higher crimping is succeeded. (Suggested Time 6 sec).

5, 6. Progressive Ironing with Function selection

There is a two function selector (**selector 6**) and works with relation to **selector 5** status

a. Selector 5 to position "0": the machine does normal operation, no matter if selector 6 is in Normal Mode or Steps Mode.

b. Selector 6 Normal Mode: the machine will start pulse ironing procedure (like hammering operation) during the end of the operating cycle.

c. Selector 6 Steps Mode: the machine again with the same conditions will do a step by step crimping from the beginning until the full pressing of the cycle.

OPERATION



Step 1. Place the upper as shown in the Figure 1



Step 2. Press the pedal to hold the upper (Figure 2). Before continuing the procedure be sure that the upper is in the right crimping position.

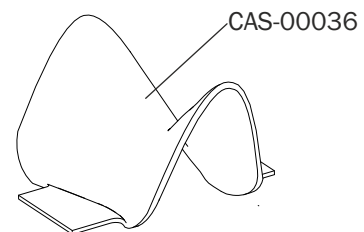
For correct placing release the pedal, correct the place of the upper and press it again.



Step 3. Press the START buttons at the same time and release the pedal to complete the procedure. The machine will revert to its initial position after the end of the setting time.

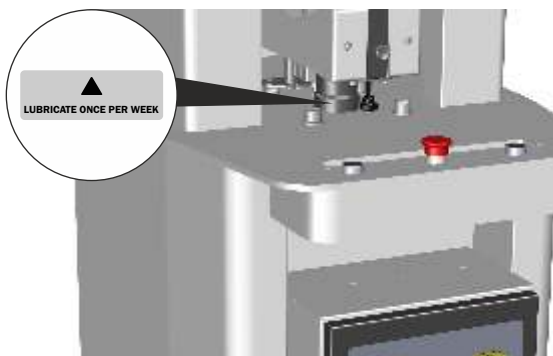
Attention!

If there is an emergency press the EMERGENCY button to cancel the procedure. To operate again the machine, rotate the button according to the arrow's direction.



- If you use sensitive materials that cannot afford high temperatures use the silicon head jacket to protect them.
- The Silicon head jacket must also be used when you have decoratives on the uppers. **Otherwise the Teflon covering of the mould (CAS-00007) will be destroyed and you will have marks on your uppers.**

Maintenance



- Once a week lubricate the rod of the cylinder ASM-00850 with oil type SAE 30
- Once a week check the oil level of the air pressure lubricator P1 and add oil type TELUS 32 (SHELL) or something similar.
- Once a week add a few drops of oil at the back part of the machine after you have taken off the red cap.

Every six months check the good operation of the lubricator.

Note: The lubricator must drip one drop every 20 operation cycles.

ASSEMBLING VC-16 PLUS

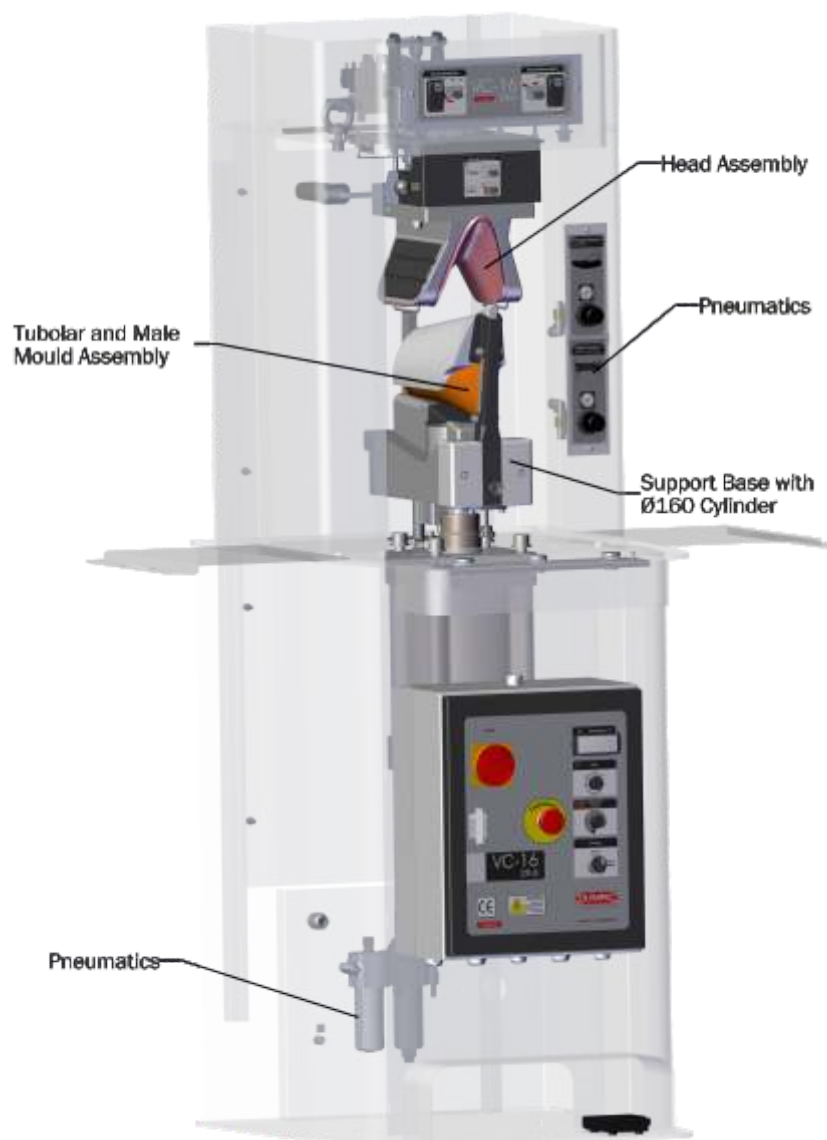
VC-16 PLUS Tilting Head Assembly (Page 9)

VC-16 PLUS Tubular & Male Mould Assembly (Page 10)

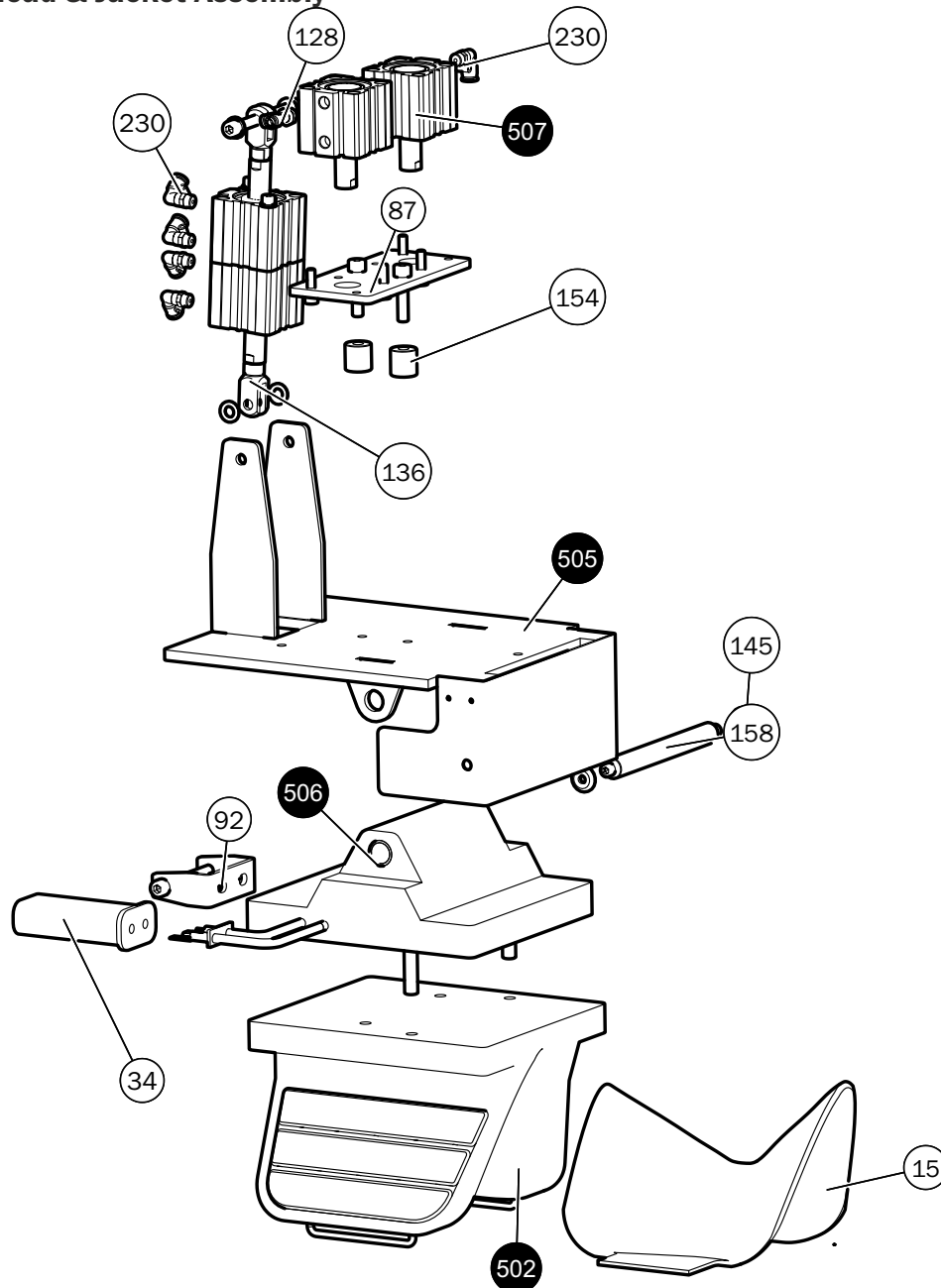
VC-16 PLUS Support Base & Ø160 Cylinder Assembly (Page 11)

VC-16 PLUS Side Tables Assembly (Page 11)

VC-16 PLUS Pneumatics (Pages 12-14)

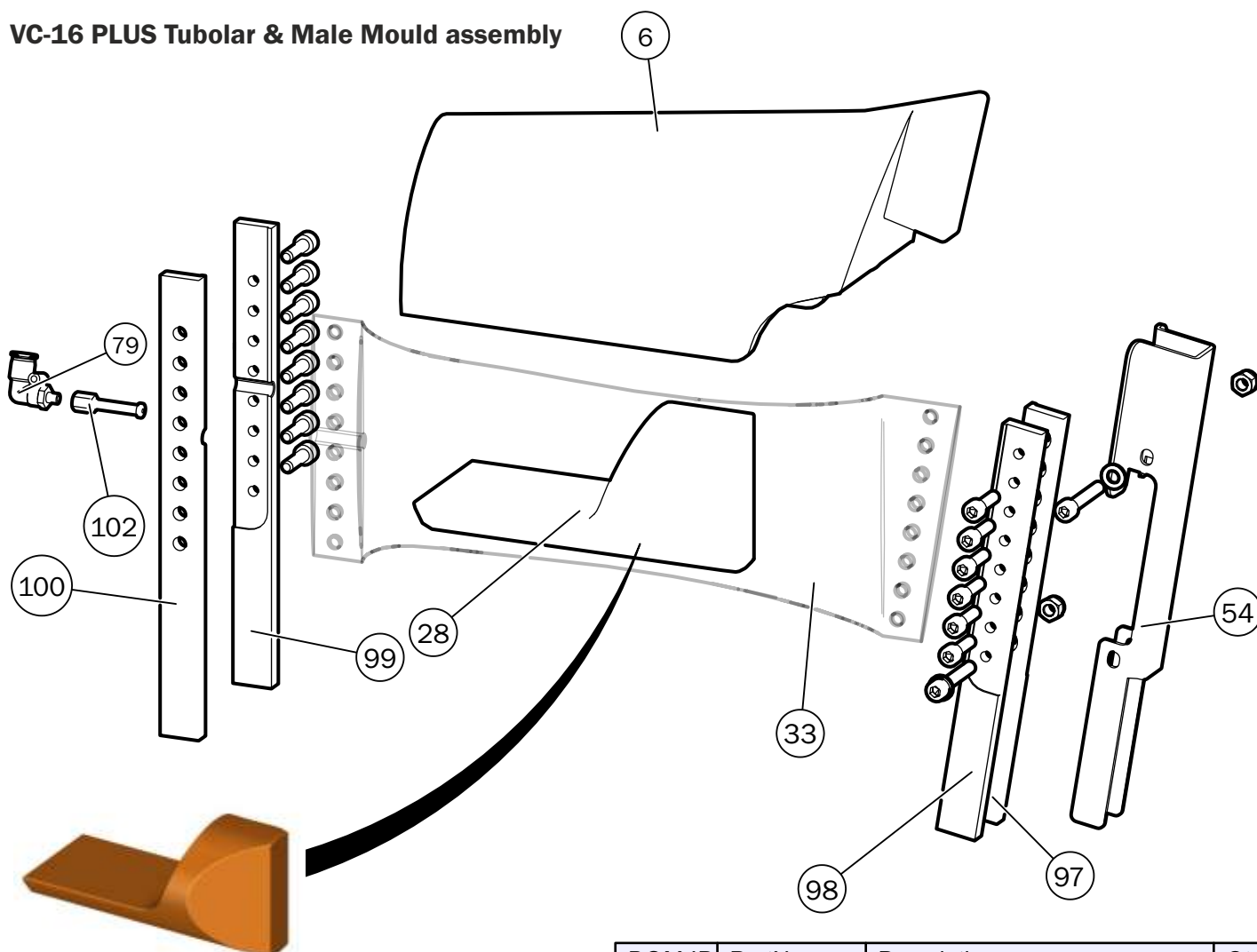


VC-16 PLUS Tilting Head & Jacket Assembly

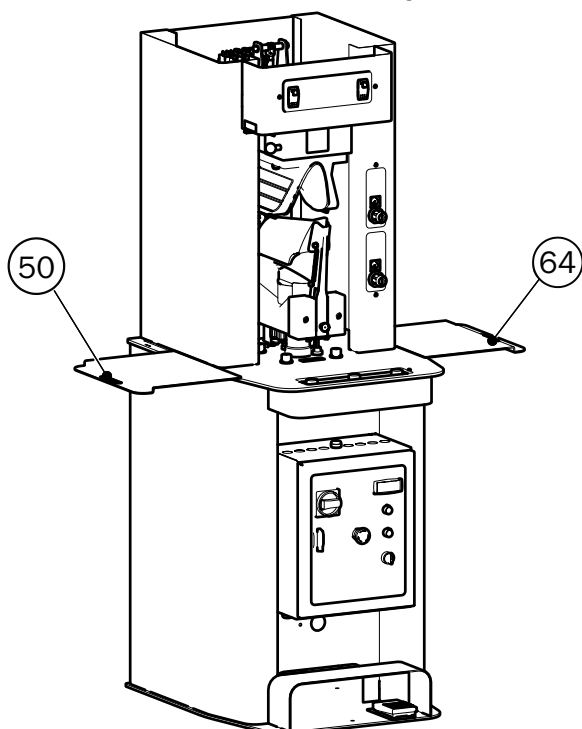


BOM ID	PartNo	Description	Qty
15	CAS-00036.	VITON HEAD JACKET	1
34	ELE-00016	ELECTRIC ELEMENT ISOLATOR	1
87	LAS-00772	CYLINDER FLANGE	1
92	LAS-00787	CYLINDER MOUNTING FLANGE	1
128	PNE-00788	FITTING, TEE, BACK SIDE, 1/8 (M) - Ø4 (F) - Ø4 (F)	1
136	PNE-01087	Y JOINT FOR CYLINDER Ø20	2
145	REV-00082	WASHER, CUSTOM	2
154	REV-00375	SPACER- GUIDE	2
158	REV-00386	Ø16 AXLE WITH THREAD	1
230	PNE-09916	ELBOW MALE ADAPTOR 1/8 - Ø4	5
502	ASM-00854	CASTED HEAD WITH ISOLATOR	1
505	ASM-00899	PLATE WITH COVER	1
506	ASM-00874	HOT STATION HEATING ELEMENT	1
507	ASM-00417	PISTON Ø40X20	4

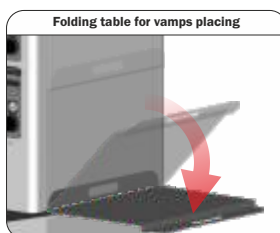
VC-16 PLUS Tubular & Male Mould assembly



VC-16 PLUS Side Tables assembly

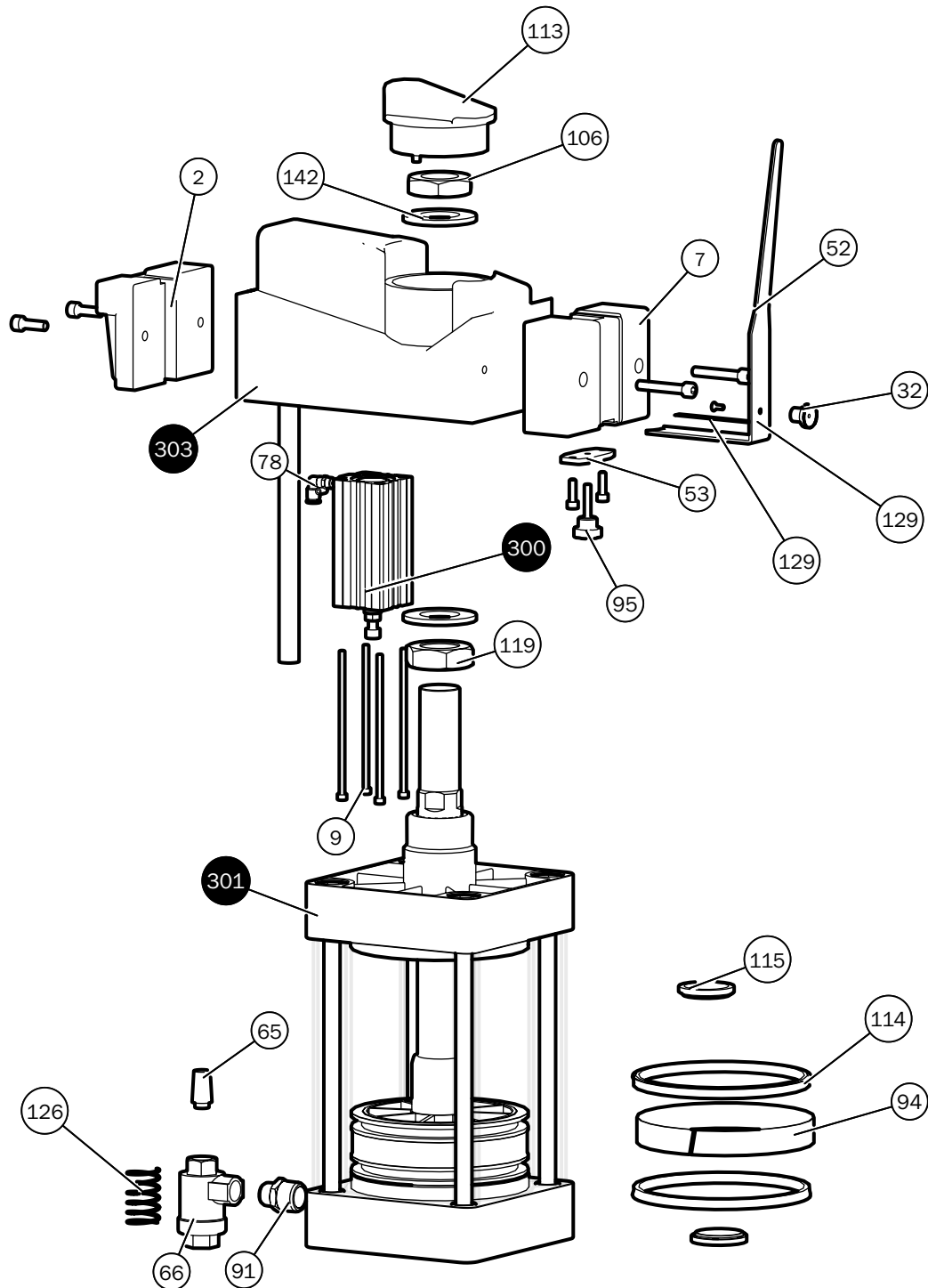


BOM ID	PartNo	Description	Qty
6	CAS-00124	VC-16 SILICON MALE MOULD	1
28	GEN-00003	VC-16 VULCOLAN STUFFING	1
33	GEN-00403	TUBULAR BODY - VC16 SERIES	1
54	LAS-00713	HOLDING FLANGE	1
79	PNE-00030	FITTING, ANGLE, M5 - Ø4	1
97	REV-00007	RIGHT FRONT GUIDE	1
98	REV-00008	LEFT FRONT GUIDE	1
99	REV-00009	RIGHT REAR GUIDE	1
100	REV-00010	LEFT REAR GUIDE	1
102	REV-00098	TUBULAR VC-16 M5 FITTING	1



BOM ID	PartNo	Description	Qty
50	LAS-00692	TABLE, LEFT	1
64	LAS-00751	TABLE, RIGHT	1

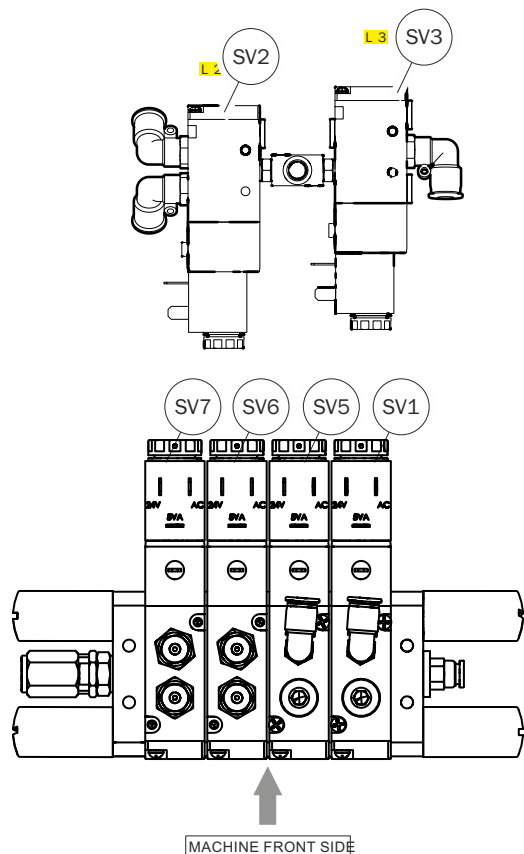
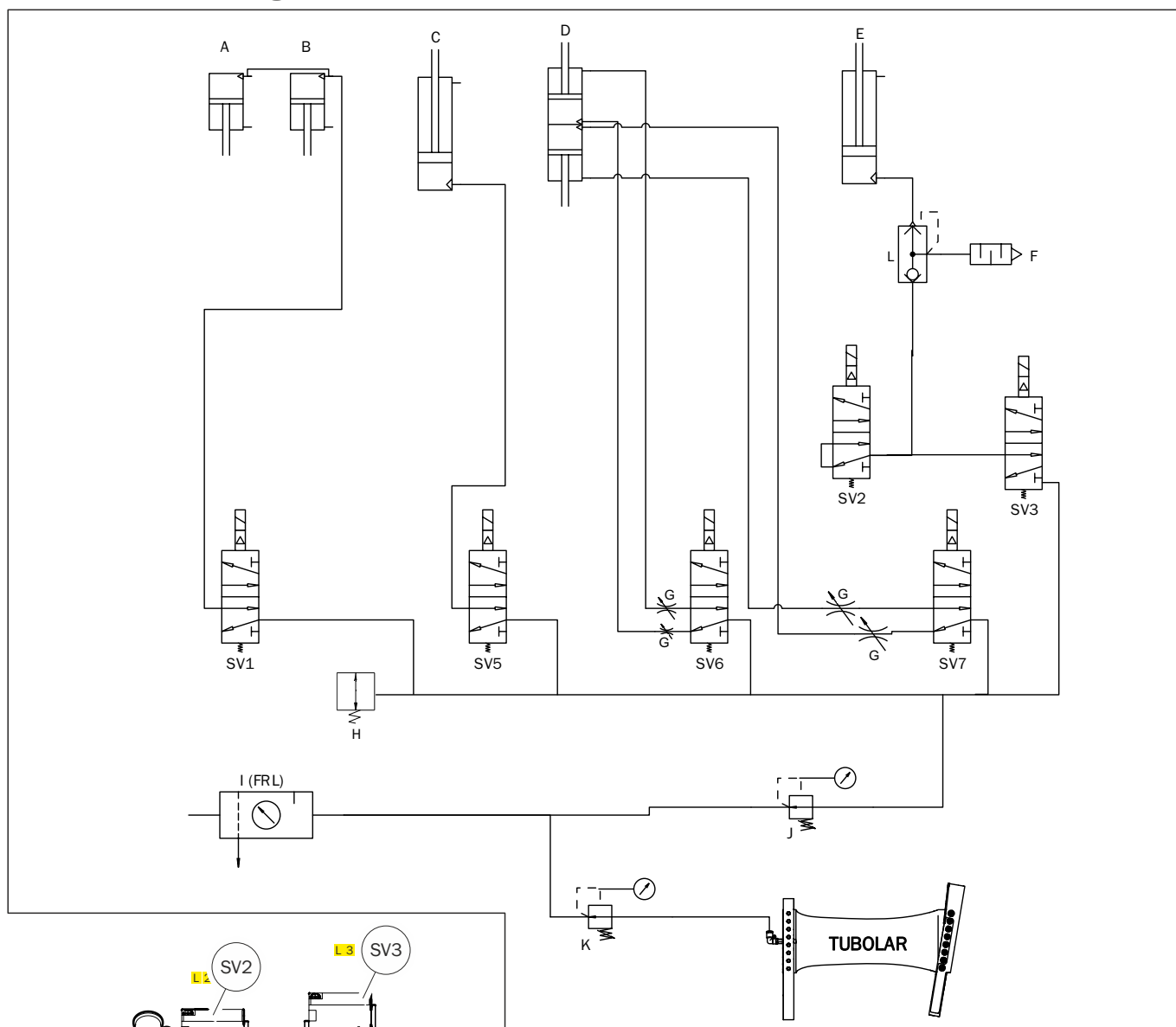
VC-16 PLUS Support Base & Ø160 Cylinder Assembly



BOM ID	PartNo	Description	Qty
2	CAS-00003	GUIDE BLOCK	1
7	CAS-00125	CASTED CAP	1
9		SCREW DIN912 M5x130	4
32	GEN-00393	KNURLED KNOB	1
52	LAS-00710	UPPER GUIDE	1
53	LAS-00711	HOLDING PLATE	1
65	PNE-00002	SILENCER, BRASS, CONIC, 1/2	1
66	PNE-00003	QUICK EXHAUST VALVE 1/2"	1
78	PNE-00029	FITTING, ELBOW, 1/8 - Ø4	1
91	PNE-00948	NIPPLE, CONIC, REDUCING, 1/2 - 3/4	1
94	PNE-00985	INTERNAL RING, 159x157x10.4	1
95	PNE-01082	LOBE KNOB, MALE, 7-LOBE, Ø25, M6x30	1

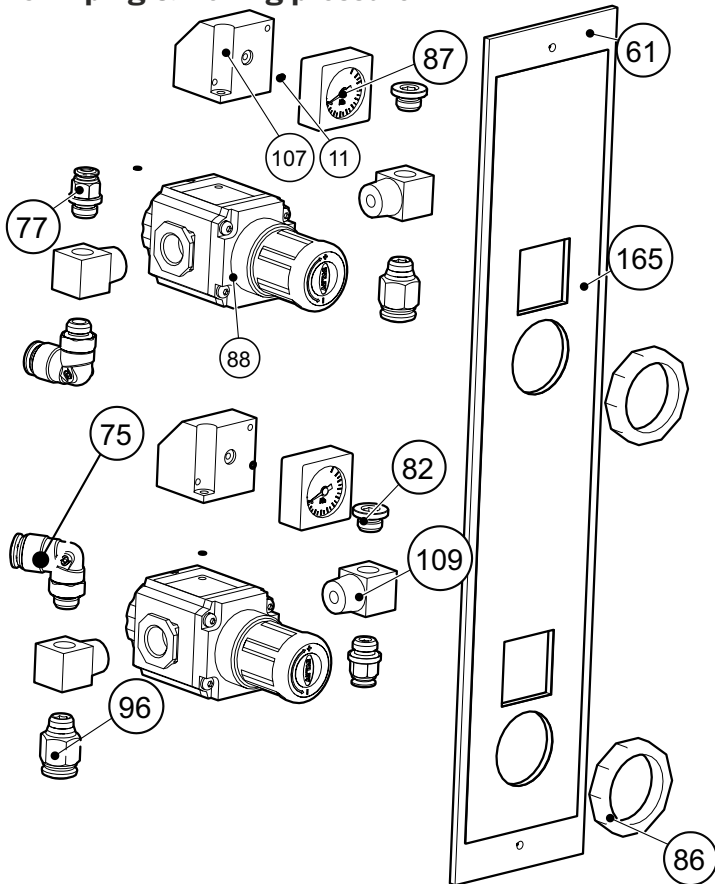
BOM ID	PartNo	Description	Qty
106	REV-00376	NUT, CUSTOM, M36X2.0	1
113	RUB-00094	VC-2014 RUBBER CAP	1
114	RUB-00104	PISTON SEAL FOR Ø160	2
115	RUB-00105	CAP SEAL FOR PISTON Ø160	2
119		NUT M36x2	1
126	SPR-00005	QUICK EXHAUST VALVE'S SPRING	1
129	STK-00057	STICKER, TPA-11, SCALE A-F	1
142	FAS-01040	WASHER DIN 125 - A 36	2
300	PNE-00968	CYLINDER 40x75	1
301	ASM-00694	CYLINDER Ø160x240 FOR SUPPORT BASE MOVEMENT	1
303	ASM-00527	SUPPORT BASE CASTED ASSY	1

VC-16 Plus Pneumatic Diagram



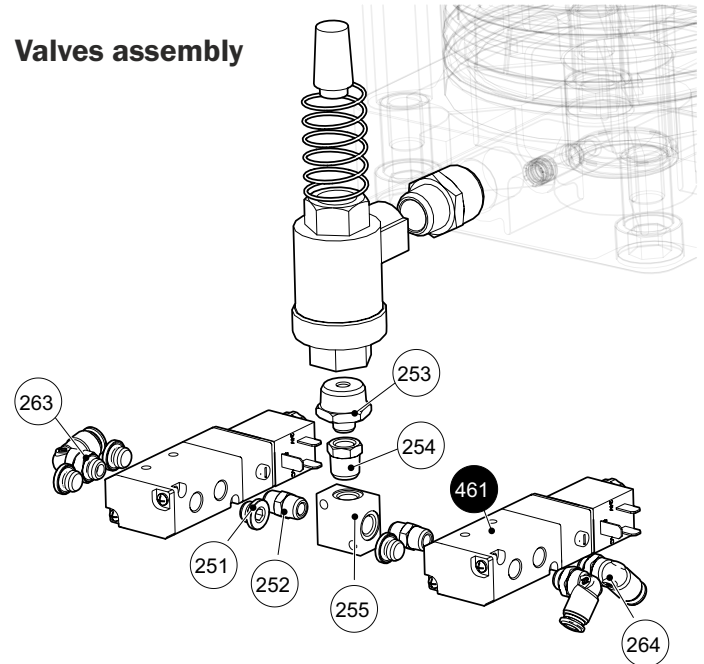
SYMBOL	P/N	DESCRIPTION
A	ASM-00417	CYLINDER 40x20
B	ASM-00417	CYLINDER 40x20
C	PNE-00968	CYLINDER ACQ 40x75 G
D	ASM-00877	ROTATION CYLINDERS SYSTEM Ø40x20
E	ASM-00694	CYLINDER Ø160x240
F	PNE-00002	SILENCER 1/2
G	REV-00097	FITTING 1/8 (M) - 1/8 (F) - Ø1.5
H	PNE-00114	SAFETY VALVE, 1/8, P.T. 6bar
I	PNE-00001	FRL G1/4 SIZE 300
J	ASM-00095	CRIMPING PRESSURE ADJUSTMENT
K	ASM-00096	IRONING PRESSURE ADJUSTMENT
L	ASM-00743	QUICK EXHAUST VALVE 1/2 ASSEMBLY
SV1-SV7	ASM-00461	VALVE ELECTRIC PILOT 5/2 G1/8, 24V COIL

Crimping & Ironing pressure



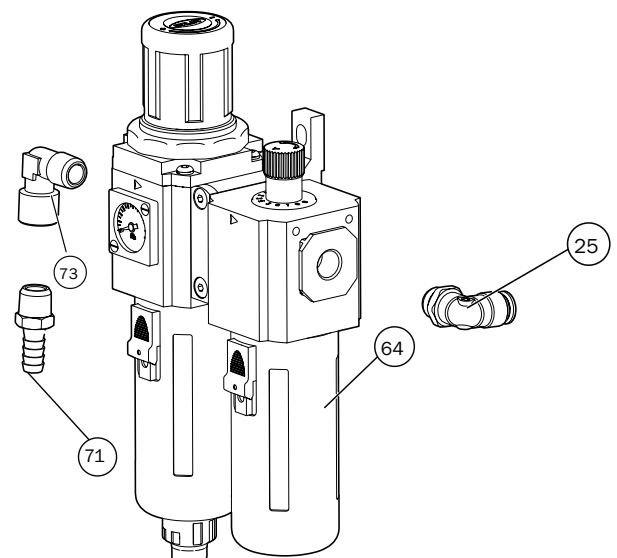
BOM ID	PartNo	Description	Qty
11	RUB-00126	ORING, NBR, 2,9x1,78	4
61	LAS-00781	PLATE	1
75	PNE-01064	ADAPTOR, ELBOW MALE 1/8-Φ8	2
77	PNE-09919	STRAIGHT MALE ADAPTOR 4-1/8"	2
82	PNE-00072	PLUG, MALE, PARALLEL, 1/8	2
86	PNE-00543B	PLASTIC NUT	2
87	PNE-00543C	REGULATOR GAUGE	2
88	PNE-00543D	PRESSURE REGULATOR 1/4 BODY	2
96	PNE-01001	FITTING, STRAIGHT, 1/8-Φ8	2
107	REV-00380	BASE	2
109	REV-00389	FITTING, CUSTOM, 1/4 TAPER	4
165	STK-00133	STICKER, BUTTONS, VC-16 PLUS	1

Valves assembly



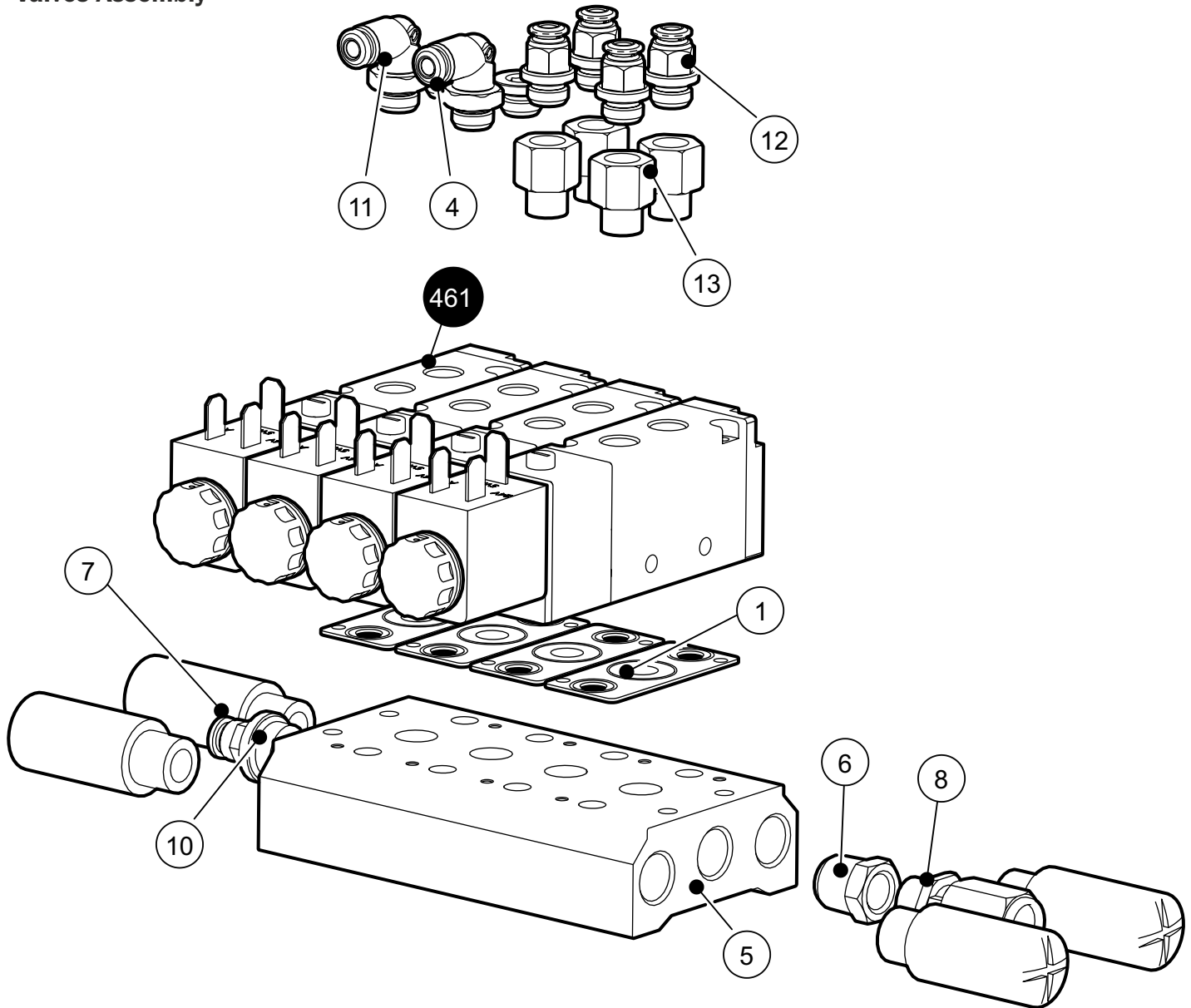
BOM ID	PartNo	Description	Qty
251	PNE-00072	PLUG, MALE, PARALLEL, 1/8	4
252	PNE-00073	NIPPLE, TAPER, 1/8 (M) - 1/8 (M)	2
253	PNE-00079	NIPPLE, TAPER, 1/2 (M) - 1/8 (M)	1
254	PNE-00083	REDUCER, 1/4(M) - 1/8(F)	1
255	PNE-00093	ALUMINIUM TEE, Rx, 1/8	1
263	PNE-01064	ADAPTOR, ELBOW MALE 1/8-Φ8	1
264	PNE-01098	ADAPTOR, ELBOW MALE 1/8-Φ6	2
461	ASM-00461	VALVE 5/2 G1/8, 24V	6

FRL with fittings



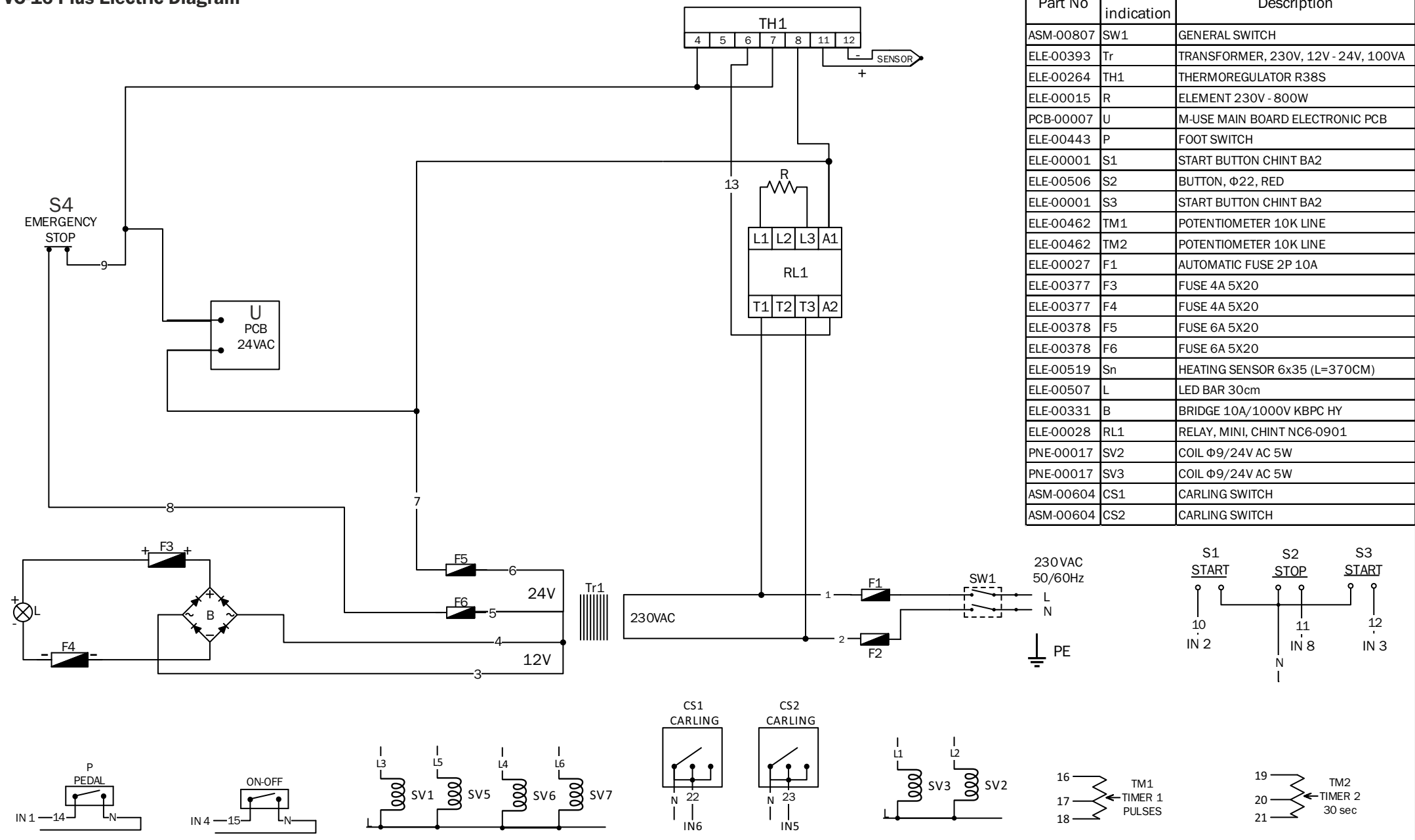
BOM ID	PartNo	Description	Qty
64	PNE-00001	FRL G1/4 SIZE 300	1
71	PNE-00020	HOSE ADAPTER, RG, MALE, 1/4 - Ø8	1
73	PNE-00023	MALE-FEMALE ELBOW 1/4"	1
25	PNE-09925	ELBOW MALE ADAPTOR 8-1/4"	1

Valves Assembly

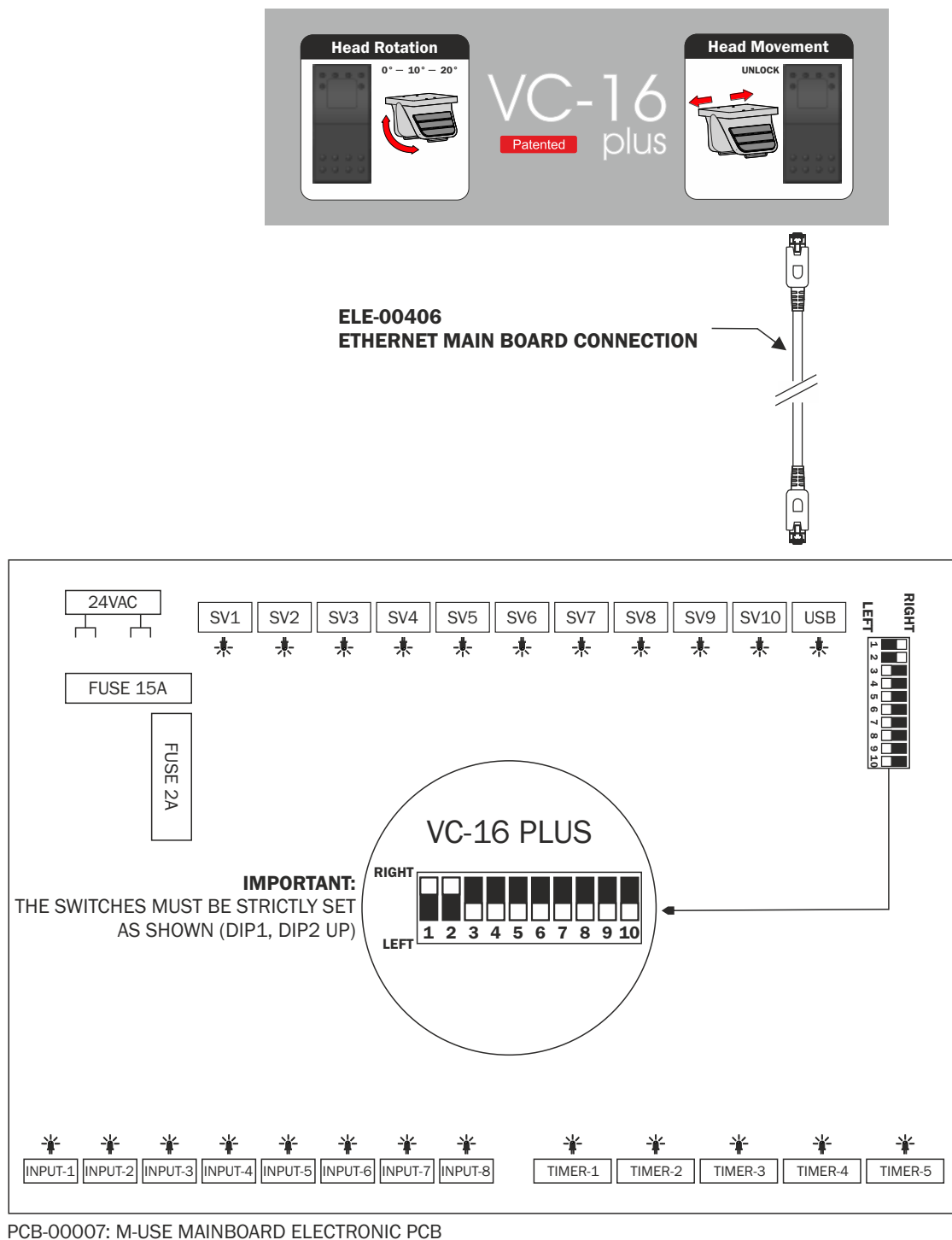


BOM ID	PartNo	Description	Qty
1	GEN-00093	CAP	4
4	PNE-00072	PLUG, MALE, PARALLEL, 1/8	2
5	PNE-00082	MANIFOLD, 1/4, 4 STATION	1
6	PNE-00083	REDUCER, 1/4(M) - 1/8(F)	1
7	PNE-00094	SILENCER, 1/4, PLASTIC, BLUE	4
8	PNE-00114	SAFETY VALVE, 1/8, P.T. 6bar	1
10	PNE-00776	FITTING, STRAIGHT, 4 - 1/4	1
11	PNE-09916	ELBOW MALE ADAPTOR 4-1/8	2
12	PNE-09919	STRAIGHT MALE ADAPTOR 4-1/8	4
13	REV-00097	REDUCTOR, 1/8 (M) - 1/8 (F) - HOLE Φ1.5	4
461	ASM-00461	VALVE ELECTRIC PILOT 5/2 G1/8, 24V COIL	4

VC-16 Plus Electric Diagram



VC-16 Plus Electronic Board Diagram

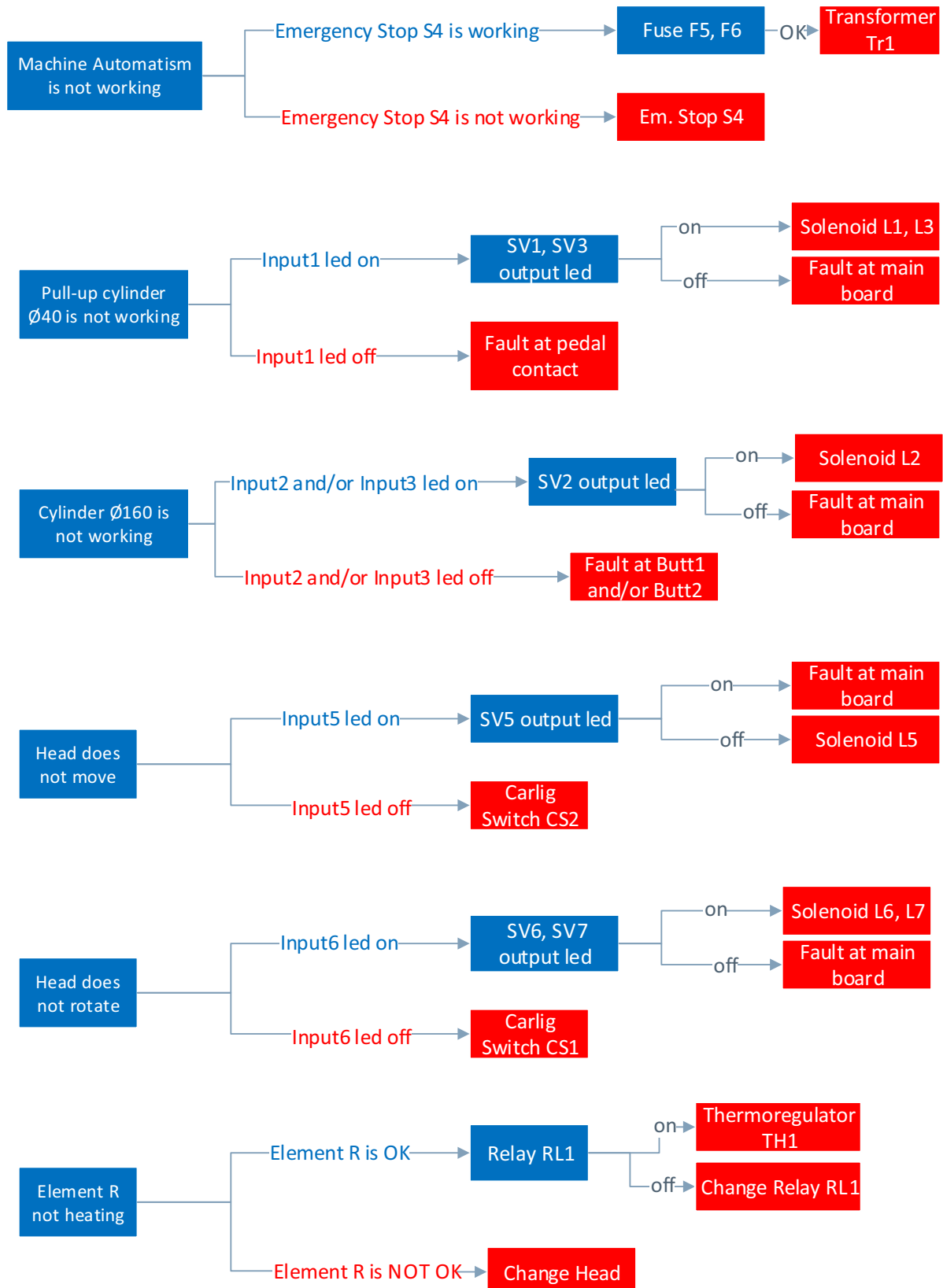


INPUTS	
PEDAL	INPUT1
BUTTON S1	INPUT2
BUTTON S3	INPUT3
STOP S2	INPUT8
CARLING CS1	INPUT6
CARLING CS2	INPUT5
FUNCTION SWITCH	INPUT4

OUTPUTS	
SV1	CYLINDERS ACQ 40x20
SV2	CYLINDER ACQ 160x240
SV3	CYLINDER ACQ 40x20
SV4	<N/A>
SV5	CYLINDER ACQ 40x75
SV6	CYLINDERS SYSTEM ACQ 40x20
SV7	CYLINDERS SYSTEM ACQ 40x20

Troubleshooting

VC-16 Plus Troubleshooting



Inflatable tubular stuffing replacement instructions

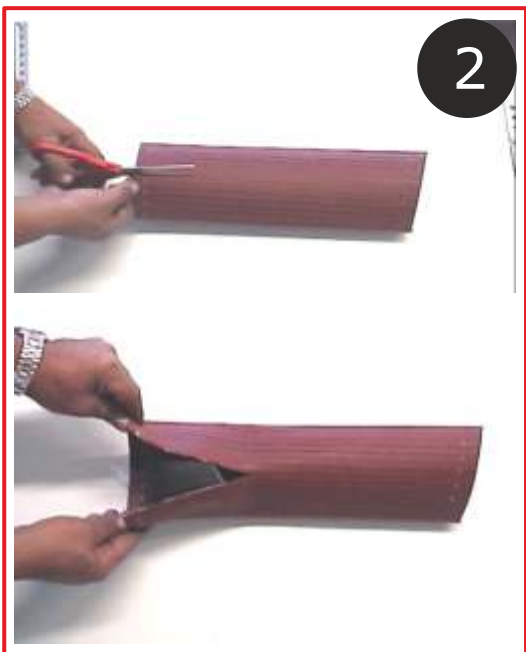


1

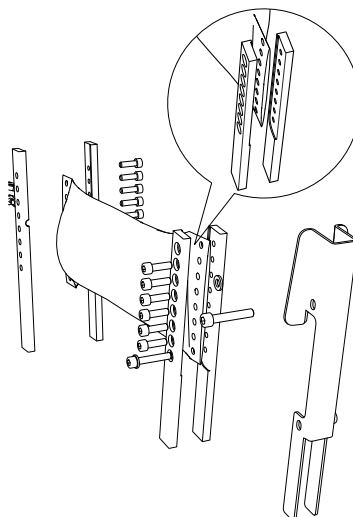


Disassemble the metal plates from the inflatable tubular (Fig. 1).

2



Snip off along the old inflatable tubular and remove the rubber stuffing which is inside (Fig.2)



ATTENTION:

As shown in the details, all four (4) guides, must be mounted in the way that their "teeth" must press the tubular, in their respective positions.

3



Push the rubber stuffing inside (Fig. 3)

4

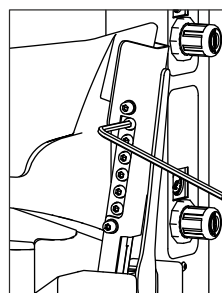


Set the 2 plates on the rubber's side without tighten completely the screws and push the rubber, from the other side, with an object to lean against the plates (Fig. 4)

5



Set the other two plates by setting also the air supply fitting and tighten all the screws (Fig. 5).



Note:

After one or two working days tighten softly all the screws of the inflatable TUBOLAR (Air bag).

Warning

Too much tightening will destroy the TUBOLAR.

Notes

This image shows a full page of blank graph paper. The grid consists of small, uniform squares formed by thin, light gray lines. There are no margins, text, or other markings on the page.

