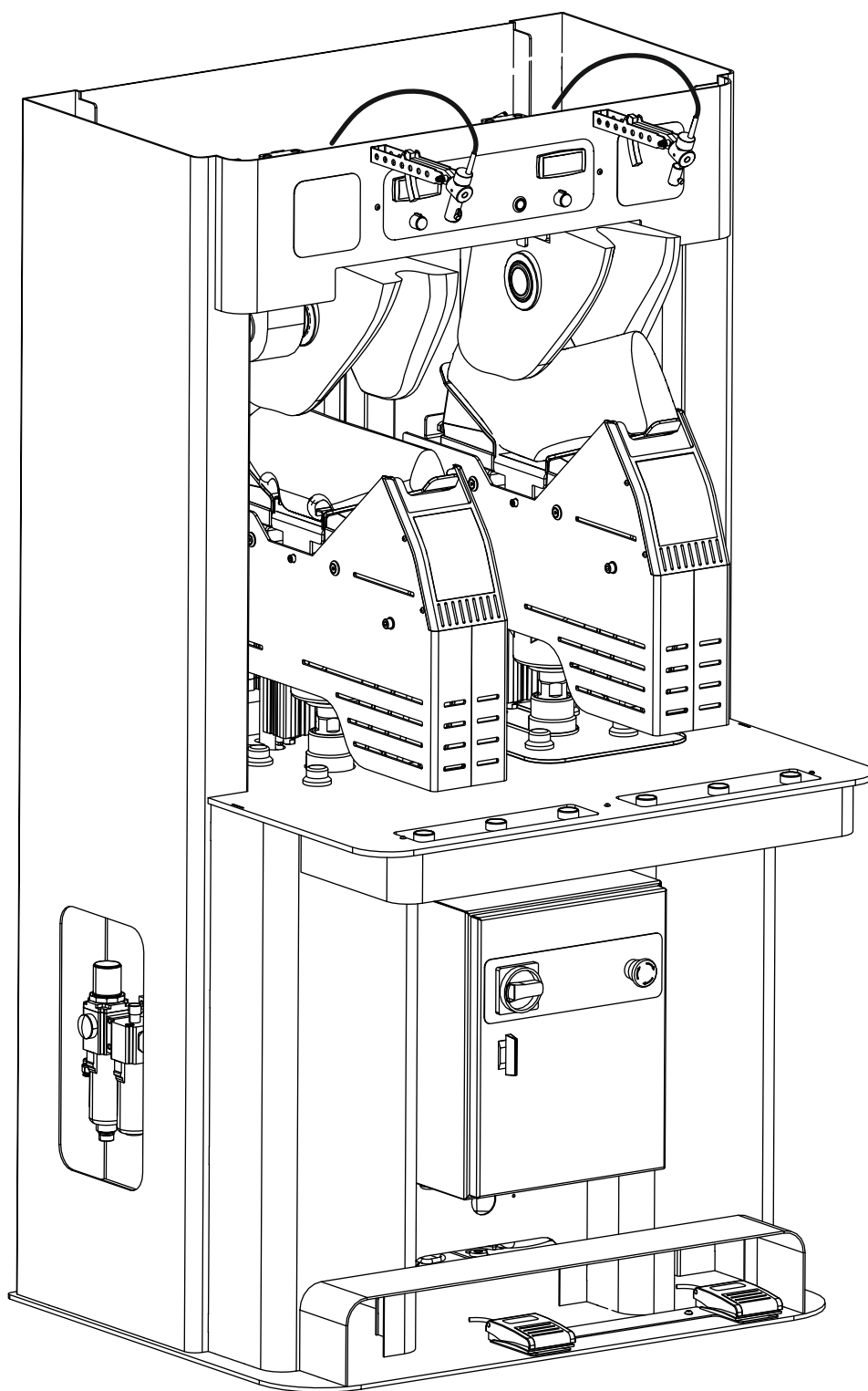


OPERATOR'S MANUAL



VC-19D

VER. ASM-01217

Patented

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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.



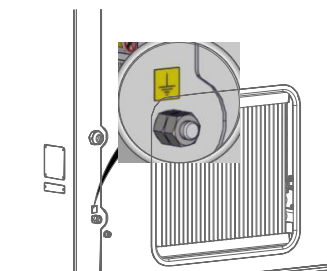
WARNING

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.



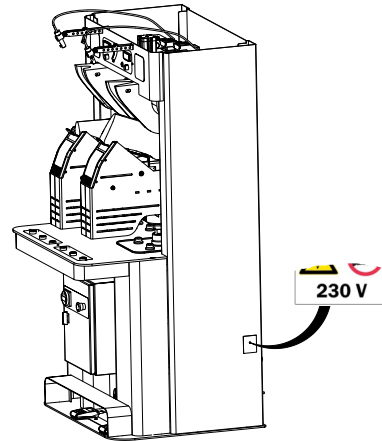
WARNING

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



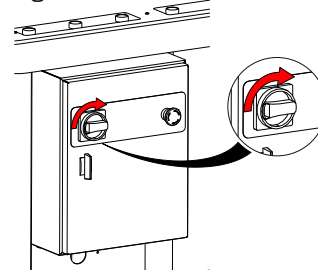
Electric and pneumatic connections

1. Connect the machine (SINGLE PHASE 230V - 50Hz).
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.

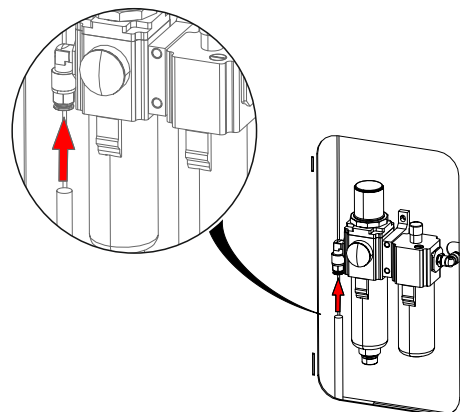


3. Check if the plug and socket have the same technical type. If not, use the suitable adapter after having consulted a certified electrician.

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

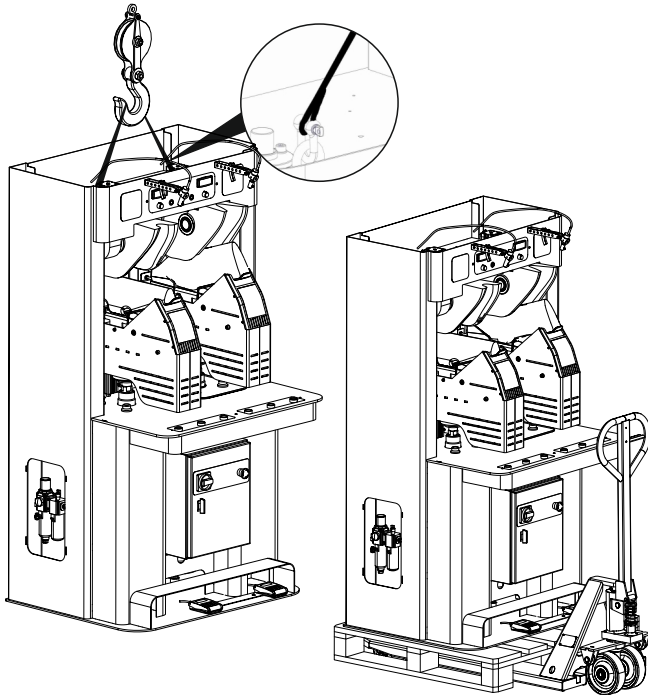


5. Connect the machine to air pressure 6 - 8bar.
6. Connect the proper pneumatic hose. Set the main pressure regulator, which is found, on the back part of the machine to 6 Bar.



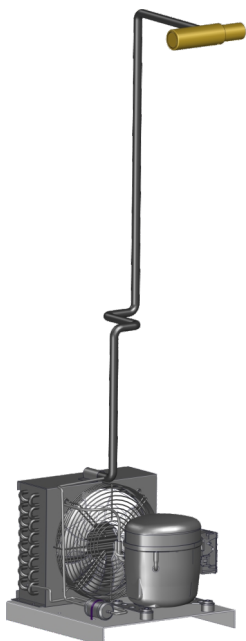
Holding - Transportation

1. Use the clevis's existed on the top of the machine with proper belts to lift the machine.
2. Pass the trans-pallet's forks under the pallet as shown in the Figure below.



Maintenance of cooling unit

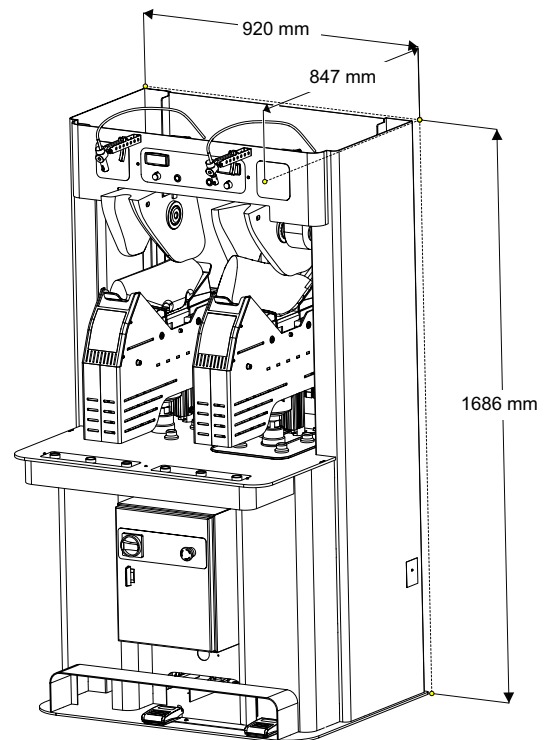
Clean the condenser (radiator) of the cooling unit once per month by using air pressure.



COOLING UNIT SPECIFICATIONS

Cooling gas type	R404A
Cooling gas qty	470gr
Compressor Power	1/2 Hp

Technical data & Dimensioning

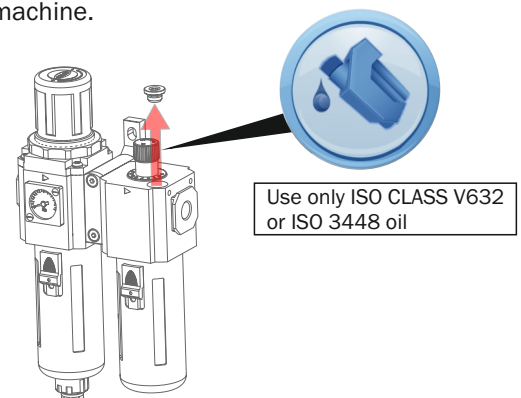


Technical Data

OPERATION	Electric - Pneumatic
PRESSURE	6 Bar
VOLTAGE	230V single phase 50Hz
CAPACITY	1200 pairs per 8 hours
POWER CONSUMPTION	1500 W
DIMENSIONS (mm)	920 X 847 X 1686
WEIGHT	385 Kgs

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 ISO Class V632 or ISO 3448 oil. Once per week lubricate all moving parts of the machine.



Panel Adjustments

1 Hot Station Temperature: Set the temperature from 60 to 110 °C. Temperature is a basic factor for the crimping. Choose the higher temperature (according the material you use) for higher crimping result. (Suggested Temperature 100 °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  button.

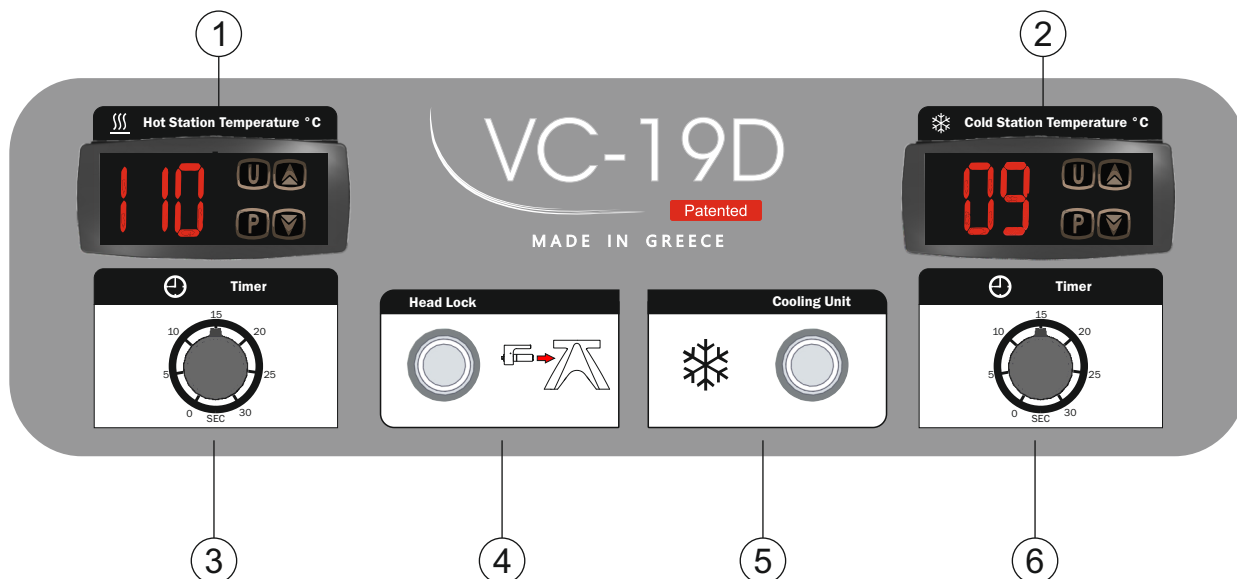
3. Hot station Time: Set the timer from 5 to 30 sec. By increasing the time a higher crimping is succeeded.

5. Cooling unit ON/OFF.

2. Cold Station Temperature: Set the temperature from 9 to 11 °C (find the suitable temperature for the minimum condensation).

4. Head Lock: Heads' lock ON/OFF.

6. Cold station Time: Set the timer from 5 to 30 sec. Less time at cold station will result in a more shallow angle.



Operation



Step 1. Place the vamp in the hot station mould as shown in Figure 1



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



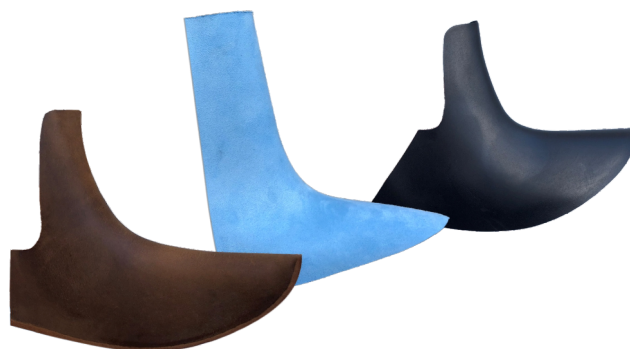
Step 2. Press the pedal to hold the vamp (Figure 2). Before continuing the procedure be sure that the vamp is in the right crimping position.

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

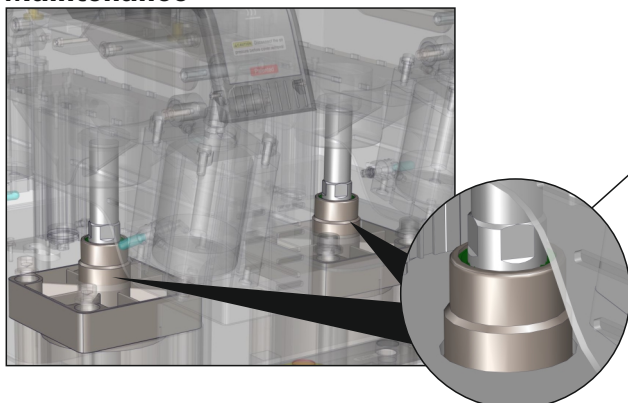


Repeat the procedure in the hot and cold station in order to stabilize the materials

Tip: Hot and cold is necessary either for leather or synthetic vamps and helps maximize and retain the final shape of the vamp and finally the shoe



Maintenance



- Once a week lubricate the rod of the cylinders **ASM-00694** with oil type SAE 30.
- Once a week check the oil level of the air pressure lubricator P1 and add oil type ISO Class V632 or ISO 3448 or something similar.
- Once a month clean the radiator.

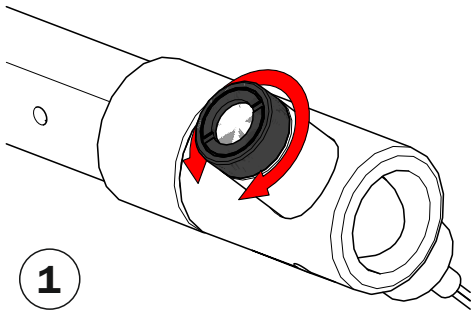
Every six months check the good operation of the lubricator.

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

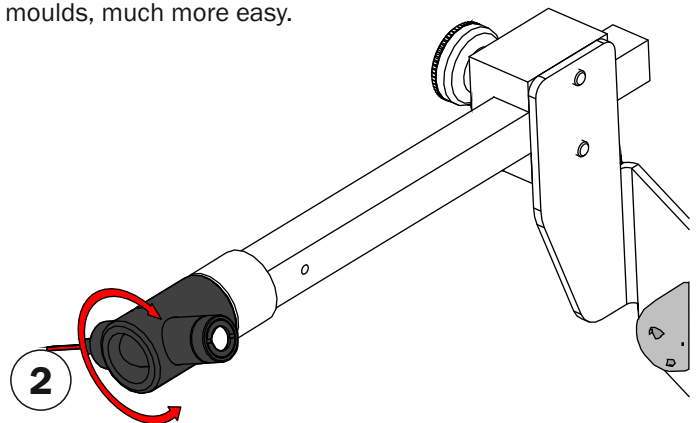
Laser Projectors System (optional)

Laser Projector System makes the vamps adjustment on the male moulds, much more easy.

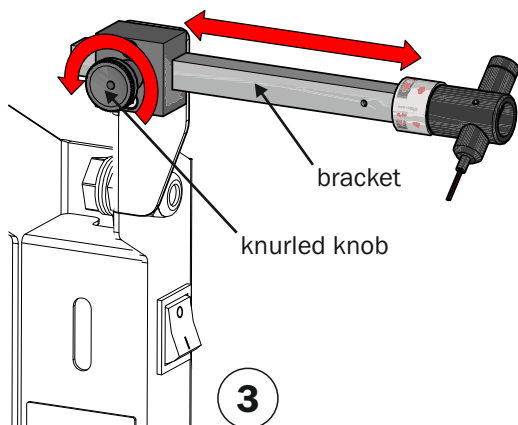
Adjustments



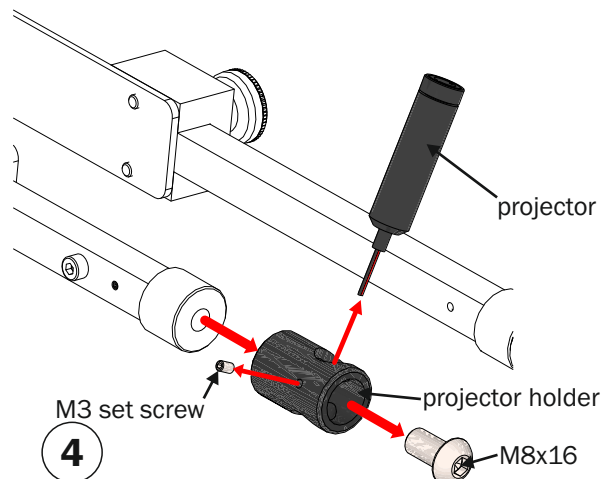
1. Adjust the beam focus by rotating the laser iris cover so that the beam produces a clear line.



2. Adjust the angle of the beam by rotating the projector holder accordingly.



3. Adjust the projector position by translating the projector bracket. Loosen the knurled knob, translate the aluminum bracket in the desired position and tight again the knurled knob.



4. Loosen or unscrew the M3 set screw and remove the projector. Then, unscrew the socket button screw M8x16 and remove the projector holder.

Safety Precautions

In order to avoid any harm or injury, please keep in mind the following safety measures:



During laser projectors' operation, avoid direct eye exposure.



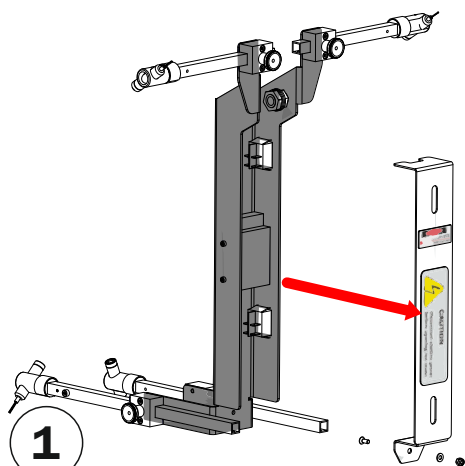
Before opening the back cover, please disconnect the electric power from the machine.



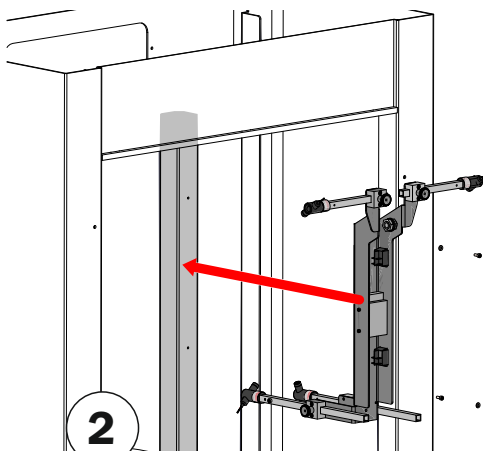
Risk of electric shock! The connection should be made by qualified personnel only!



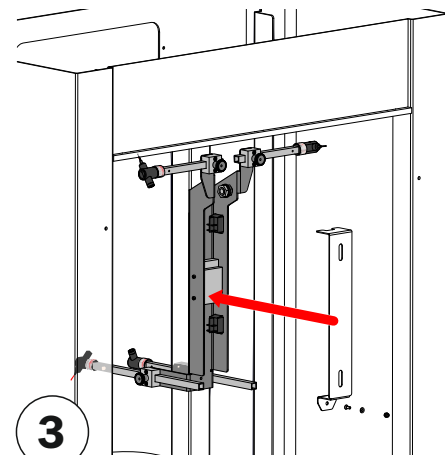
Laser Projectors System (optional) - Assembling in frame



1 Before mounting to frame, remove the cap.

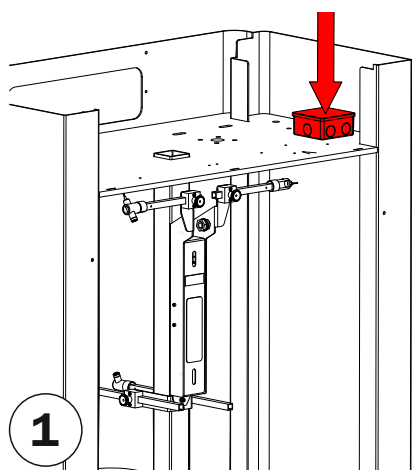


2 Mount the rest of assembly in the back holes of the frame's middle column.

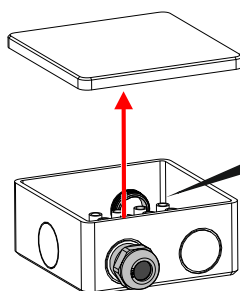


3 Mount the cap.

Laser Projectors System (optional) - Electrical Connection

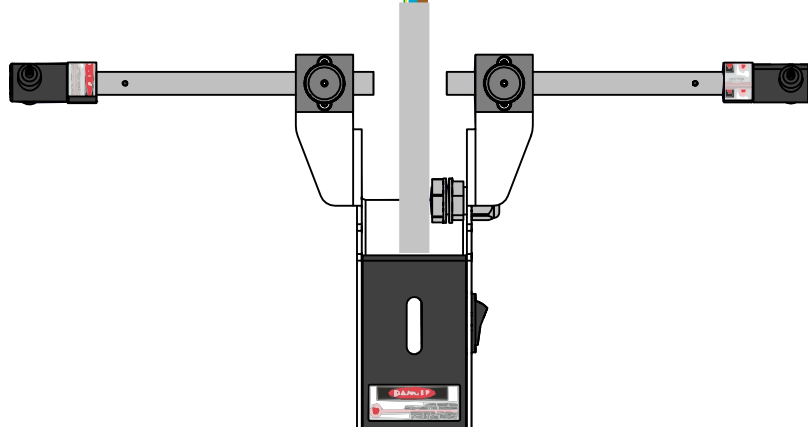
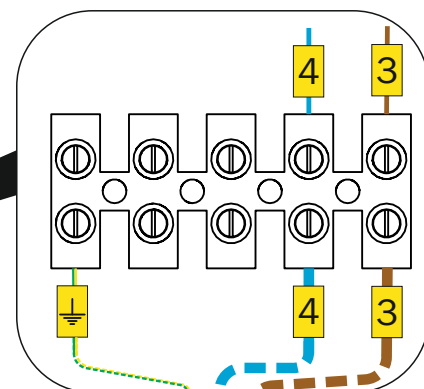


1 Locate the electrical box at the top of the machine



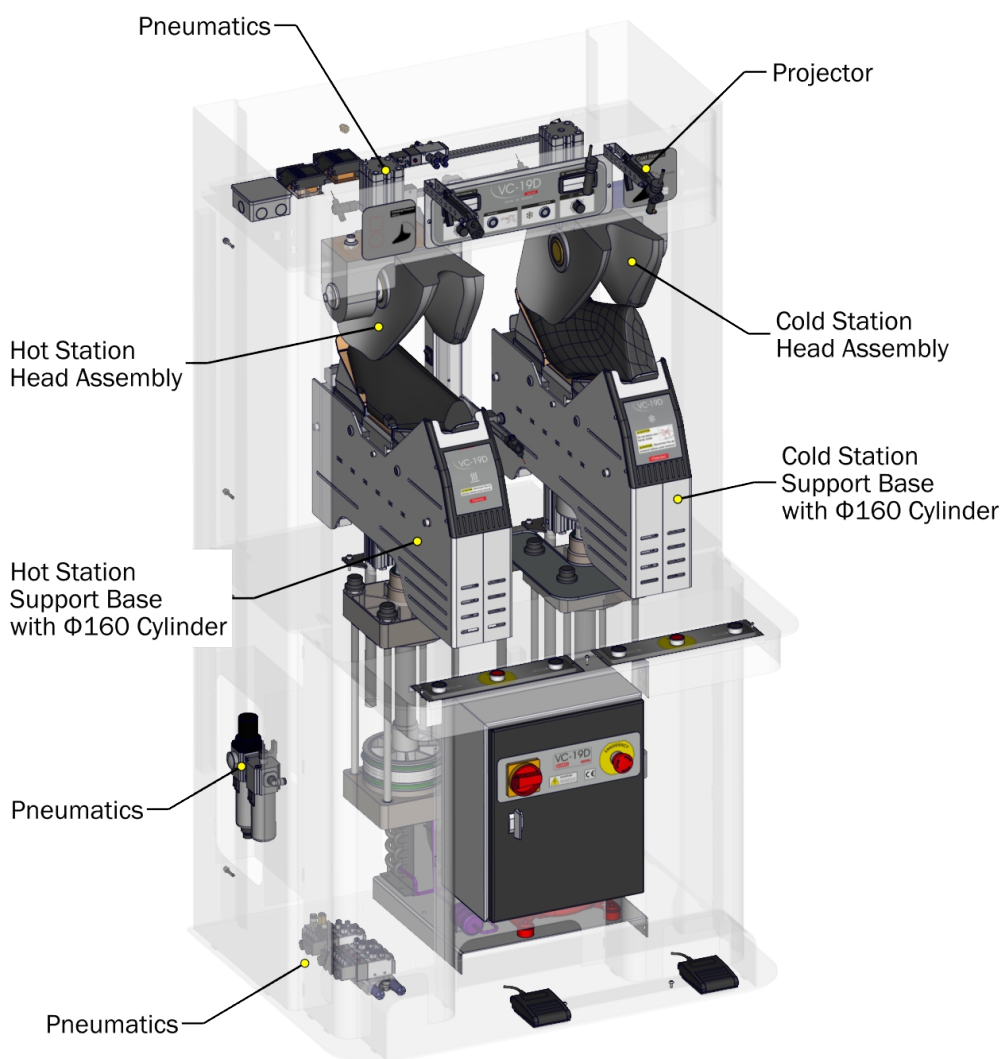
2

Locate the terminal inside the box, and connect the cables according the schematic.



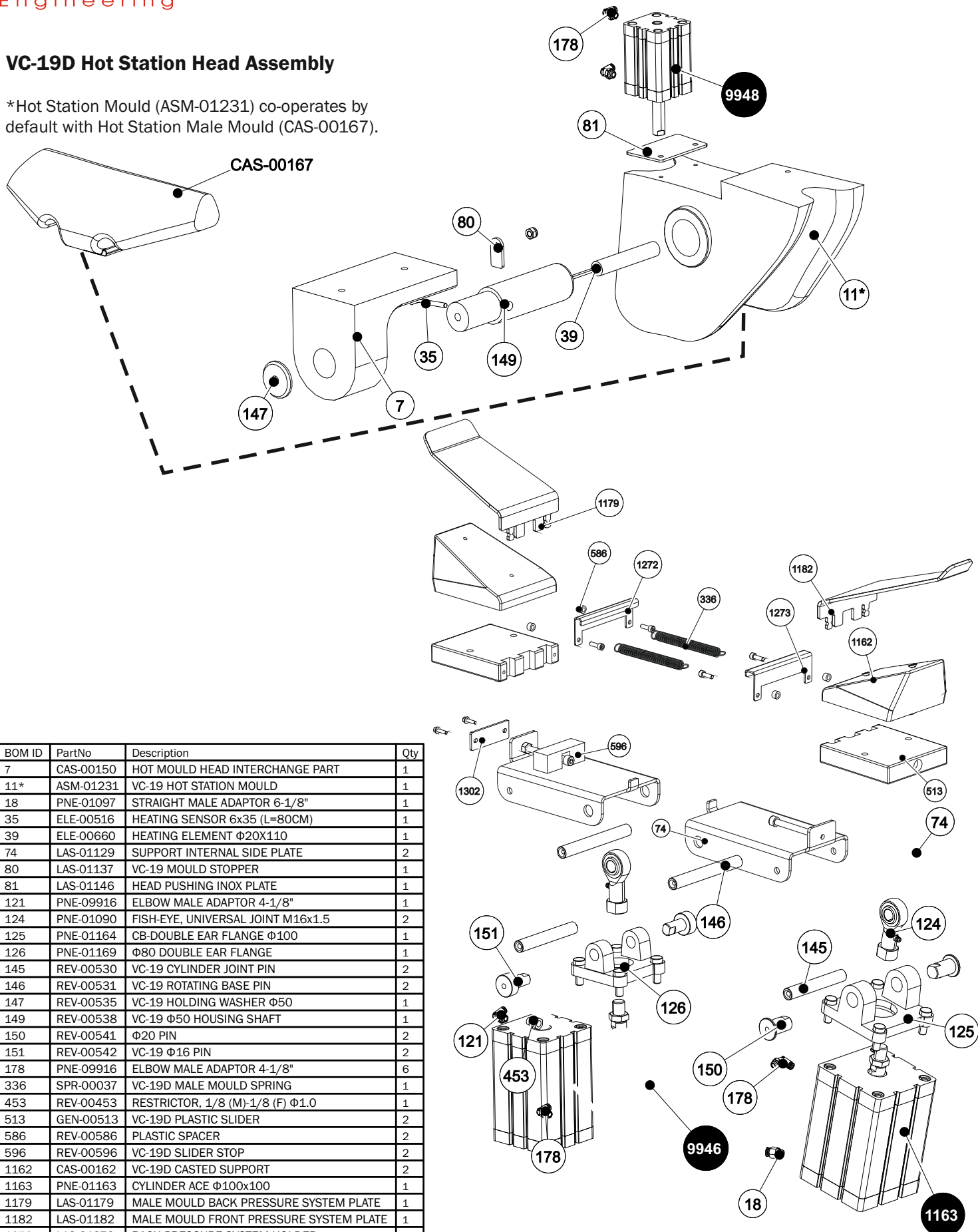
ASSEMBLING VC-19D

Hot Station Head Assembly (page 11)
Hot Station Support Base with Main Cylinder (page 12)
Cold Station Head Assembly (page 13)
Cold Station Support Base with Main Cylinder (page 14)
Bottom Valve Assembly (Page 15)
Projector with rest of Pneumatics (Page 16)
Laser Pointers System - Optional (Page 17)



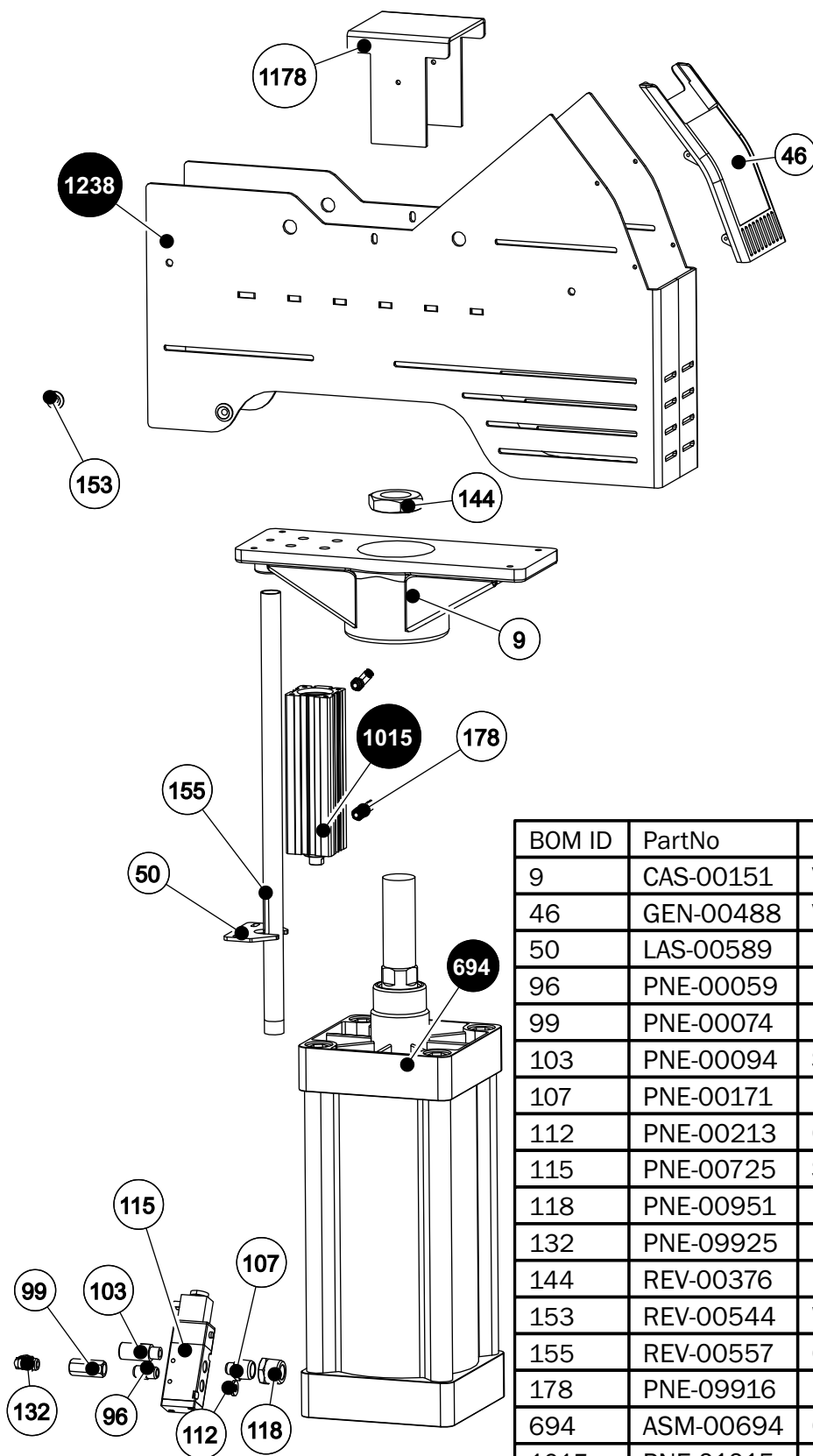
VC-19D Hot Station Head Assembly

*Hot Station Mould (ASM-01231) co-operates by default with Hot Station Male Mould (CAS-00167).



BOM ID	PartNo	Description	Qty
7	CAS-00150	HOT MOULD HEAD INTERCHANGE PART	1
11*	ASM-01231	VC-19 HOT STATION MOULD	1
18	PNE-01097	STRAIGHT MALE ADAPTOR 6-1/8"	1
35	ELE-00516	HEATING SENSOR 6x35 (L=80CM)	1
39	ELE-00660	HEATING ELEMENT Φ20X110	1
74	LAS-01129	SUPPORT INTERNAL SIDE PLATE	2
80	LAS-01137	VC-19 MOULD STOPPER	1
81	LAS-01146	HEAD PUSHING INOX PLATE	1
121	PNE-09916	ELBOW MALE ADAPTOR 4-1/8"	1
124	PNE-01090	FISH-EYE, UNIVERSAL JOINT M16x1.5	2
125	PNE-01164	CB-DOUBLE EAR FLANGE Φ100	1
126	PNE-01169	Φ80 DOUBLE EAR FLANGE	1
145	REV-00530	VC-19 CYLINDER JOINT PIN	2
146	REV-00531	VC-19 ROTATING BASE PIN	2
147	REV-00535	VC-19 HOLDING WASHER Φ50	1
149	REV-00538	VC-19 Φ50 HOUSING SHAFT	1
150	REV-00541	Φ20 PIN	2
151	REV-00542	VC-19 Φ16 PIN	2
178	PNE-09916	ELBOW MALE ADAPTOR 4-1/8"	6
336	SPR-00037	VC-19D MALE MOULD SPRING	1
453	REV-00453	RESTRICTOR, 1/8 (M)-1/8 (F) Φ1.0	1
513	GEN-00513	VC-19D PLASTIC SLIDER	2
586	REV-00586	PLASTIC SPACER	2
596	REV-00596	VC-19D SLIDER STOP	2
1162	CAS-00162	VC-19D CASTED SUPPORT	2
1163	PNE-01163	CYLINDER ACE Φ100x100	1
1179	LAS-01179	MALE MOULD BACK PRESSURE SYSTEM PLATE	1
1182	LAS-01182	MALE MOULD FRONT PRESSURE SYSTEM PLATE	1
1272	LAS-01272	BACK PRESSURE SYSTEM HOLDER	1
1273	LAS-01273	FRONT PRESSURE SYSTEM HOLDER	1
1302	LAS-01302	VC-19D SLIDER STOP PLATE	1
9946	PNE-09946	CYLINDER ACE 80x100	1
9948	PNE-09948	CYLINDER ACE Φ50X50	1

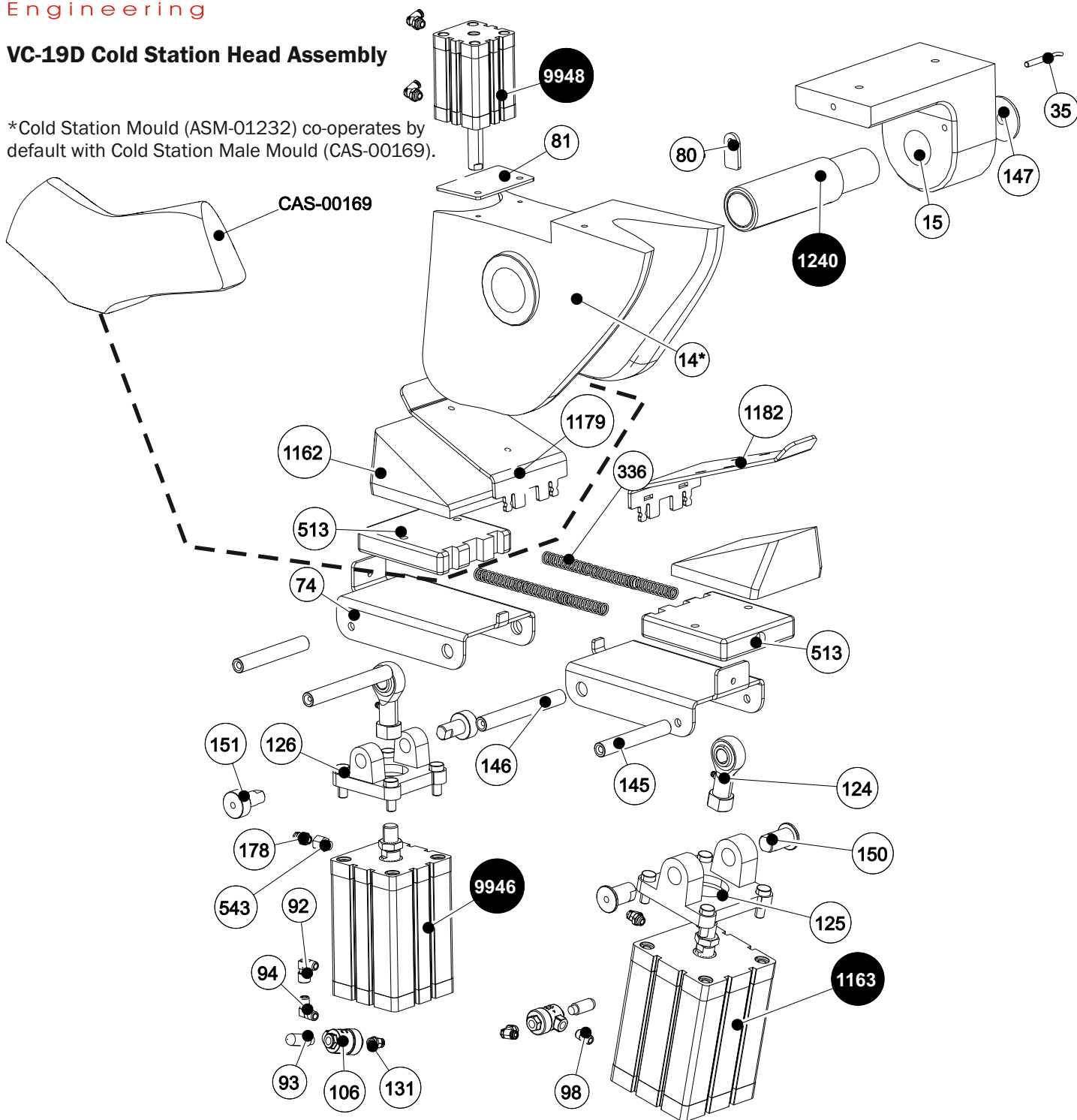
VC-19D Hot Station Support Base with Main Cylinder



BOM ID	PartNo	Description	Qty
9	CAS-00151	VC-19D SUPPORT MOULD BASE	1
46	GEN-00488	VC-19 MOULD SUPPORT COVER	1
50	LAS-00589	PISTON GUIDE, VC-2014	1
96	PNE-00059	NIPPLE, TAPER, 1/4 (M) - 1/4 (M)	1
99	PNE-00074	NON-RETURN VALVE, 1/4	1
103	PNE-00094	SILENCER, 1/4, PLASTIC, BLUE	1
107	PNE-00171	REDUCING NIPPLE 1/4-1/2	1
112	PNE-00213	CAP ALLEN, +OR 1/4	1
115	PNE-00725	SOLENOID VALVE 1/4 5/2 1P	1
118	PNE-00951	REDUCER, TAPER, 3/4-1/2	1
132	PNE-09925	ELBOW MALE ADAPTOR 8-1/4"	1
144	REV-00376	NUT, CUSTOM, M36X2.0	1
153	REV-00544	WASHER, CUSTOM, Φ20x6.2	4
155	REV-00557	GUIDE CYLINDER Φ22xΦ19	1
178	PNE-09916	ELBOW MALE ADAPTOR 4-1/8"	2
694	ASM-00694	CYLINDER Φ160x240	1
1015	PNE-01015	CYLINDER 40x120G	1
1178	LAS-01178	VC-19D MALE MOULD BASE	1
1238	ASM-01238	HOT STATION COVER	1

VC-19D Cold Station Head Assembly

*Cold Station Mould (ASM-01232) co-operates by default with Cold Station Male Mould (CAS-00169).

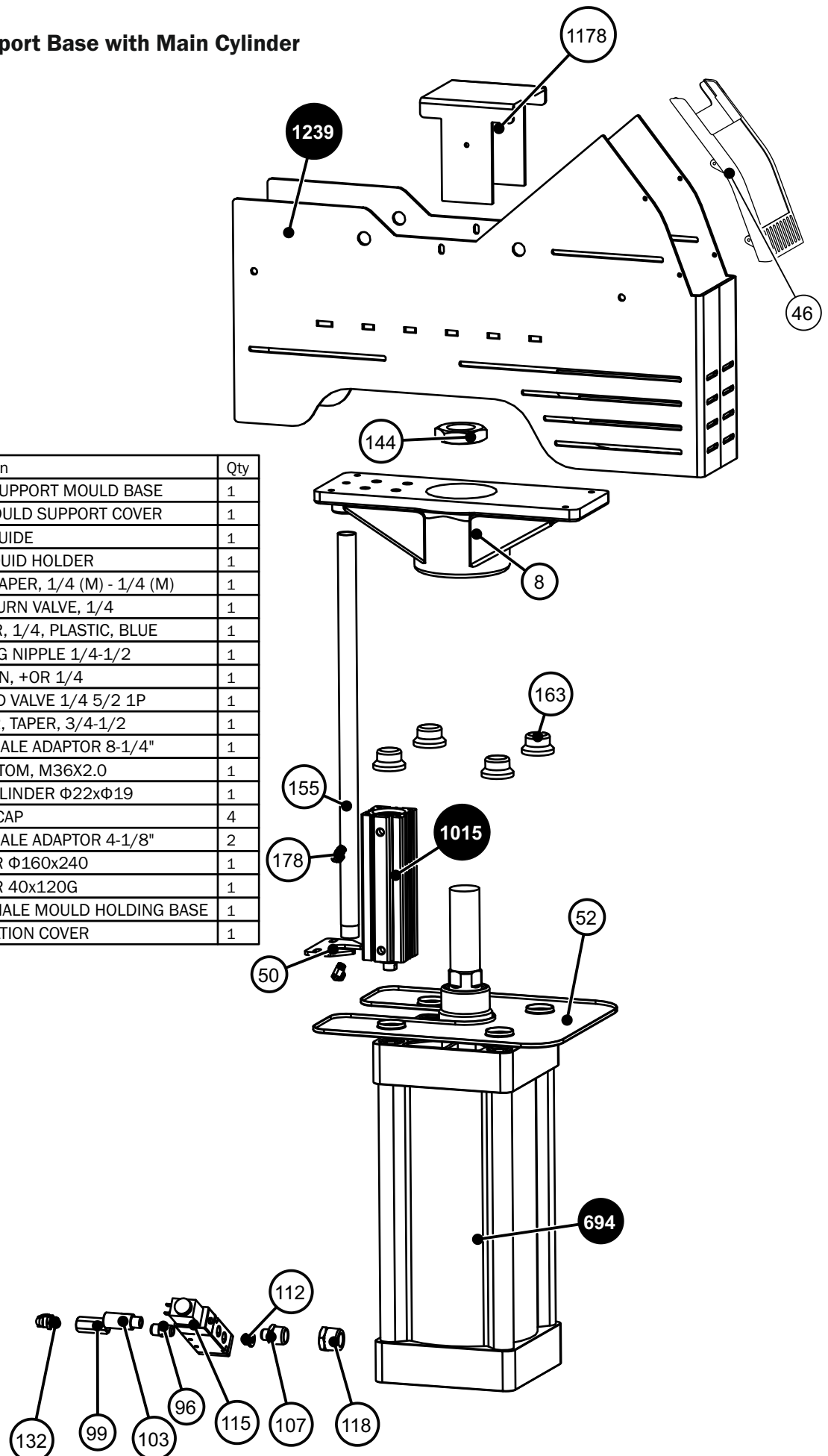


BOM ID	PartNo	Description	Qty
14*	ASM-01232	COLD STATION MOULD, STANDARD	1
15	CAS-00159	COLD MOULD HEAD INTERCHANGE PART	1
35	ELE-00516	HEATING SENSOR 6x35 (L=80CM)	1
74	LAS-01129	SUPPORT INTERNAL SIDE PLATE	2
80	LAS-01137	MOULD STOPPER	1
81	LAS-01146	SHORT HEAD PUSHING INOX PLATE	1
92	PNE-00032	FITTING, ELBOW, 1/8 (M) - 1/8 (F)	1
93	PNE-00050	SILENCER, 1/8, PA	2
94	PNE-00055	ELBOW, 1/8 (M) - 1/8 (M), INOX	1
98	PNE-00073	NIPPLE, TAPER, 1/8 (M) - 1/8 (M)	1
106	PNE-00098	QUICK EXHAUST VALVE, 1/8	2
124	PNE-01090	FISH-EYE, UNIVERSAL JOINT M16x1.5	2
125	PNE-01164	CB-DOUBLE EAR FLANGE Φ100	1
126	PNE-01169	Φ80 DOUBLE EAR FLANGE	1
131	PNE-09919	STRAIGHT MALE ADAPTOR 4-1/8"	1

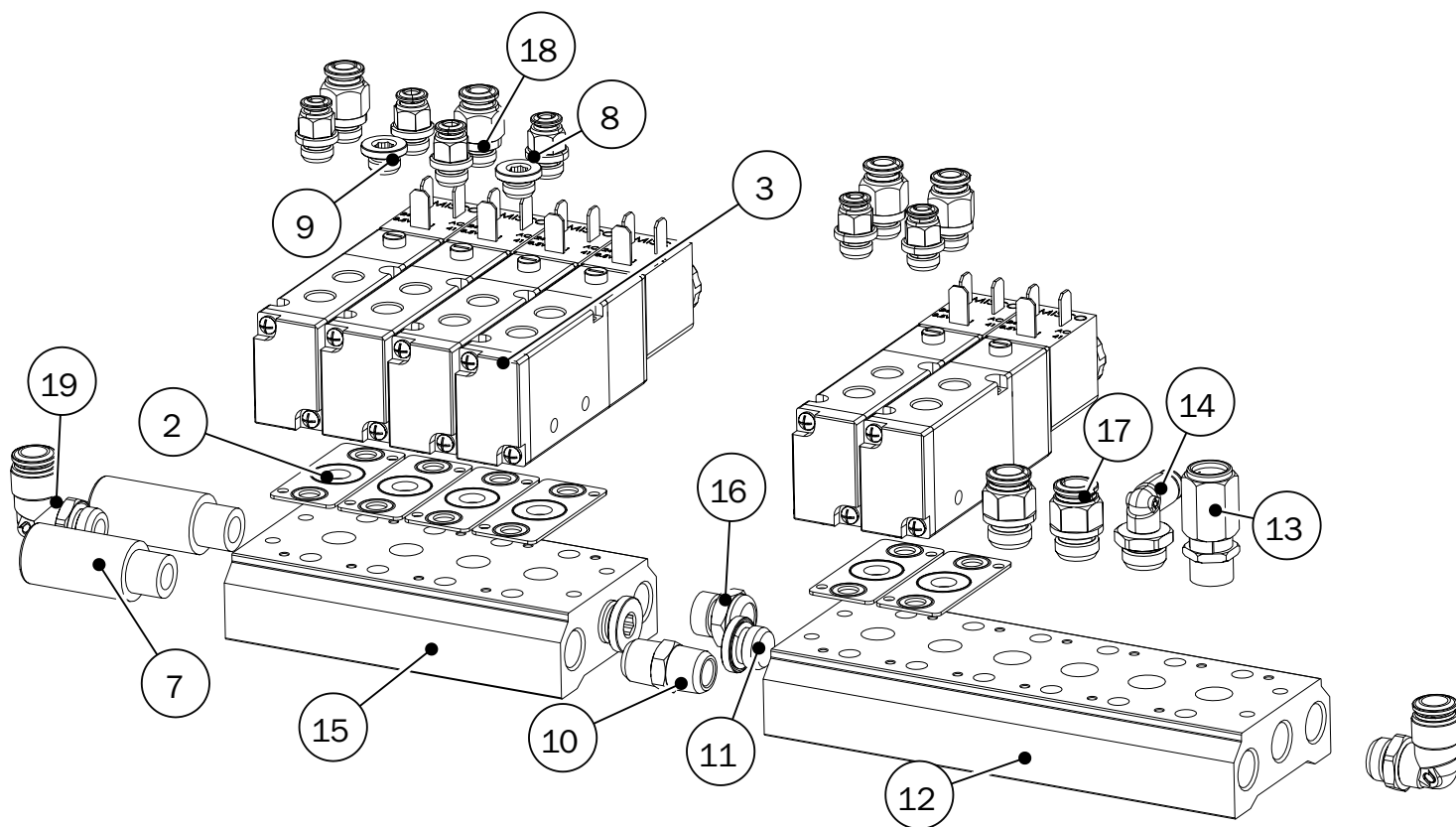
BOM ID	PartNo	Description	Qty
145	REV-00530	CYLINDER JOINT PIN	2
146	REV-00531	ROTATING BASE CONNECTION PIN	2
147	REV-00535	HOLDING WASHER Φ50	1
150	REV-00541	Φ20 PIN	2
151	REV-00542	Φ16 PIN	2
178	PNE-09916	ELBOW MALE ADAPTOR 4-1/8"	5
336	SPR-00036	VC-19D MALE MOULD SPRING	5
513	GEN-00513	VC-19D PLASTIC SLIDER	2
543	REV-00453	RESTRICTOR, 1/8 (M) - 1/8 (F) - Φ1.0	1
1162	CAS-00162	VC-19D CASTED SUPPORT	2
1163	PNE-01163	CYLINDER ACE Φ100x100	1
1179	LAS-01179	MALE MOULD BACK PRESSURE SYSTEM, TOP PLATE	1
1182	LAS-01182	MALE MOULD FRONT PRESSURE SYSTEM, TOP PLATE	1
1240	ASM-01240	EVAPORATOR INSERT	1
9946	PNE-09946	CYLINDER ACE 80x100	1
9948	PNE-09948	CYLINDER ACE Φ50x50	1

VC-19D Cold Station Support Base with Main Cylinder

BOM ID	PartNo	Description	Qty
8	CAS-00151	VC-19D SUPPORT MOULD BASE	1
46	GEN-00488	VC-19 MOULD SUPPORT COVER	1
50	LAS-00589	PISTON GUIDE	1
52	LAS-00822	VC-16 LIQUID HOLDER	1
96	PNE-00059	NIPPLE, TAPER, 1/4 (M) - 1/4 (M)	1
99	PNE-00074	NON-RETURN VALVE, 1/4	1
103	PNE-00094	SILENCER, 1/4, PLASTIC, BLUE	1
107	PNE-00171	REDUCING NIPPLE 1/4-1/2	1
112	PNE-00213	CAP ALLEN, +OR 1/4	1
115	PNE-00725	SOLENOID VALVE 1/4 5/2 1P	1
118	PNE-00951	REDUCER, TAPER, 3/4-1/2	1
132	PNE-09925	ELBOW MALE ADAPTOR 8-1/4"	1
144	REV-00376	NUT, CUSTOM, M36X2.0	1
155	REV-00557	GUIDE CYLINDER $\Phi 22 \times \Phi 19$	1
163	RUB-00131	RUBBER CAP	4
178	PNE-09916	ELBOW MALE ADAPTOR 4-1/8"	2
694	ASM-00694	CYLINDER $\Phi 160 \times 240$	1
1015	PNE-01015	CYLINDER 40x120G	1
1178	LAS-01178	VC-19D MALE MOULD HOLDING BASE	1
1239	ASM-01239	COLD STATION COVER	1



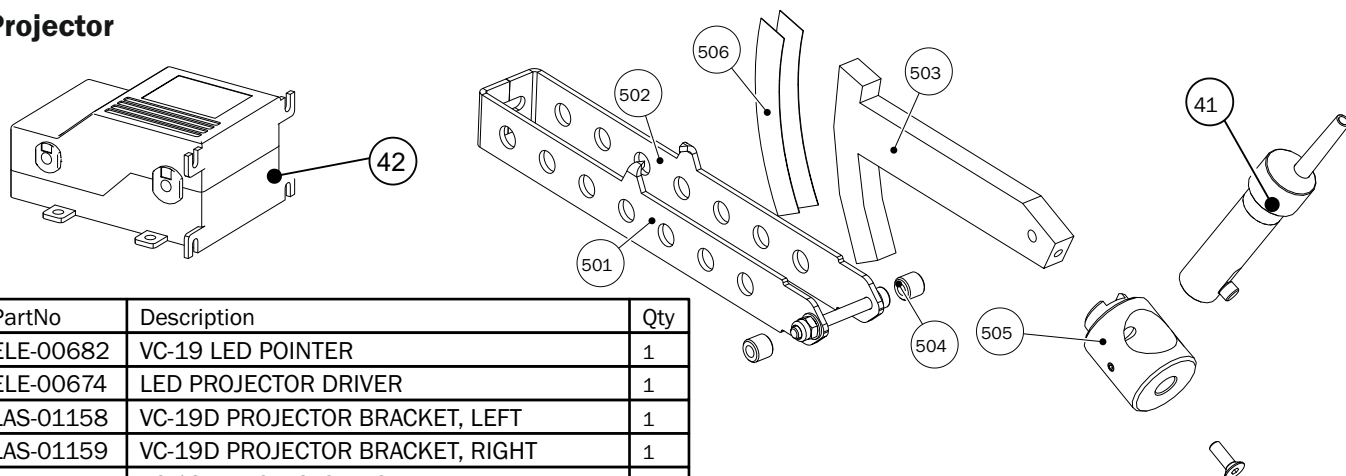
VC-19D Bottom valve assembly



BOM ID	PartNo	Description	Qty
2	GEN-00093	CAP	6
3	ASM-00461	VALVE 5/2 G1/8, 24V	6
7	PNE-00094	SILENCER, 1/4, PLASTIC, BLUE	2
8	PNE-09919	STRAIGHT MALE ADAPTOR 4-1/8"	6
9	PNE-00072	PLUG, MALE, PARALLEL, 1/8	2
10	PNE-00059	NIPPLE, TAPER, 1/4 (M) - 1/4 (M)	1
11	PNE-00213	CAP ALLEN, +OR 1/4	2
12	PNE-01040	MANIFOLD, 1/4, 6 STATIONS	1

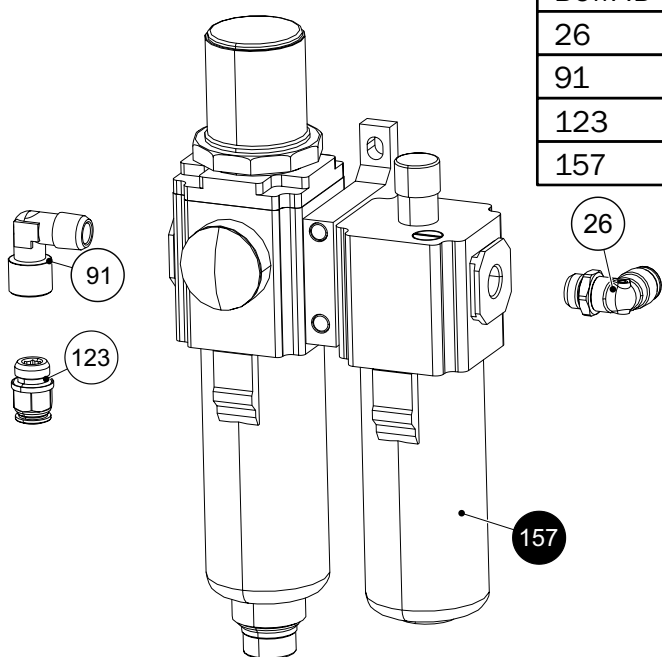
BOM ID	PartNo	Description	Qty
13	PNE-00608	SAFETY VALVE, 1/4, P.T. 6 bar	1
14	PNE-09923	ELBOW MALE ADAPTOR 4-1/4"	1
15	PNE-00082	MANIFOLD, 1/4, 4 STATIONS	1
16	PNE-00896	SILENCER 1/4	1
17	PNE-09921	STRAIGHT MALE ADAPTOR 8-1/4"	2
18	PNE-01097	STRAIGHT MALE ADAPTOR 6-1/8"	4
19	PNE-09925	ELBOW MALE ADAPTOR 8-1/4"	2

VC-19D Projector



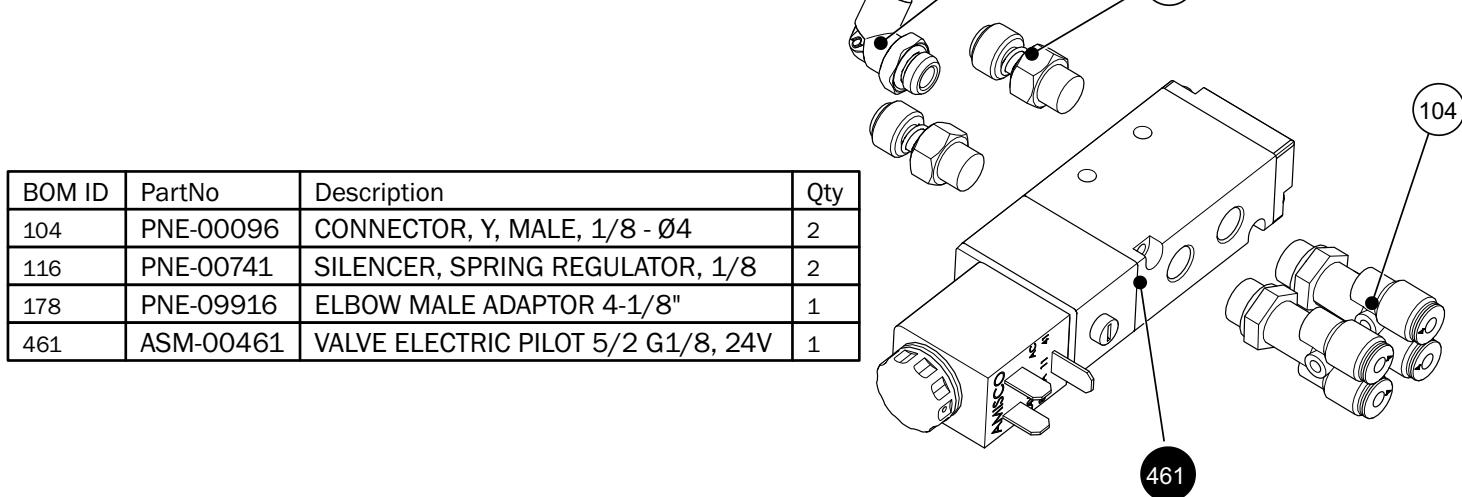
BOM ID	PartNo	Description	Qty
41	ELE-00682	VC-19 LED POINTER	1
42	ELE-00674	LED PROJECTOR DRIVER	1
501	LAS-01158	VC-19D PROJECTOR BRACKET, LEFT	1
502	LAS-01159	VC-19D PROJECTOR BRACKET, RIGHT	1
503	LAS-01160	VC-19D PROJECTOR POINTER	1
504	REV-00571	VC-19D TOP PROJECTOR SYSTEM SPACER	2
505	REV-00572	VC-19D LED PROJECTOR HOLDER	1
506	STK-00181	VC-19D TOP PROJECTOR MEASURING TAPES	1

VC-19D FRL with components



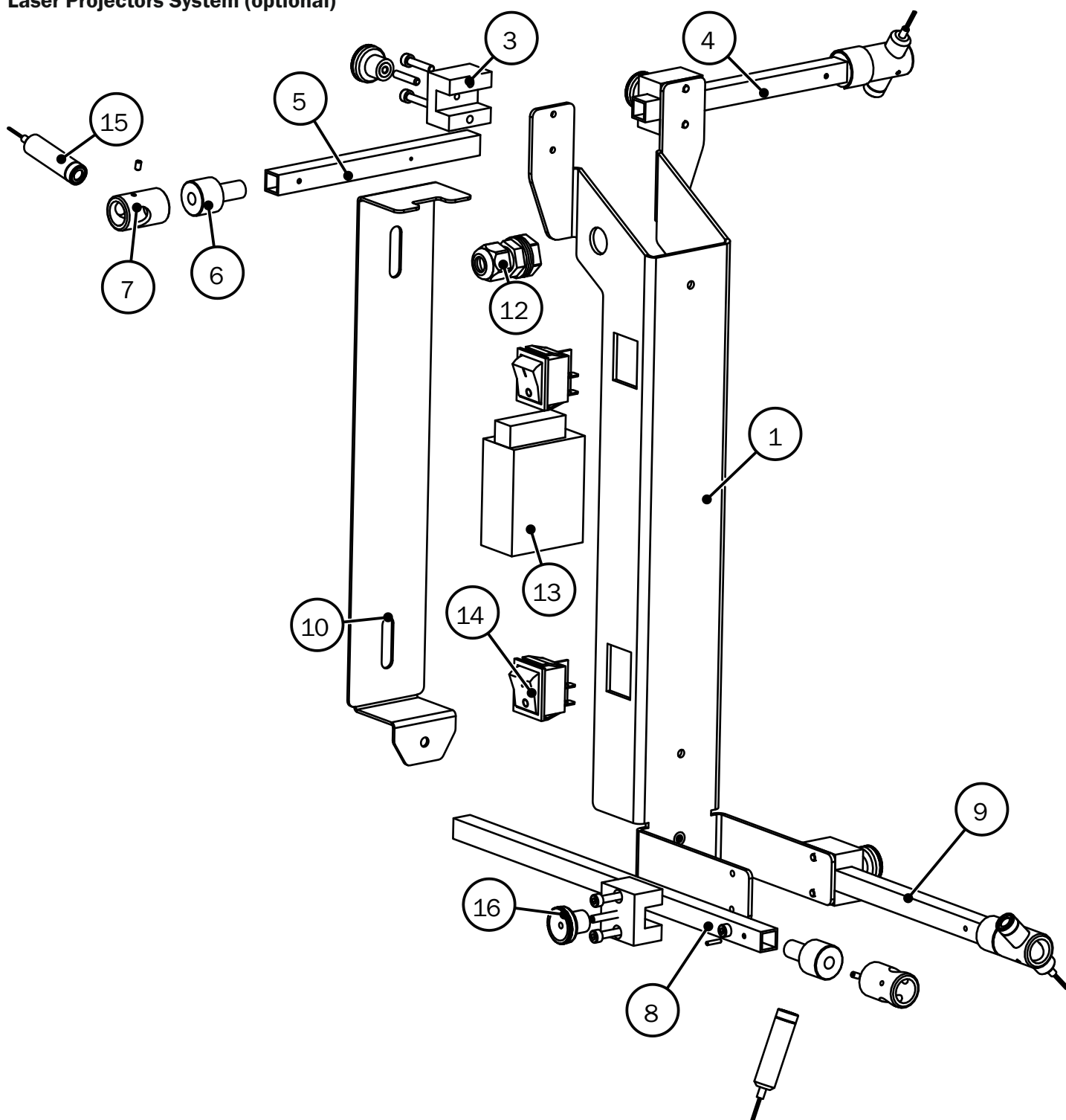
BOM ID	PartNo	Description	Qty
26	PNE-09925	ELBOW MALE ADAPTOR 8-1/4"	2
91	PNE-00023	MALE-FEMALE ELBOW 1/4"	1
123	PNE-09921	STRAIGHT MALE ADAPTOR 8-1/4"	2
157	PNE-00001	FRL G1/4 SIZE 300	4

VC-19D Top Valve with components



BOM ID	PartNo	Description	Qty
104	PNE-00096	CONNECTOR, Y, MALE, 1/8 - Ø4	2
116	PNE-00741	SILENCER, SPRING REGULATOR, 1/8	2
178	PNE-09916	ELBOW MALE ADAPTOR 4-1/8"	1
461	ASM-00461	VALVE ELECTRIC PILOT 5/2 G1/8, 24V	1

Laser Projectors System (optional)

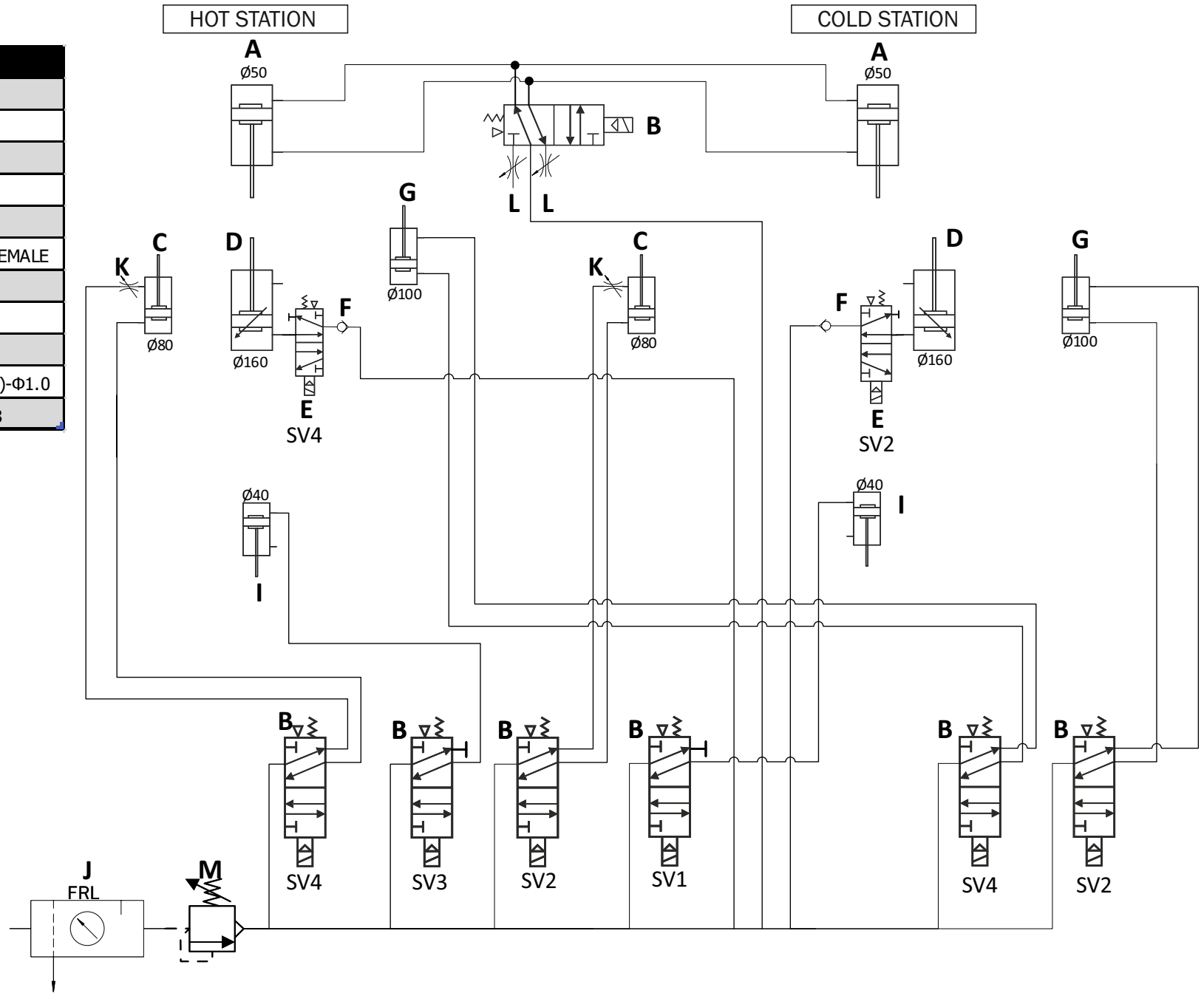


BOM ID	PartNo	Description	QTY.
1	LAS-01161	HOLDING ARM	1
3	REV-00569	GUIDE HOLDER	4
4	GEN-00501R	TOP GUIDE TUBE, RIGHT	1
5	GEN-00501L	TOP GUIDE TUBE, LEFT	1
6	REV-00568	LASER PROJECTOR HOLDER BASE	4
7	REV-00567	VC-19D PROJECTOR HOLDER	4
8	GEN-00500L	BOTTOM GUIDE TUBE, LEFT	1

BOM ID	PartNo	Description	QTY.
9	GEN-00500R	BOTTOM GUIDE TUBE, RIGHT	1
10	LAS-01167	ARM CAP	1
12	ELE-00644	CABLE GLAND PG9	1
13	ELE-00686	POWER SUPPLY 15W/5V/3A MINI	1
14	ELE-00687	VC-19D LASER SYSTEM SWITCH	2
15	ELE-00688	VC-19D $\Phi 12$ LASER DIODE	4
16	GEN-00393	KNURLED KNOB M4	4

VC-19D Pneumatic Diagram

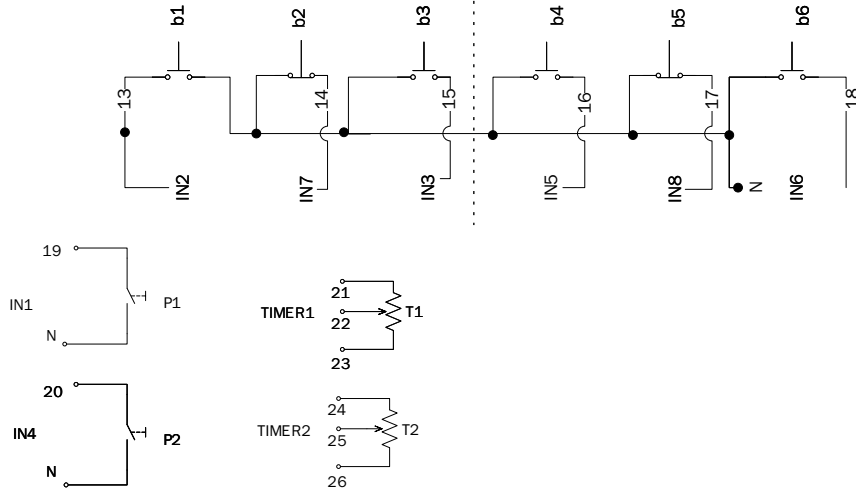
	P/N	DESCRIPTION
A	PNE-09948	CYLINDER ACE $\Phi 50 \times 50$
B	ASM-00461	VALVE 5/2 1/8, 24V
C	PNE-09946	CYLINDER ACE 80x100
D	ASM-00694	CYLINDER SI 160x240
E	PNE-00725	VALVE 1/4 5/2 1P
F	PNE-00074	NON-RETURN VALVE, 1/4, FEMALE
G	PNE-01163	CYLINDER ACE $\Phi 100 \times 100$
I	PNE-01015	CYLINDER ACQ 40x120
J	PNE-00001	FRL G1/4 SIZE 300
K	REV-00453	RESTRICTOR, 1/8 (M)-1/8 (F)- $\Phi 1.0$
L	PNE-00741	SILENCER, REGULATOR, 1/8



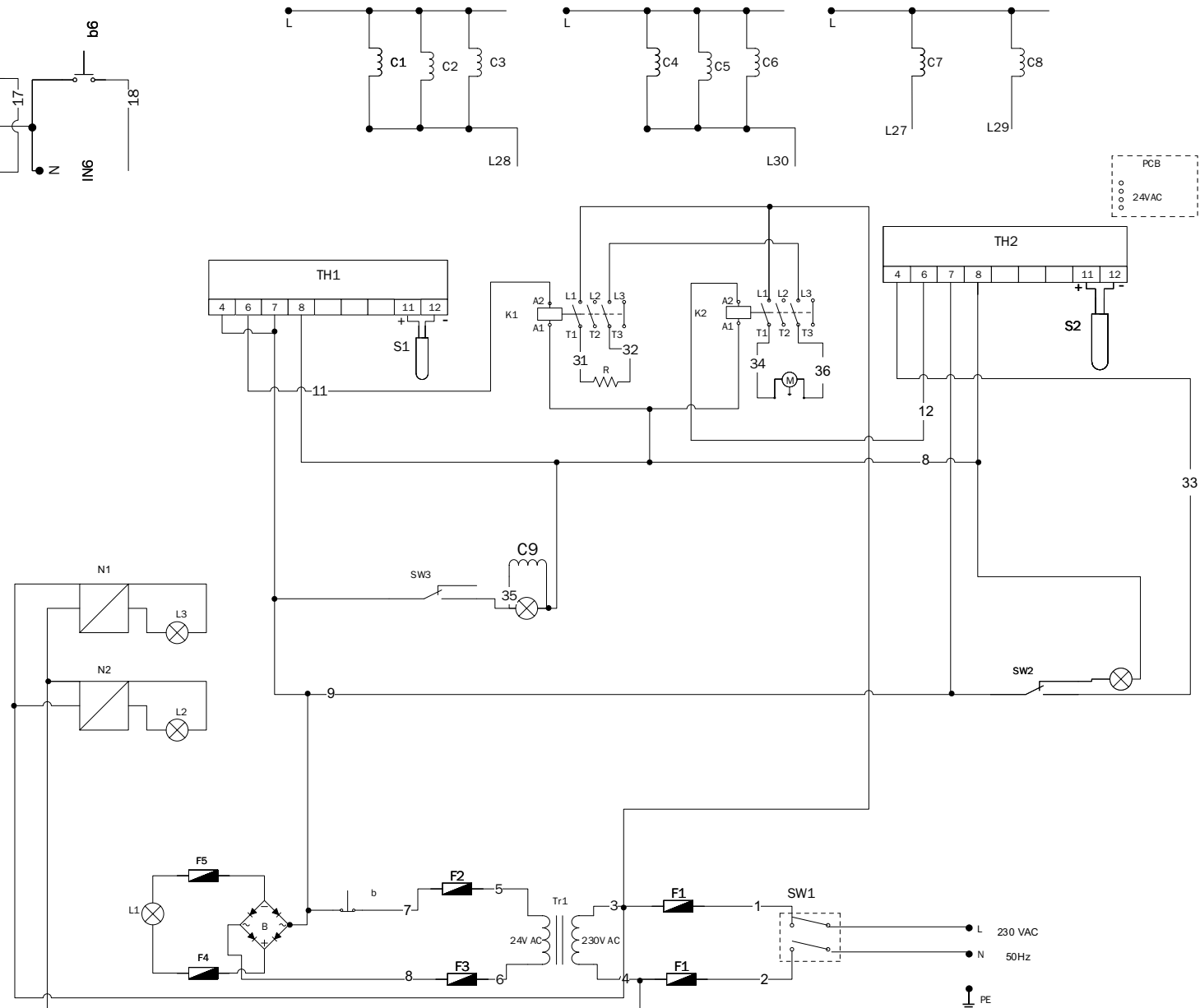
VC-19D Electrical diagram

HOT STATION

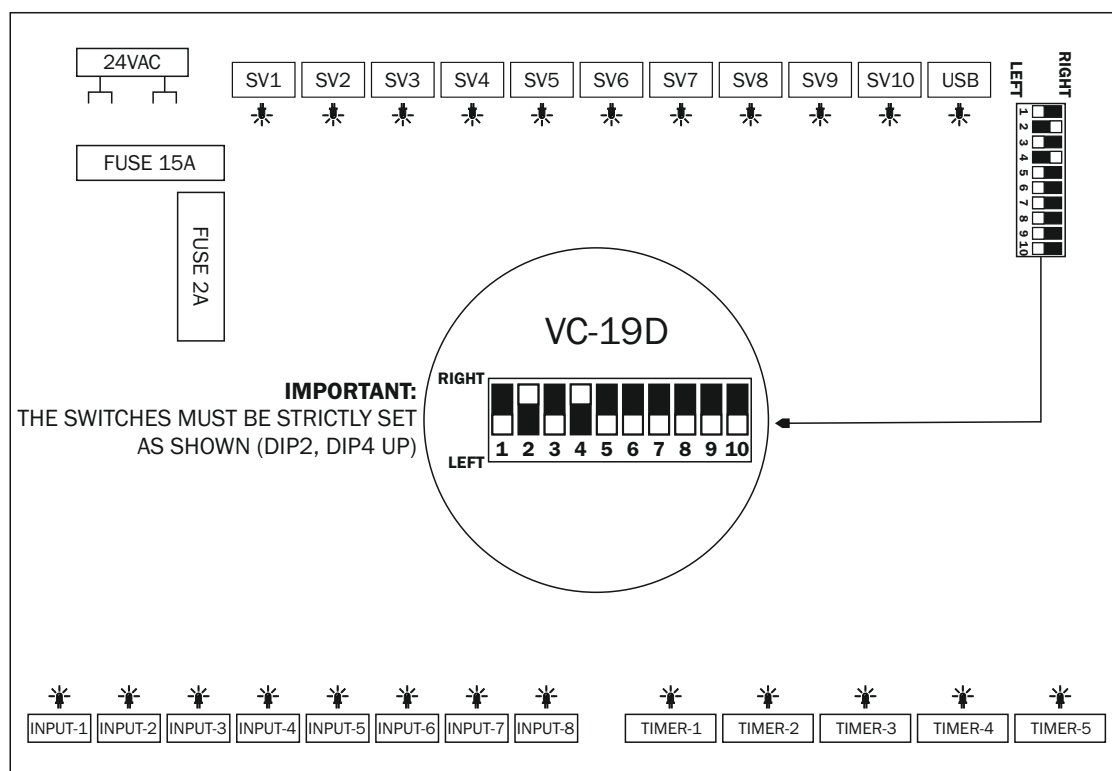
COLD STATION



SYMBOL	Part No	Description
SW1	ASM-00807	MAIN SWITCH
SW2, SW3	ELE-00670	SWITCH 24V
b	ELE-00002	STOP BUTTON
Tr	ELE-00021	TRANSFORMER, 230V – 24V 12V 100 VA
K1, K2	ELE-00028	RELAY
TH1, TH2	ELE-00264	THERMOREGULATOR R38S
N1, N2	ELE-00674	230V Power supply unit 3W
R	ELE-00660	HEATING ELEMENT 230V 900W
M	ASM-01228	VC-19D COOLING UNIT
L1	ELE-00407	LED BAR
L2, L3	ELE-00682	LED POINTER OL3 3W WHITE
B	ELE-00331	BRIDGE 10A/1000V
F1	ELE-00336	CHINT NB1 63C10A
F2, F3	ELE-00378	FUSE 6A 5X20
F4, F5	ELE-00377	FUSE 4A 5X20
S1, S2	ELE-00516	HEAD TEMPERATURE SENSOR
C1 - C9		COIL 24 VAC
U	PCB-00028	M-USE
T1, T2	ELE-00076	POTENTIOMETER 10kΩ
P1, P2	ELE-00615	FOOT SWITCH BLACK
b1, b3, b4, b6	ELE-00001	START BUTTON
b2, b5	ELE-00506	STOP BUTTON



VC-19D Electronic Board Diagram

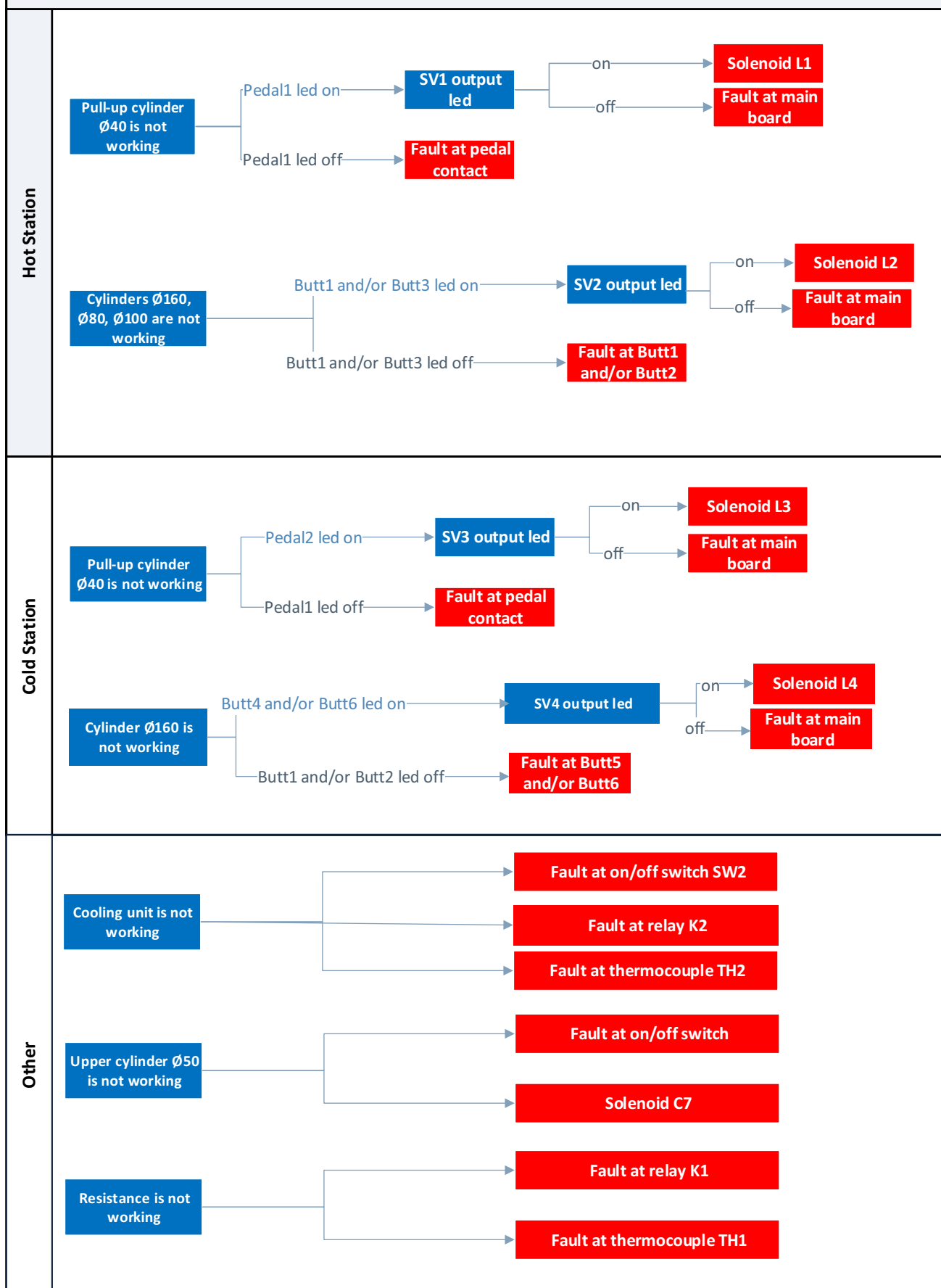


PCB-00028 M-USE MAINBOARD ELECTRONIC PCB

INPUTS	
PEDAL1	INPUT1
PEDAL2	INPUT4
BUTTON b1	INPUT2
STOP b2	INPUT7
BUTTON b3	INPUT3
BUTTON b4	INPUT5
STOP b5	INPUT8
BUTTON b6	INPUT6

OUTPUTS	
SV1	HOT STATION CYLINDER ACQ Φ 40x120
SV2	HOT STATION CYLINDER ACE Φ 100x100
	HOT STATION CYLINDER ACE Φ 80x100
	HOT STATION CYLINDER SI Φ 160x240
SV3	COLD STATION CYLINDER ACQ Φ 40x120
SV4	COLD STATION CYLINDER ACE Φ 100x100
	COLD STATION CYLINDER ACE Φ 80x100
	COLD STATION CYLINDER SI Φ 160x240

VC-19D Troubleshooting



Notes

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.

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