



# OWNER'S MANUAL MANUEL DE L'UTILISATEUR

# VACCUM MACHINE 650A

# IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS



This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate your machine.

Failure to comply with these instructions may result in personal injury.

### **General Operation**

- Read, understand, and follow all instructions in the manual and on the machine before starting. Keep this manual in a safe place for further and regular reference and for ordering replacement parts.
- Only allow responsible individuals familiar with the instructions to operate the machine. Be sure to know controls and how to stop the machine quickly.
- Never put your hands near moving parts.
- Only allow qualified individuals for the maintenance of your machine.
- Remove all obstacles, which may interfere with the machine functions.
- Clear the work area such as electrical wires, buckets, knives etc.
- Be sure that everyone else is clear of your work area before operating the machine.
- Do not sit nor stand on the machine.
- Always turn off the machine after your work is done. Never leave a running machine unattended.
- Always disconnect and wait till the machine has cooled before attempting any maintenance.
- Do not wear loose fitting clothes or jewelry as they may get caught in moving parts of the machine.
- Always wear security shoes, to prevent injury caused by moving the machine or objects falling from the machine.
- Never exceed the time limit to seal, which is recommended by the manufacturer. This is to
  avoid any damage that may be caused to the sealing bars and to eliminate the risk of fire in
  the machine. Thus avoiding corporal burns.
- Never touch the sealing bars after they have been used, this will avoid corporal burns. Wait a
  few minutes to let the machine cool down before touching.
- Always make sure that the sealing bars are well installed in their "Guide Blocks" before starting a cycle.
- Never incline the machine more than 30 degrees, it may tip over and hurt someone seriously.
- Work only in daylight or good artificial light.

Do not operate the machine while under the influence of alcohol or drugs!

#### Service

- Use proper containers when draining the oil. Do not use food or beverage containers that may mislead someone into drinking from them. Properly dispose of the containers, or store in a safe place immediately following the draining of the oil.
- Prior to disposal, determine the proper method to dispose of waste from your local office of Environmental Protection Agency. Recycling centers are established to properly dispose of materials in an environmentally safe fashion.

Do not pour oil or other fluids into the ground, down a drain or into a body of water.



# Warning-Your responsibility:

This machine should only be operated by personal who can read, understand and respect warnings and instructions regarding this machine in the owners manual. Save these instructions for future reference.

## VACUUM PACKAGING MACHINE

# **MODEL 650A**

(MC-40 SIPROMAC)

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### VACUUM PACKAGING MACHINES

### **OPERATION INSTRUCTIONS**

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# SIPROMAC INC. VACUUM PACKAGING MACHINES

#### 1. SETTING UP THE MACHINE:

Before choosing the site for the machine, please consider that you will also need room for packaged and non-packaged products apart from the space needed for the machine itself.

Keep in mind that the machine must not be set up upon uneven ground. Especially with mobile models, the weight of the pump might then cause warping of the machine. Then the lid will not fit correctly.

Before starting to work, check the oil view glass on the pump, if there is a sufficient quantity of oil in the pump. Never use oil other than recommanded by the producer. Never exceed maximum quantity of oil indicated, when adding or changing oil. Verify weekly.

Normal ambient temperature for the vacuum pump is between 10 to 70°C. For temperature below 10°C; it is recommended to use synthetic oil. Please consult factory and pump manufacturer manual for more information or when ambient temperature are outside normal limits

#### 2. ELECTRICAL CONNECTION:

Electrical connections must be made by qualified personnel. This person must make sure that the electrical entries corresponds to the proper voltage and amperage of the machine. GROUNDING INSTRUCTIONS: This appliance must be connected to a grounded, metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance. A qualified electrician should be consulted if there is any doubt as to whether an outlet box is properly grounded.

All vacuum machines are supplied with an electrical schematic drawing. An important step in connecting the machine is to make sure that the pump turns in its correct rotation.



The pump should not rotate more than 3 to 4 seconds in the wrong rotation or it may cause serious damage. The proper rotation is indicated by an arrow on the pump motor.

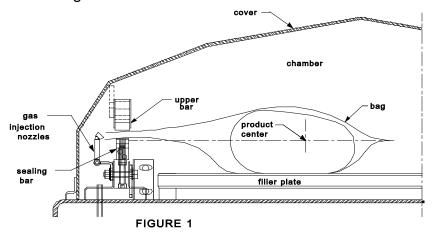
#### 3. OPERATION:

#### 3.1 Working principles:

A vacuum packaging cycle is made of 3 stages. First the vacuum is made, the air is completly taken out of the chamber and from bag containing the product. (See figure 1). Then it is possible to inject neutral gas from the nozzles, if the product is delicate. Finally, a mechanism pushes the sealing bar to the rubber support to seal the bag.

To obtain nice packages, the products and the bags have to be of proportional sizes. The bag's opening should never exceed 50 cm(2") past the seal bars. The product should be centered in height in relation to the seal bar by adjusting the spacers provided.

To obtain a good seal, make sure that no residue of fat is left between the bag's inner sides where sealing is done.



#### 3.2 Special packaging:

#### 3.2.1 Gas flushing (option):

There is an atmospheric pressure of 1 kg/sq. cm (14 lbs/sq. inch) upon products when fully evacuated. Products which can be damaged by high pressure must be packaged with a partial vacuum, or the pressure must be counterbalance by inflating the bag with gas (nitrogen or carbon dioxide) before sealing after evacuation.

For gas flushing, the bags are placed on the sealing bars, the open end placed over the gas nozzles mounted alongside the sealing bar. After evacuation, the vacuum valve closes and the gas valve opens. Gas time (sec.) can be set in the program menu.

The necessary gas tank and pressure valve mounted on tank is not supplied, The pressure of the gas regulator should be set at approximately 1/3 kg/sq. cm (5 lbs/sq.inch.). Each machine has an adaptor for gas connection when gas flush option is ordered.

### 3.2.2 Top and bottom sealing (optional):

When sealing aluminium laminate bags (especially bags for e.g. coffee) it is imperative to have an upper and a lower sealing bar.

## 3.2.2 Electrical bag cut (optional):

This option is used to obtain a package that the excess bagtail is cut off close to the seal (cannot be used with top and bottom sealing).

#### 3.3 Vacuum packaging operation:

#### 3.3 Vacuum packaging operation:

Note: Refer to the menus structure on page 14 and the keyboard detail on page 15.

#### 3.3.1 Basics:

Use key "POWER" to power ON / OFF the vacuum packaging machine. When the unit is energized, the identification of the last executed program is displayed on LCD screen.

Use the "ESC" key to change over from the programs menu to the functions menu and from the functions menu to the programs menu.

In functions menu, use key "SELECT" to select a function and key "ENTER" to accede and executed the selection.

In programs menu, use key "SELECT" to select a program and key "ENTER" to accede and modify the selection.

In programs submenu, use key "ENTER" to pass over the parameters and point to the following one; the parameters are blinking to point out the acquisition mode. A return to programs menu is performed automatically following the last parameter acquisition.

In program submenu, use key "ESC" to get back to the programs menu. Strike any key to clear the error messages which may be displayed on LCD screen.

#### 3.3.2 Functions:

#### 3.3.2.1 Create a program:

When executing the "create a program" function, the program submenu is acceded, starting with the identification. The initial identification "Pxx NO NAME" is given to the program and all parameters are established to zero; the program number is allocated automatically.

#### 3.3.2.2 <u>Delete a program</u>:

When executing the "delete a program" function, the programs menu is acceded and the number of the first program in memory is blinking to point out the deletion mode. Use key "SELECT" to select a program and key "ENTER" to accede and confirm deletion of the selection. Use key "ESC" to unconfirm a deletion and to leave the function. When leaving the function, the number of the actual program on LCD screen cease to blink.

#### 3.3.2.3 Select operating mode:

When executing the "select operating mode" function, which is available only for the automatic units, the actual selection is blinking to point out the acquisition mode. Use key "SELECT" to get through the operating modes, which are automatic, semi-automatic and manual; the validation of the selected operating mode is performed automatically. Use key "ESC" or "ENTER" to leave the function and get back to the program menu.

#### 3.3.3 Programs menu:

#### 3.3.3.1 Program identification:

For a selected program, set the identification, using the numeric keyboard characters chart; press numeric key untill the desired character is selected (4 times for the numeric value). Use key "ENTER" to validate the character and to validate the characters string at the end(the new characters string is blinking). In a middle of an acquisition, use key "ESC" to come backward and erase one or several characters.

```
keys 2, 2, ENTER
                                                   → E
Example: EXAMPLE 1 →
                                                   → X
        (9 characters)
                              keys 8, 8, 8, ENTER
                              keys 1, ENTER
                                                   → A
                              keys 5, ENTER
                                                   → M
                                                   → P
                              keys 6, ENTER
                              keys 4, 4, 4, ENTER
                                                   → L
                                                   → E
                              keys 2, 2, ENTER
                              keys 9, 9, 9, ENTER
                                                   → space
                              keys 1, 1, 1, 1, ENTER → 1
                              key ENTER to validate the characters string
```

#### 3.3.3.2 <u>Vacuum level setting</u>:

For a selected program set the vacuum level, starting with the values; the decimal point is automatically inserted following the second digit entry and the validation is automatically performed following the third digit entry (the new vacuum level is blinking). The vacuum level is rounded off to the nearest half value. In the middle of an acquisition, use key "ENTER" to validate the vacuum level and key "ESC" to come backward and start over with a new acquisition (the old vacuum level is blinking). Set vacuum level to zero to bypass the pressure transducer and proceed only using the vacuum plus time.

```
Examples: 90.0% → keys 9, 0, 0 or 9, 0, ENTER or
keys 9, 0, 1 or 9, 0, 2 or 9, 0, 3 or 9, 0, 4
97.5% → keys 9, 7, 5 or
keys 9, 7, 6 or 9, 0, 7 or 9, 0, 8 or 9, 0, 9
0.0% → keys 0, 0, 0 or 0, ENTER
```

## 3.3.3.3 <u>Vacuum plus time setting</u>:

For a selected program set the vacuum plus time, in seconds; the validation is automatically performed following the second digit entry (the new vacuum plus time is blinking). In a middle of an acquisition, use key "ENTER" to validate the vacuum plus time and key "ESC" to come backward and start over with a new acquisition (the old vacuum plus time is blinking).

**Examples:** 1s  $\rightarrow$  keys 0, 1 or 1, ENTER

#### 3.3.3.4 Gas flush level setting:

For a selected program set the gas flush level following the same procedure as for the vacuum level; the maximum gas flush level setting is 10% below the vacuum setting.

#### 3.3.3.5 Sealing time setting:

For a selected program set the sealing time, starting with the seconds; the decimal point is automatically inserted following the first digit entry and the validation is automatically performed following the third digit entry (the new sealing time is blinking). The sealing time is truncated to the nearest half hundredth. In a middle of an acquisition, use key "ENTER" to validate the sealing time and key "ESC" to come backward and start over with a new acquisition (the old sealing time is blinking).

Examples: 4.50s → keys 4, 5, 0 or 4, 5, ENTER or keys 4, 5, 1 or 4, 5, 2 or 4, 5, 3 or 4, 5, 4

2.35s → keys 2, 3, 5 or keys 2, 3, 6 or 2, 3, 7 or 2, 3, 8 or 2, 3, 9

0.00s → keys 0, 0, 0 or 0, ENTER

#### 3.3.4 Vacuum cycle execution:

For the manual units and the automatic units set on manual, close the cover to initiate a vacuum cycle. For the automatic units set on semi-automatic or on automatic, use push button "STOP / START" to initiate or interrupt a vacuum cycle. A selected program can be initiated only in the programs menu, when no modifications are in progress, and the access to the other programs and functions is denied. During cycle execution the operation status is sequencally displayed on LCD screen, except for the parameters established to zero, which are not displayed:

- chamber vacuum level during vacuum sequence,
- vacuum plus time status during vacuum plus sequence,
- chamber vacuum level during gas flush sequence,
- sealing time status during sealing sequence,
- chamber vacuum level during atmosphere sequence.7

During cycle execution, use key "1" to abort the vacuum sequence and execute the following sequence, which is gas flush or sealing, and key "ENTER" to accede and modify the program; the parameters become valid only for the following vacuum cycles.

#### 3.3.5 System monitor:

To accede the diagnostics menu, power up the vacuum packaging machine while keeping pushed in the "ESC"key. Use key "SELECT" to select the system monitor function and key "ENTER" to accede and visualize the monitored parameters. Use key "SELECT" to change over from the software revision, the amount of working hours done and the amount of complete cycles performed since first initialization.

## -MENUS STRUCTURE-

#### Functions menu:

"F1 CREATE A PRGM"
"F2 DELETE A PRGM"

"F3 SELECT OPMODE" (automatic units only)

#### Programs menu:

"Pxx NAME"

Program submenu:

"VACUUM: xx.x%" (10.0% - 99.5%)

"VACUUM PLUS: xxs"(0s - 99s)

"GAS FLUSH: xx.x%" (0.0% - 10% below the vacuum level) (units with gas option)

"SEAL TIME: x.xxs" (0.00s - maximum unit allocated setting)

"Pxx NAME" (12 characters)

#### • Diagnostics menu (keys "ESC" & "POWER" for access):

"DIAGNOSTICS MENU" (access code required)

"D1 INPUTS TEST"

"D2 OUTPUTS TEST"

"D3 MODEL SELECT"

"D4 GAS OPTION"

"D5 SEALING TIME"

"D6 COOLING TIME"

"D7 OFFSET CALIB."

"D8 VACUUM SENSOR"

"D9 SIPROMAC PUB"

"D10 LOADING TIME" (automatic units only)

"D11 UNLOADNG TIME" (automatic units only)

"SYSTEM MONITOR" (no access code required)

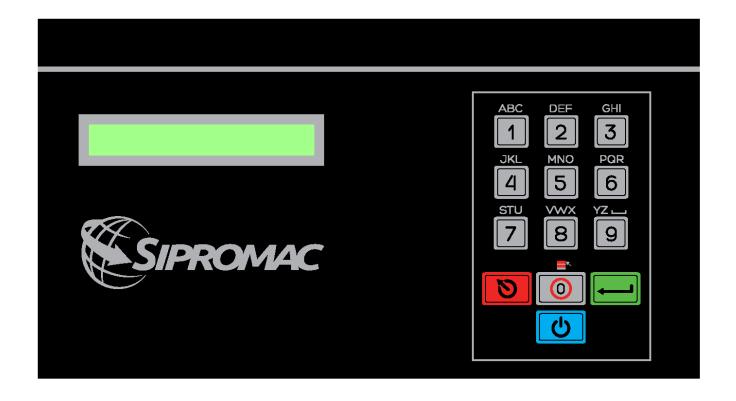
"SOFTWARE: R x.xx"

"WORK HRS: xxxxx"

"CYCLES: xxxxxxxx"

# -KEYBOARD DETAILS-

# **MC-40 CONTROLS**



WARNING: All electrical work described in this brochure should be done by a QUALIFIED and AUTHORIZED technician.

#### 3.4 Daily cleaning:

For hygenic cleanliness, it is imperative to clean chamber and spacers daily. Also clean the lid rubber to assure tight seat of the lid.

Cleaning instructions for gas injection nozzles: Periodically on a regular basis the gas injection nozzles must be removed with the connection tube and soaked in a food grade soap and water solution, then dried and re-installed.

#### 4. TROUBLE SHOOTING:

#### 4.1 Failure during packaging cycle:

#### 4.1.1 <u>"VACUUM ERROR" message is displayed on LCD</u>:

No pressure variation is picked up by the PCB transducer during the vacuum sequence within a preset period of time.

- Check vacuum lines for potential leaks or kinks.

#### 4.1.2 "GAS FLUSH ERROR" message is displayed on LCD:

No pressure variation is picked up by the PCB transducer during the gas flush sequence within a preset period of time.

- Check gas flush and vacuum lines for potential leaks or kinks.

#### 4.1.3 <u>"ATMOSPHERE ERROR" message is displayed on LCD:</u>

No pressure variation is picked up by the PCB transducer during the atmosphere sequence within a preset period of time.

- Check vacuum lines for potential leaks or kinks.

### 4.1.4 "COVER DOWN ERROR" message is displayed on LCD(manual units):

The input signal of the down position switch has been lost during cycle execution.

- Check limit switch adjustment.

#### 4.2 Insufficient vacuum:

#### 4.2.1 Leakage in the bag:

Most frequently, insufficient vacuum in bags is due to leakage in bag and not due to any fault of the machine.

Pin-hole leak for which there is no obvious explanation is due to faulty bag material.

Pin-hole leak caused by sharp edge of the product (bone, etc.). Use bone-guard or thicker film.

Tear in bag by careless handling (sharp edge on filling table, damage made by retailer or customer).

Leakage in lateral or bottom seal, complain to supplier of bags or film.

#### 4.2.2 No leakage in the bag:

Bag is too large, therefore the surplus of air remains visible (there is surplus of air in 0.4% of the bag volume in each bag). Use bags of suitable size.

Vacuum level is too low:

Pressure bar is jammed and closes opening of bag during evacuation.

#### 4.2.3 <u>Insufficient vacuum in chamber</u>:

If troubles described under 4.2.1 and 4.2.2 do not apply, there is something wrong with the evacuation. To find the leakage quickly, check for leaks with a precision vacuumeter, going back step by step from the chamber to the pump.

At the chamber (measuring point at base of valve) at maximum time of evacuation. If more than 6 torr, proceed directly to the pump, if more than 3 torr:have pump service by pump supplier. If pressure at pump is good, reconnect hoses to pump and measure again.

Verify at vacuum hose connections and valve connections.

When proceeding this way, starting from pump, loss of pressure per step must not exceed 0.5 to 1 torr.

**Caution:** Verify connections of measuring equipment before verifing machine.

Most frequent points of leakage: lid gasket, damaged vacuum hose or loose hose clamps.

#### 4.3 Faulty seal:

#### 4.3.1 Insufficient seal:

Damaged teflon or silicone rubber.

Sealing pressure too low, bellows leaking or pressure bar jammed.

Leakers in seal: heating wire mechanically damaged (knicked) or silicone rubber uneven.

### 4.3.2 No seal:

Sealing wire burnt.

Faulty contact in sealing circuit.

Sealing transformer burnt through.

Contactor does not work.

### 4.3.3 Permanent sealing current:

Contactor is jammed check sealing transformer for damage through overload.

#### 4.3.4 Seal does not stick:

Insufficient layer of polyethylene (inferior quality of bags).

Seal area extremely contaminated by fat or meat juice. Use filling aid.

Sealing temperature is too low (when using very thick films).

<u>Caution</u>: Do not increase sealing time more than really necessary; higher temperature will reduce working life of teflon and silicone rubber.

#### 4.4 Fault in the valve:

Vacuum or air valve does not open.

Check whether there is voltage on the magnetic valves during their period of operation. If there is no voltage a wire is broken or the PC board is damaged.

Lid does not open at the end of the cycle; air enters, but there is still 20 - 40% vacuum in chamber. Vacuum valve does not close.

#### 4.5 MC40 Control board failure

**NOTE**: Refer to menu structure on page 13.

This board software is allowing access to a "Diagnostics Menu". Only qualified service technicians are authorized to access this menu by entering a security password.

By acceding either the "D1 input test" feature or the "D2 output test" feature, a trained technician will be able to quickly know the origin of the problem: pump, sealing system, pneumatic problem, security switches problem, etc...

Keep in mind that in most cases trouble is due to a leakage, loose electrical connection or evident dammage to the main components: vacuum pump, valves, electrical contactors, thermal overload, fuses holder or transformer.

For assistance do not hesitate to contact your local service technicians.

#### 5. Regular maintenance:

Routine controls to be made at regular intervals:

Check teflon for wear.

Check silicone rubber for burnt spots and smooth even position.

Check pressure bar for jamming.

Check lid sealing for damage and hardened spots.

Check switch-point of micro switch, adjust if necessary.

Check evacuation hose for damage (contraction of diameter, or abrasions).

Check vacuum connections for tightness.

Check oil in pump (oil level in view glass; add if necessary. Regular change of oil - necessity indicated by change of color).

Check vacuum in chamber with precision vacuumeter.

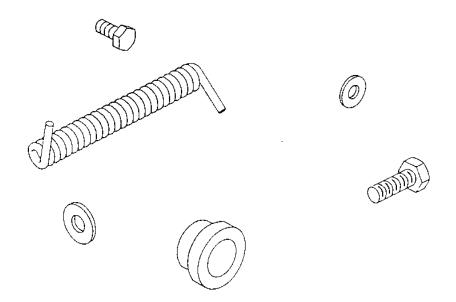
Check function of cycle with various settings of timers.

# MODEL 650A COVER ADJUSTMENT PROCEDURE

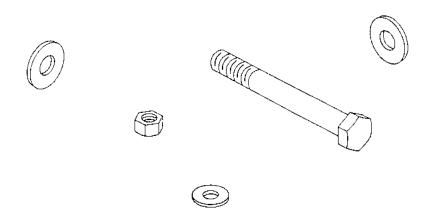
Reference Drawing:# 005-0325 # 004-0122

PROBLEM: MACHINE TABLE AND COVER SEEMS TO BE STRAIGHT, LID GASKET IS GOOD BUT COVER DOES NOT SIT PROPERLY ON BOTH SIDES OF TABLE.

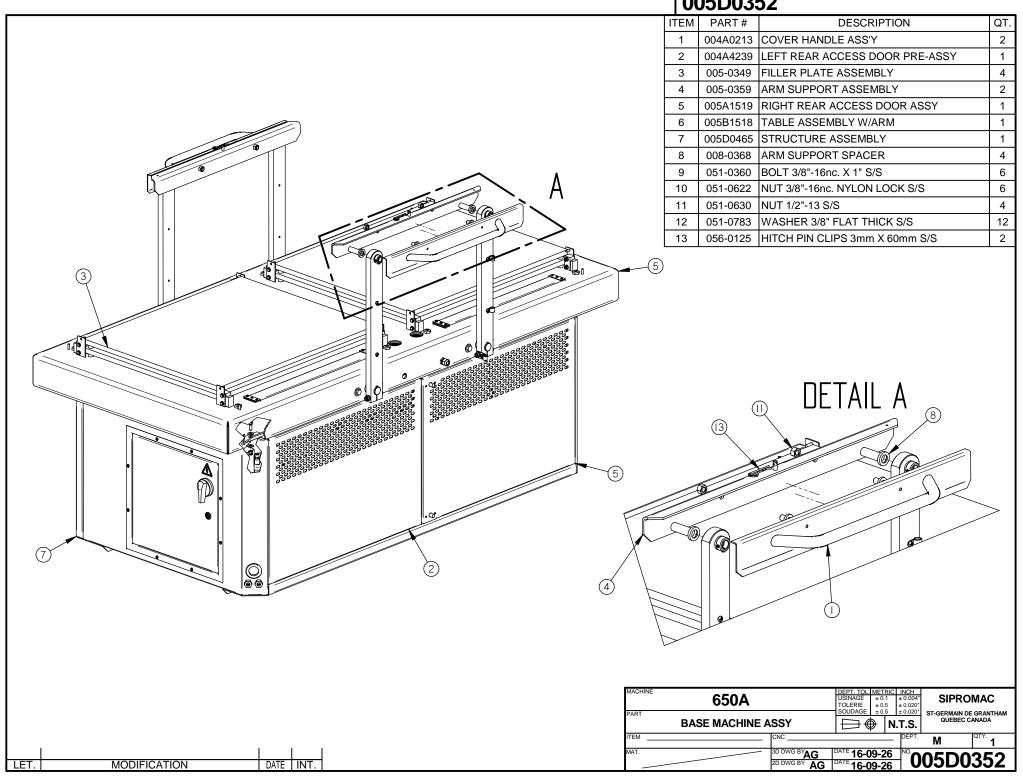
- 1. Floor should be flat (within 1/8" approx.).
  - 2.1 Mark position of original adjustment of guide arm length and its lower shaft position (See drawing # 005-0416; items: #39 & #16).
  - 2.2 Loosen the two bolts on the guide arm (See drawing # 005-0325; items #39).
  - 2.3 Now move the cover each side and check how cover sits on the table. Distance between table and lid gasket should be under 1/16" approx. If so, go to step 3.0 for guide arm adjustment. Otherwise go to step 2.4 for central arm adjustment.
  - 2.4 Put chamber in upright position and check with a square angle to see if arms are parallel. If not, loosen bolt at the end of one arm and adjust until square (See drawing # 005-0416; items #33, #14 & #44).
  - 2.5 When closing cover (guide arm still loose), if cover is not sitting properly on either the front or rear of the table, you have to change the height of a central pillow block (See drawing # 004-0122; item #3) until cover is sealing properly each side (less than 1/16").
- 3. Adjustment of guide arm: two things have to be adjusted, the length and the lower axis position. Each of these should be adjusted separately. Fix the lower axis in a central position, then adjust guide arm length by marking its position. When chamber is at the left and at the right, tighten at the center of your marks. Adjustment can be done a couple of times until everything is ok.



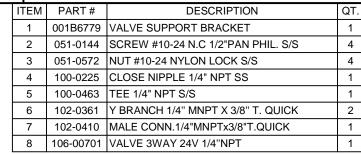
# **MECHANICAL DRAWING**

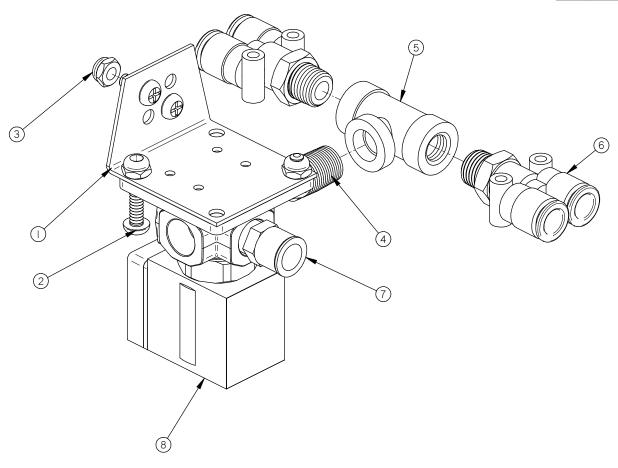


005D0352



| 005A1524



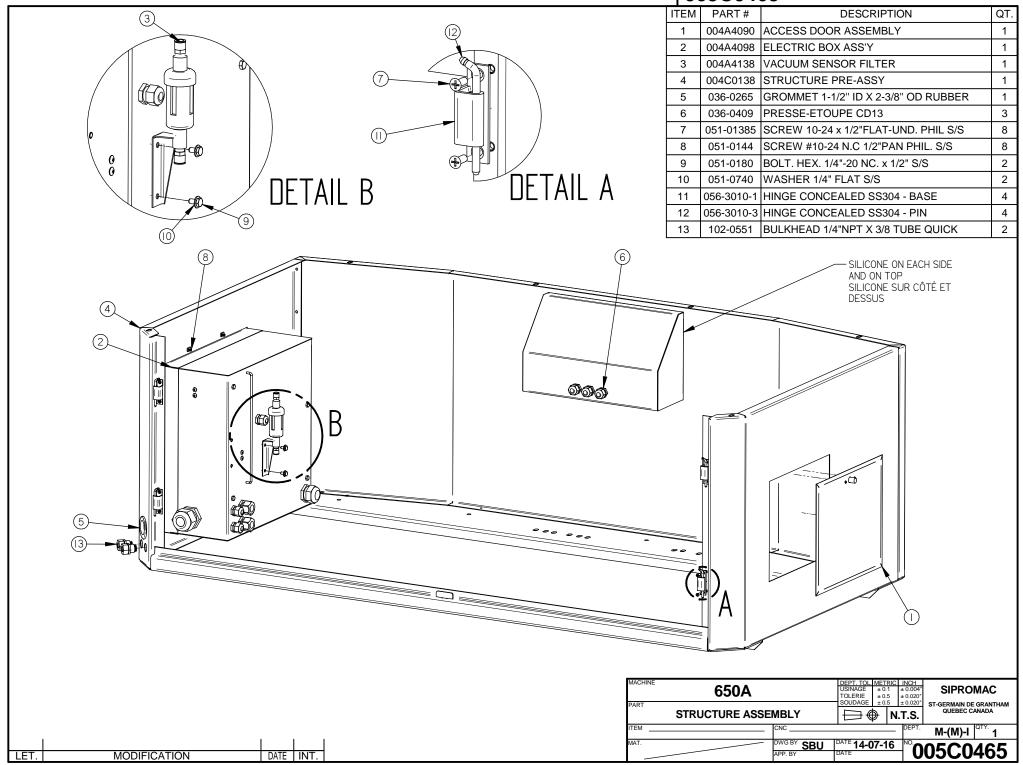


MACHINE	650A	USINAGE TOLERIE	± 0.5	± 0.004" ± 0.020"	SIPRO	OMAC
BELLO <sup>®</sup>	WS VALVE ASSY	SOUDAGE		± 0.020*	ST-GERMAIN D QUEBEC	CANADA
ITEM	CNC			DEPT.	M	QTY. <b>1</b>
MAT.	3D DWG B <b>ŠBU</b> 2D DWG BY XX	DATE 14-07	7-17 /IM-D	0 0	05A1	524

LET. MODIFICATION DATE INT.

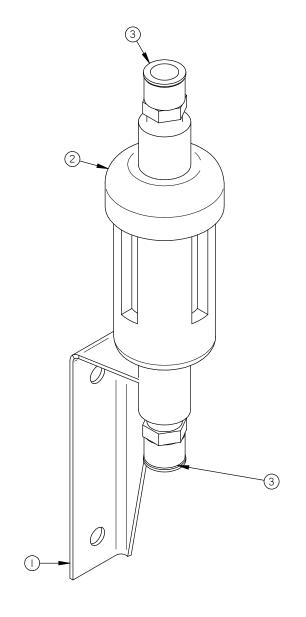
005A1519 ITEM PART# DESCRIPTION QT. 004A4238 RIGHT REAR ACCESS DOOR PRE-ASSY 2 056-2600 SPRING PAWL LATCHE SS KNOB 4 3 051-0071 SCREW 4-40 x 1/4" RND SLOT S/S 051-0541 NUT # 4-40 NYLON LOCK SS 4 DETAIL A DEPT. TOL METRIC INCH USINAGE ±0.1 ±0.004' TOLERIE ±0.5 ±0.020' SOUDAGE ±0.5 ±0.020' 650A **SIPROMAC** ST-GERMAIN DE GRANTHAM QUEBEC CANADA **RIGHT REAR ACCESS DOOR ASSY** DWG BY SBU DATE 13-09-16 005A1519 LET. MODIFICATION

005C0465 PART# 004A4090



# | **004A4138**

ITEM	PART#	DESCRIPTION	QΤ
1	004A4139	VACUUM SENSOR FILTER SUPPORT	1
2	114-2020	FILTER / DRYER 1/4"mnpt. X 1/4"t.p. COMP.	1
3	102-0410	MALE CONN.1/4"MNPTx3/8"T.QUICK	2

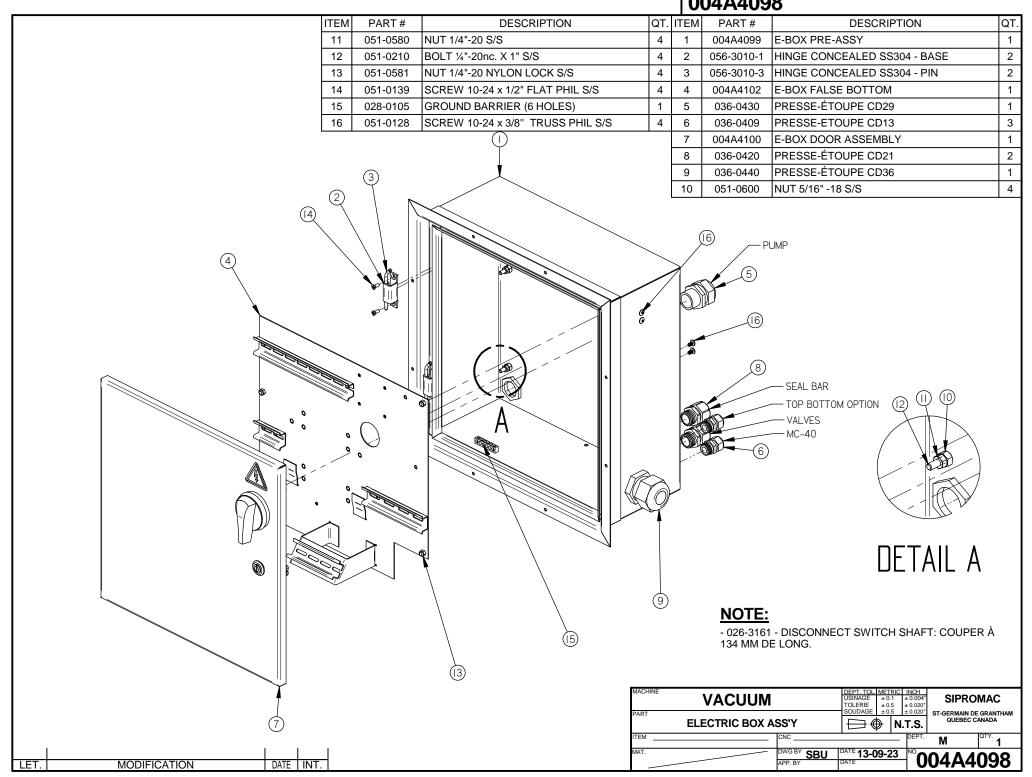


LET.

MODIFICATION

MACHINE	VACUUM			± 0.1 ± 0.5	± 0.004" ± 0.020"	SIPRO	MAC
PART	VACUUM SENSOR FILTER		SOUDAGE	± 0.5	1.T.S.	ST-GERMAIN D QUEBEC (	
ITEM		CNC			DEPT.	М	QTY. <b>1</b>
MAT.			DATE 13-1	1-19	-No.	04A4	138

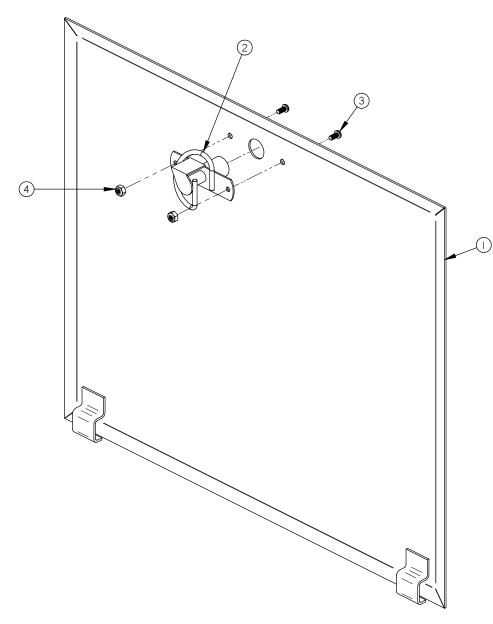
004A4098



004A4100 ITEM PART# DESCRIPTION 004A4101 E-BOX DOOR PRE-ASSY 056-2612 CAM LOCK QUARTER TURN SS304 3 179-0026 D-SHAPED RUBBER SEAL 1683mm LONG 026-3160 HANDLE RED/YELLOW NEMA 4X, COMPACT, PADLOCKABLE 127-0100 STICKER ELEC.HAZARD ISO 2-1/2" TRIANGLE (5) CENTER WITH HANDLE I6.4 **─**► 434 DEPT. TOL METRIC INCH USINAGE ±0.1 ±0.004' TOLERIE ±0.5 ±0.020' SOUDAGE ±0.5 ±0.020' **VACUUM SIPROMAC** ST-GERMAIN DE GRANTHAM QUEBEC CANADA **E-BOX DOOR ASSEMBLY** DATE 13-09-17 MODIFICATION LET.

# | 004A4090

ITEM	PART#	DESCRIPTION	QT.
1	004A4089	ACCESS PANEL PRE-ASSY	1
2	056-2600	SPRING PAWL LATCHE SS KNOB	1
3	051-0071	SCREW 4-40 x 1/4" RND SLOT S/S	2
4	051-0541	NUT # 4-40 NYLON LOCK SS	2

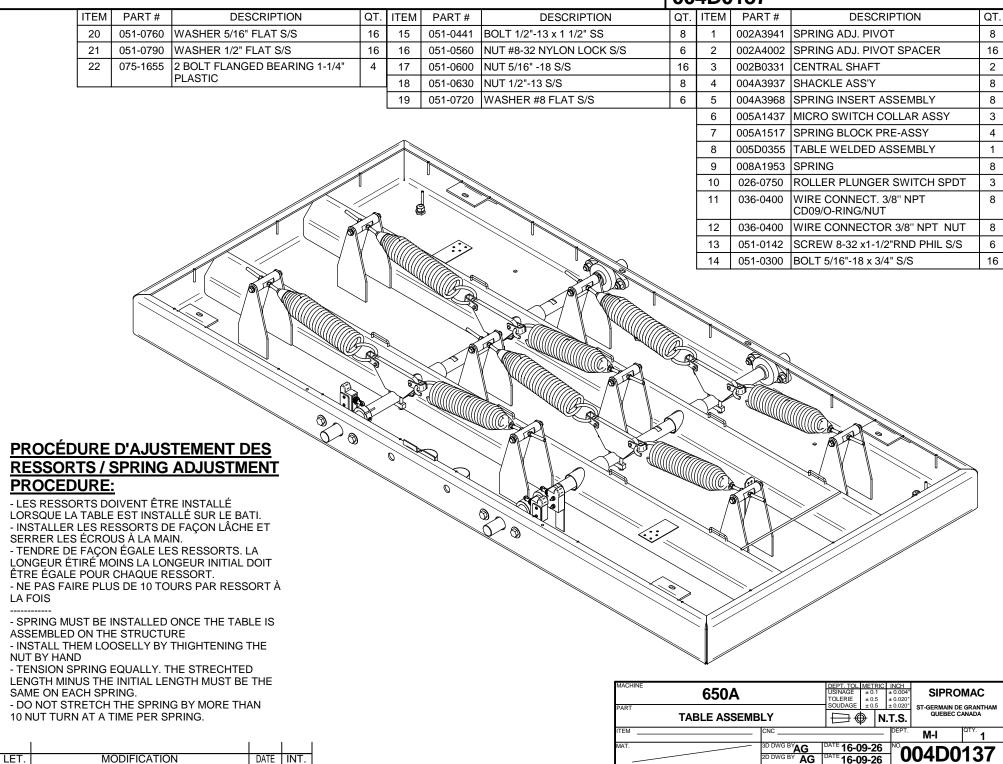


VACUUM		USINAGE : TOLERIE :	± 0.5	± 0.004" ± 0.020"	SIPF	ROMAC
ACCESS DOOR ASS	EMBLY	SOUDAGE		± 0.020*		N DE GRANTHAM EC CANADA
ITEM	CNC			DEPT.	М	QTY. <b>1</b>
MAT.		DATE 13-09	)-11	NO. <b>0</b>	04A	4090

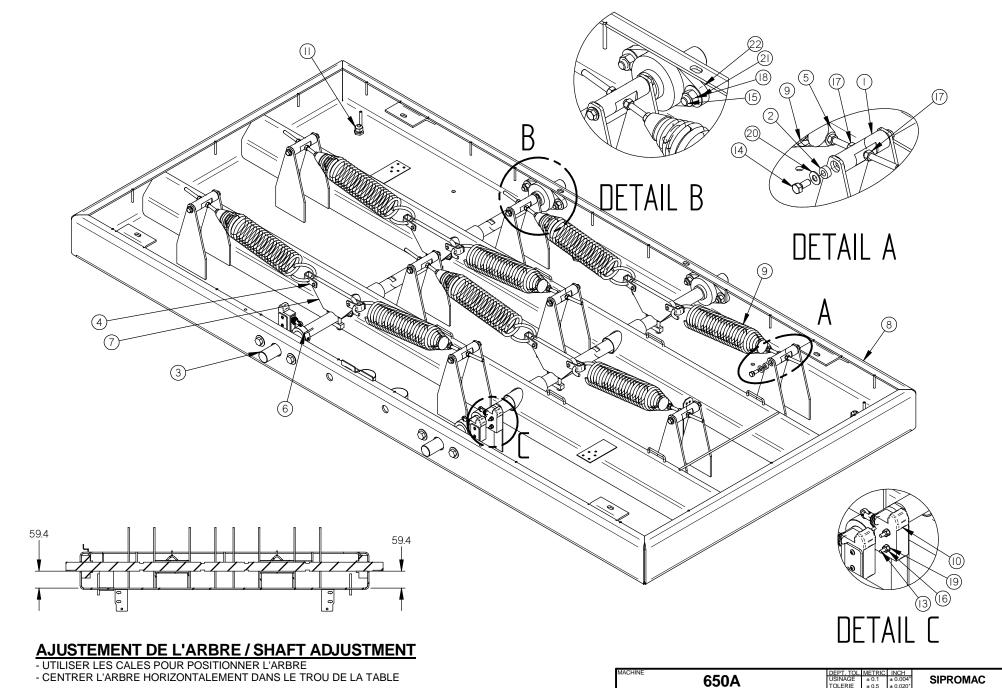
LET. MODIFICATION DATE INT.

005B1518 PART# **DESCRIPTION** QT. 1 001-1876 LOWER WIRE SUPPORT 2 LEFT SEAL BAR GUIDE BLOCK 002-0326 4 3 002-0327 RIGHT SEAL BAR GUIDE BLOCK 4 COVER ARM COLLAR 4 002-0390 4 5 004B0383 COVER ARM ASSY 6 004D0137 TABLE ASSEMBLY 1 7 005A0651 BELLOWS ASSEMBLY 4 8 PRESSE-ETOUPE CD13 1 036-0409 DETAIL A SCREW 1/4"-20 x 5/16" SKT SET S/S 8 051-0178 10 051-0185 SCREW 1/4-20x 1/2"PAN PHIL S/S 11 SCREW 1/4"-20 x 1" PAN PHILL S/S 8 051-0212 12 BOLT 1/4"-20nc. X 11/2" S/S 16 051-0250 13 051-0422 BOLT 3/8"-16nc, X 31/4" S/S 17 NUT 1/4"-20 NYLON LOCK S/S 14 051-0581 15 NUT 3/8"-16nc, NYLON LOCK S/S 4 051-0622 16 051-0740 WASHER 1/4" FLAT S/S 32 17 051-0783 WASHER 3/8" FLAT THICK S/S 8 KEY 1/4" SQ. x 1 1/4" ROUNDED END S/S 4 18 056-01675 METAL CABLE CLAMPS #6 SS 3 105-0450 0000 DETAIL B DETAIL C METRIC INCH ± 0.1 ± 0.004' ± 0.5 ± 0.020' ± 0.5 ± 0.020' DEPT. TOL. USINAGE TOLERIE SOUDAGE 650A **SIPROMAC** ST-GERMAIN DE GRANTHAM QUEBEC CANADA TABLE ASSEMBLY W/ARM DETAIL D DATE 16-09-26 005B1518 MODIFICATION

| 004D0137



## | 004D0137

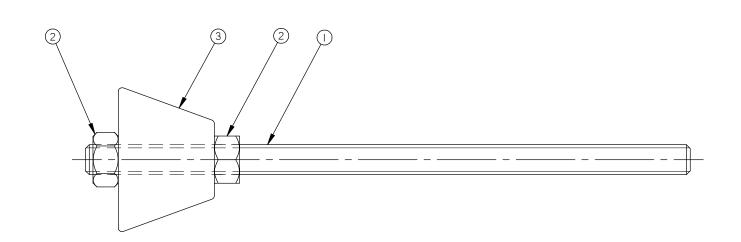


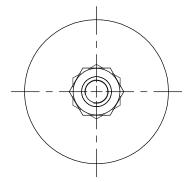
- USE BLOC TO SPACE THE SHAFT ACCORDINGLY
- CENTER SHAFT HORIZONTALLY IN THE TABLE HOLE

MACHINE	650A		USINAGE TOLERIE	± 0.1 ± 0.5	± 0.004" ± 0.020"	SIPRO	_
TABLE ASSEMB		BLY	SOUDAGE ± 0.5		1± 0.020* N.T.S.	ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
ITEM		CNC	•		DEPT.	M-I	QTY. <b>1</b>
MAT.		3D DWG BY 2D DWG BY	DATE 16-0	9-26	O	04D0	137

004A3968

ITEM	PART#	DESCRIPTION	QT.
1	002A3989	SPRING ADJUSTMENT ROD	1
2	051-0600	NUT 5/16" -18 S/S	2
3	002B3940	SPRING INSERT	1





650A	8					
620A	4					
600A	4					
420A	2					
MACHINE	QTY					
SIPROMAC						
O.1. 1 (O.11) (O						

					M.
MACHINE		DEPT. TOL.			
	VACUUM	USINAGE TOLERIE	± 0.1 ± 0.5	± 0.004" ± 0.020"	١ ١
PART		SOUDAGE	± 0.5	± 0.020"	ST-GE
PARI	SPRING INSERT ASSEMBLY	$\rightarrow$	<b>∌</b> I	N.T.S.	31-01
ITEM	CNC			DEPT.	М

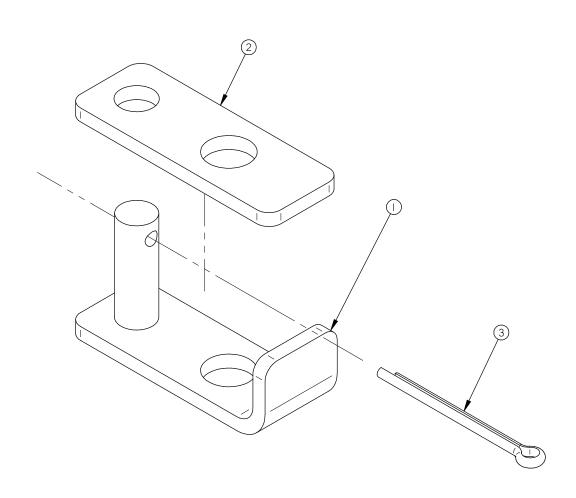
	IN DE C	GRANTHAM NADA
M-(M	<b>)</b>	TYICTE

В	AJOUT 420A ET 650A	14-08-04	SBU
Α	AJOUTER 620A	13-01-23	J.G.
LET.	MODIFICATION	DATE	INT.

OF KING INCLINE ACCE		14.1.5.			i	
M	CNC		DEPT.	M-(M)	LISTE	
f	DWG BY J.G.	DATE 13-01-1	5 NO.	0442	060	İ
	APP. BY	DATE	U	<b>U4A3</b>	900	

| 004A3937

ITEM	PART#	DESCRIPTION		
1	004A3935	SHACKLE PRE-ASS'Y	1	
2	001A6269	SHACKLE PLATE	1	
3	056-0118	COTTER PIN 3/32" x 1" S/S	1	



650A	8
620A	4
600A	4
420A	2
MACHINE	OTY

						MACHI	<u>NE</u>	QIY
MACHINE	VACUUMS	Ī	USINAGE TOLERIE	# 0.1 ± 0.5 ± 0.5	± 0.004" ± 0.020"	SIPRO	OMA	С
PART	SHACKLE ASS'Y		SOUDAGE		± 0.020*	OUEDEC CANADA		
ITEM	CNC				DEPT.	M-(M)	QTY LIS	STE

 B
 AJOUT 420A ET 650A
 14-08-04
 SBU

 A
 AJOUTER 620A
 13-01-23
 J.G.

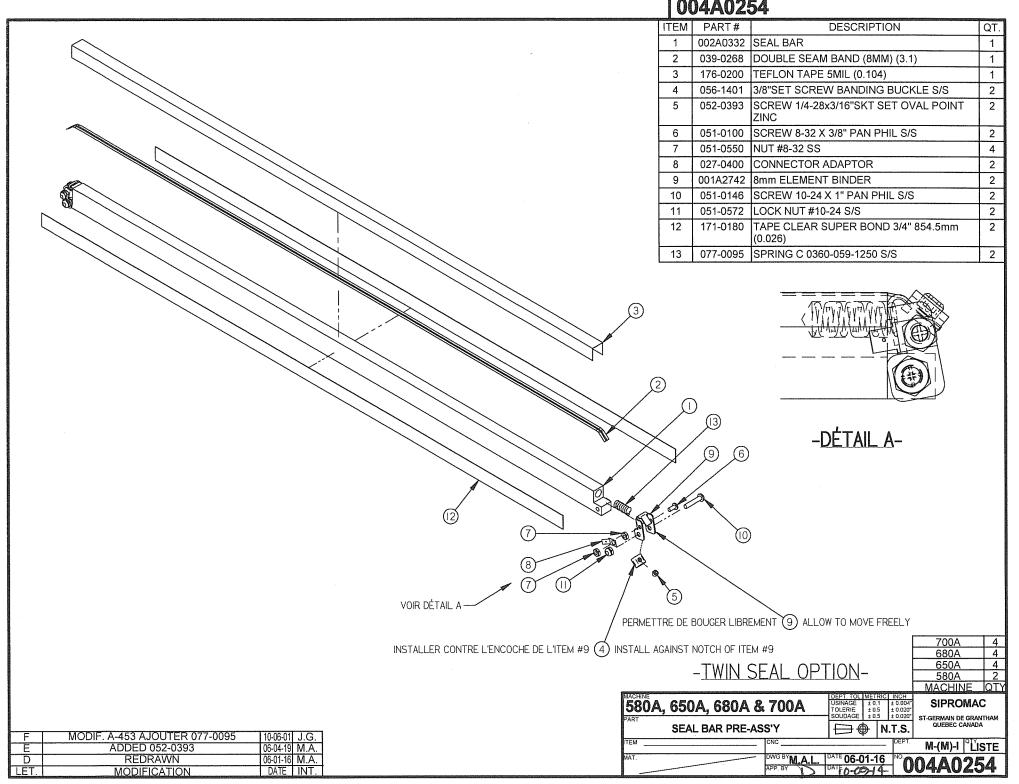
 LET.
 MODIFICATION
 DATE
 INT.

DEPT. M-(M) OLISTE

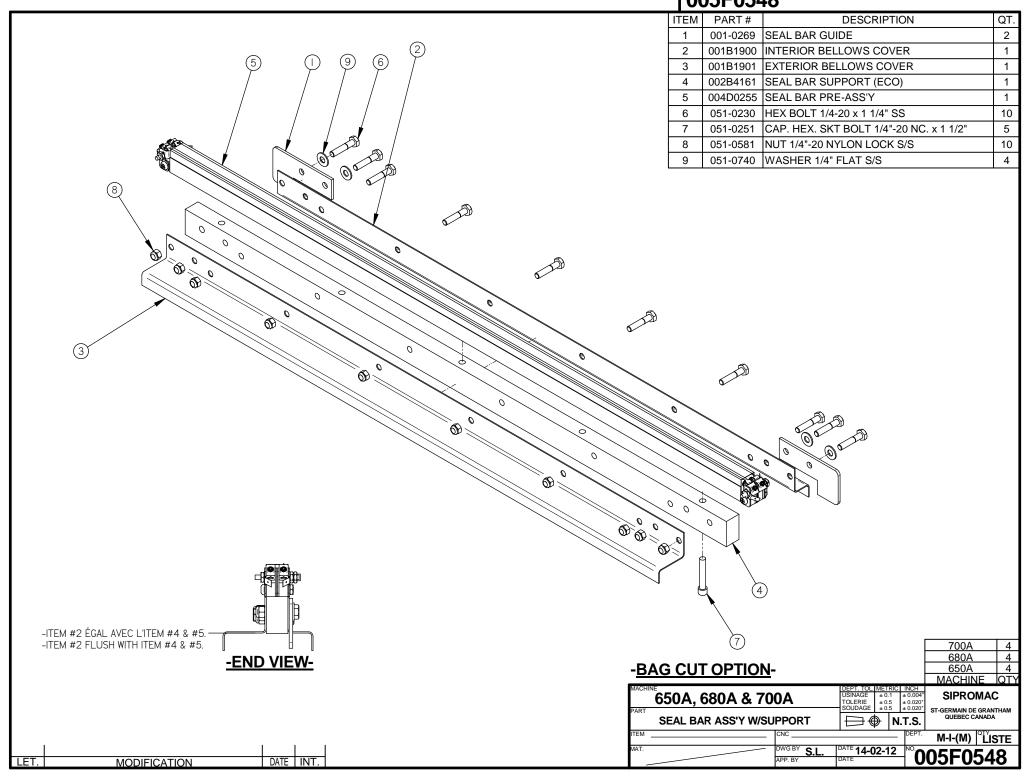
DWG BY J.G. DATE 12-11-06 NO 004A3937

005C0547 ITEM PART# DESCRIPTION QT. 1 004A0254 SEAL BAR PRE-ASS'Y 1 2 002A0357 | SEAL BAR SUPPORT 1 3 051-0251 CAP. HEX. SKT BOLT 1/4"-20 NC. x 1 1/2" 5 4 001A1900 INTERIOR BELLOWS COVER 1 5 001A1901 EXTERIOR BELLOWS COVER 001-0269 SEAL BAR GUIDE 2 051-0230 HEX BOLT 1/4-20 x 1 1/4" SS 10 8 051-0740 WASHER 1/4" FLAT S/S 051-0581 NUT 1/4"-20 NYLON LOCK S/S 10 (5) 00 **®** 0 **D** 0 0 0 0 @ @ @ (2)-ITEM #2 ÉGAL AVEC L'ITEM #4 & #5. -ITEM #2 FLUSH WITH ITEM #4 & #5. 700A -END VIEW-680A -TWIN SEAL OPTION-650A MACHINE OTY ± 0.004" ± 0.020" ± 0.020" 650A, 680A & 700A ± 0.1 ± 0.5 ± 0.5 SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA SEAL BAR ASS'Y W/SUPPORT → ● N.T.S. M-I-(M) LIST G REDRAWN / REMOVED WIRE DUCT 12-04-12 CF ATE 12-04-12 °005C0547 LET. MODIFICATION

004A0254

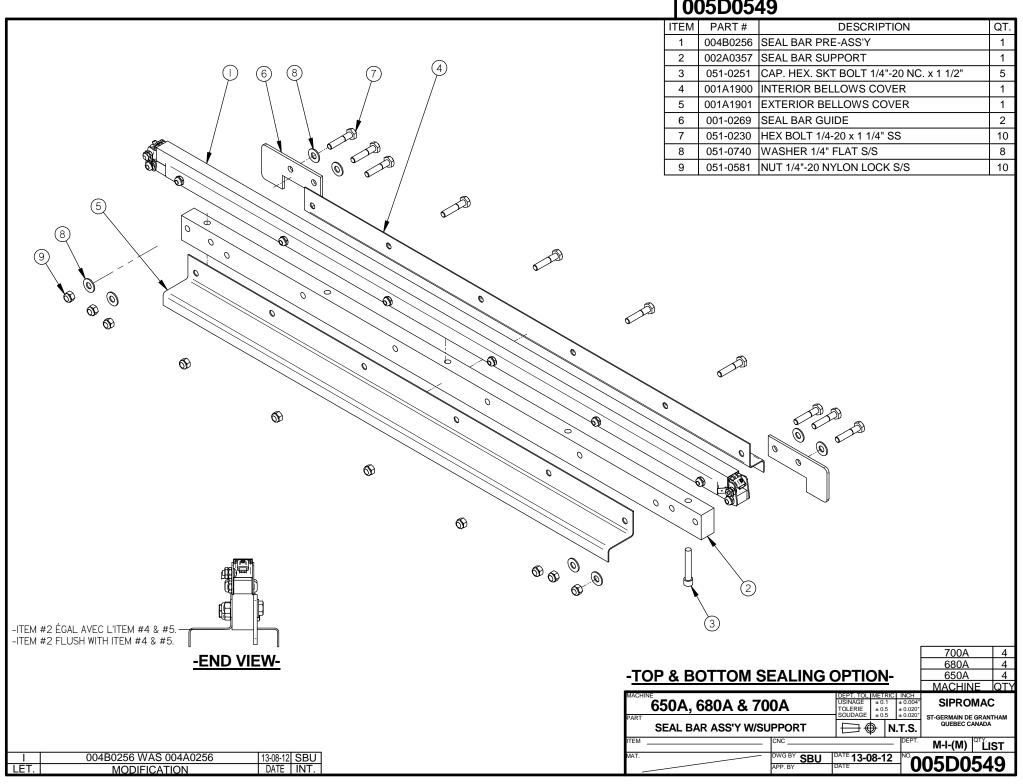


1005F0548

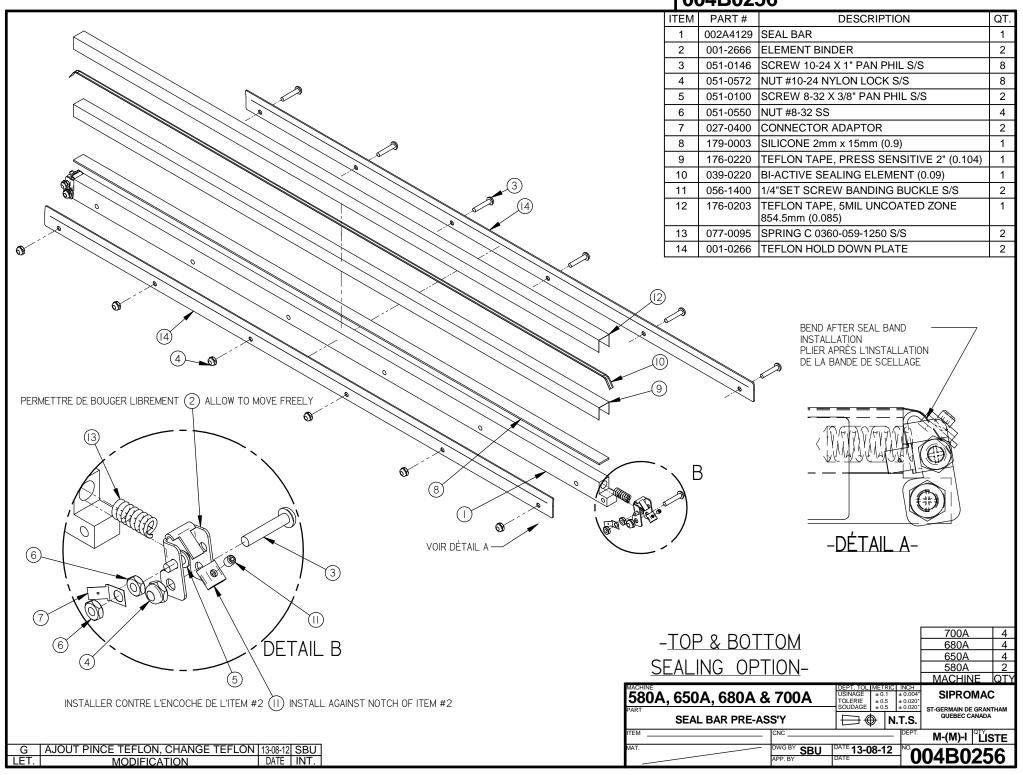


004D0255 QT. ITEM PART# DESCRIPTION 001A6660 ECO ELEMENT BINDER 2 002A4171 SEAL BAR 1 002A4172 BANDING BUCKLE 005A1443 ELEMENT BINDER RIGHT ECO 1 005A1444 ELEMENT BINDER LEFT ECO 1 CONNECTOR ADAPTOR 2 6 027-0400 039-0213 ROUND CUT-OFF ELEMENT 1.2MM (5) 039-0224 TAPERED BAND 3MM X 0.4MM 051-0146 SCREW 10-24 X 1" PAN PHIL S/S 1 10 051-0146 SCREW 10-24 X 1" PAN PHIL S/S 051-01752 SET SCREW 10-32 SS 3/16" 2 051-01752 SET SCREW 10-32 SS 3/16" 2 NUT #8-32 SS 4 13 051-0550 077-0014 SPRING C0240-040-1250 SS COMP. 4 14 2 TAPE CLEAR SUPER BOND 3/4" 854.5mm (0.026) 171-0180 176-0200 TEFLON TAPE, 5MIL 1 16 176-0203 TEFLON TAPE UNCOATED 5MIL (0.78) OVER THE ELEMENT (17) INSTALLÉ SUR L'ÉLÉMENT UNDER THE ELEMENT (16) INSTALLÉ SOUS L'ÉLÉMENT PERMETTRE DE BOUGER LIBREMENT (3) ALLOW TO MOVE FREELY DETAIL A (14)700A 680A -BAG CUT (ECO) -650A MACHINE USINAGE TOLERIE SOUDAGE **SIPROMAC** 650A, 680A & 700A ± 0.1 ± 0.5 ± 0.5 ST-GERMAIN DE GRANTHAM QUEBEC CANADA **SEAL BAR PRE-ASS'Y** ELEMENT WAS 039-02115 & 039-0222 M-(M)-I LISTE В 17-01-06 AG CHANGED IN THE ELEMENT BINDER DATE 14-02-12 Α MODIFICATION

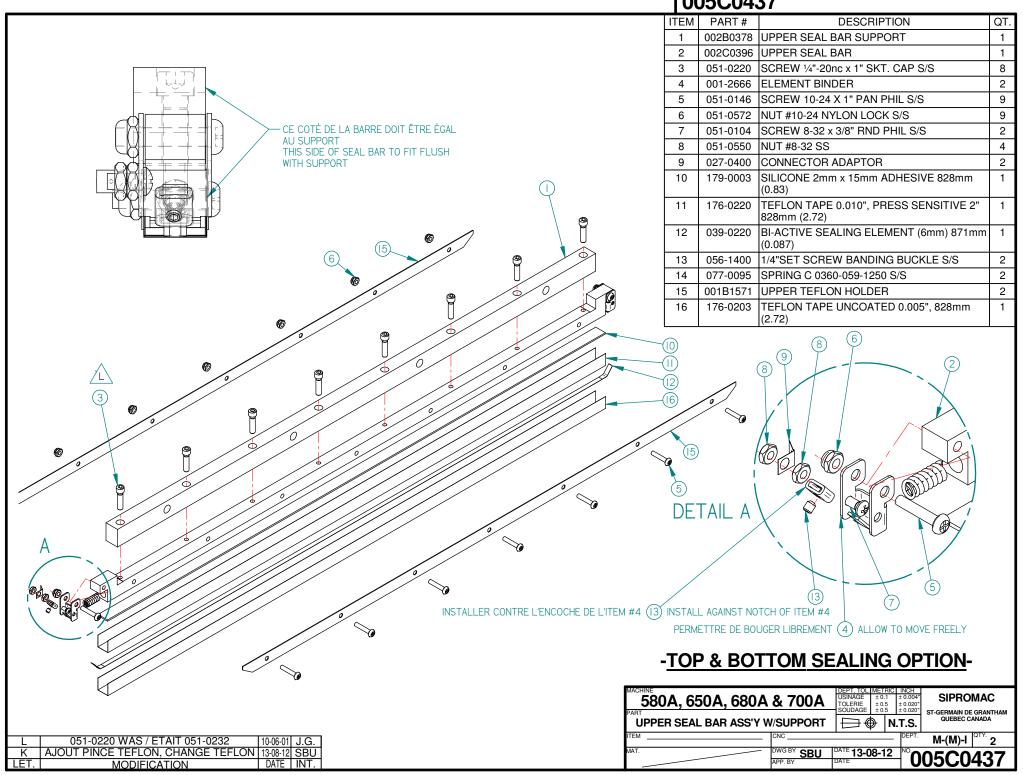
005D0549



|004B0256

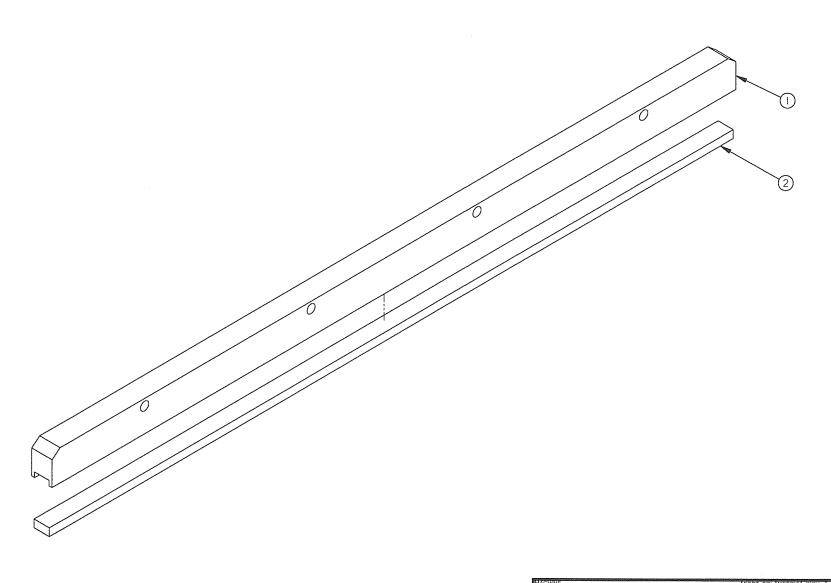


005C0437



| 004B0207

ITEM	PART#	DESCRIPTION	QT.
1	002B0364	UPPER SEAL BAR SUPPORT	1
2	008-0374	UPPER SEAL BAR RUBBER	1

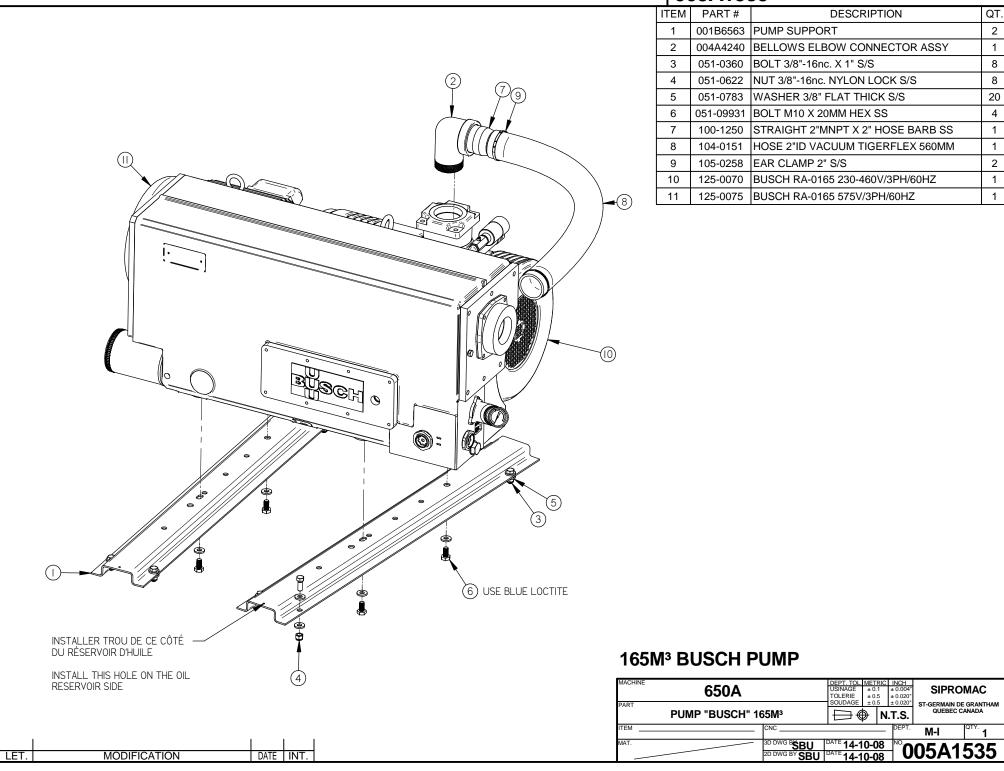


 K
 REDESSINE VOIR AUSSI 004A2555, 004A2556 & 004A2561 | 08-04-30 | J.G.

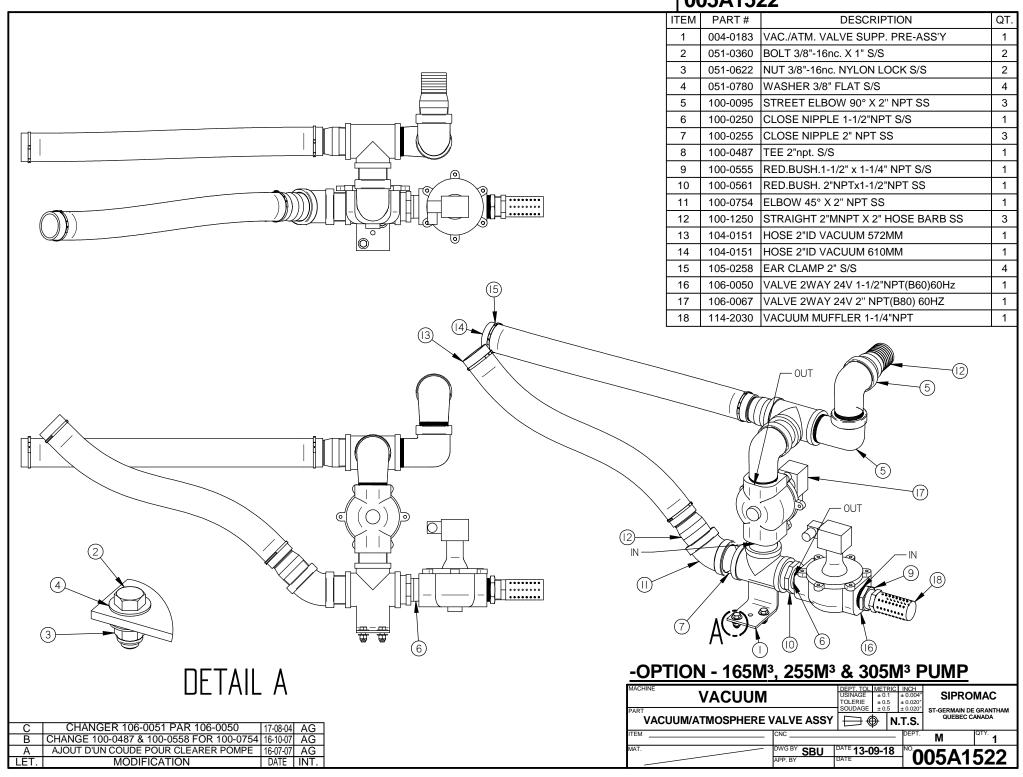
 LET.
 MODIFICATION
 DATE | INT.

| DEPT. TOLL METRIC | INCH USINAGE | ± 0.1 | ± 0.004 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.5 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 | ± 0.020 |

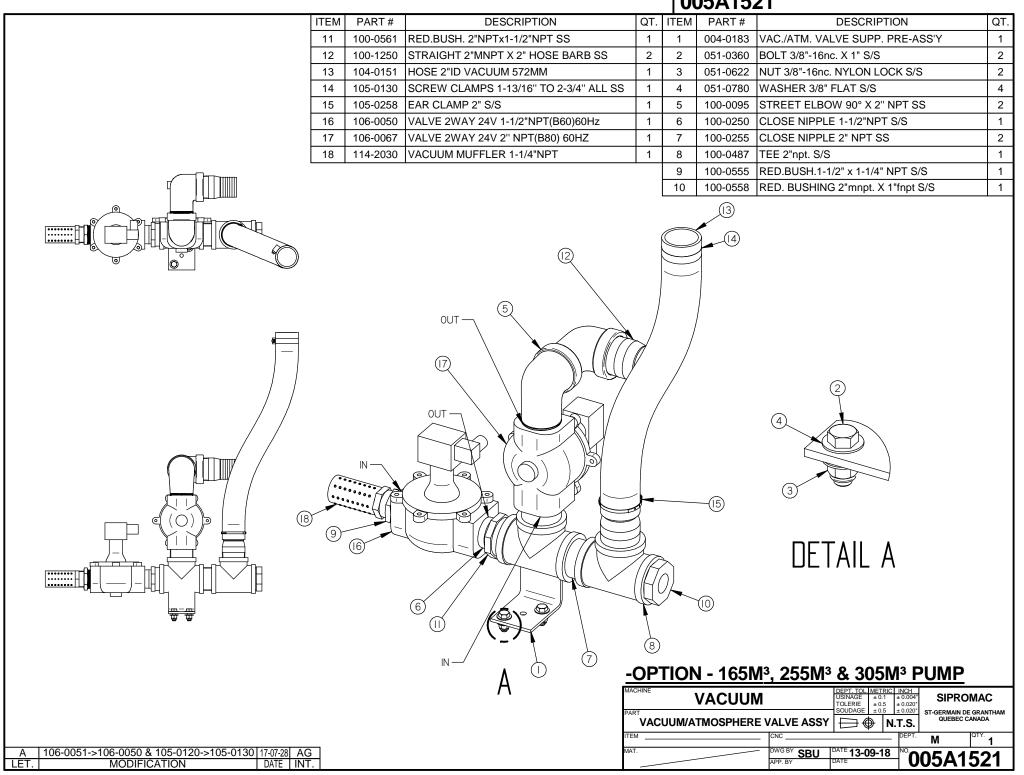
005A1535



| 005A1522

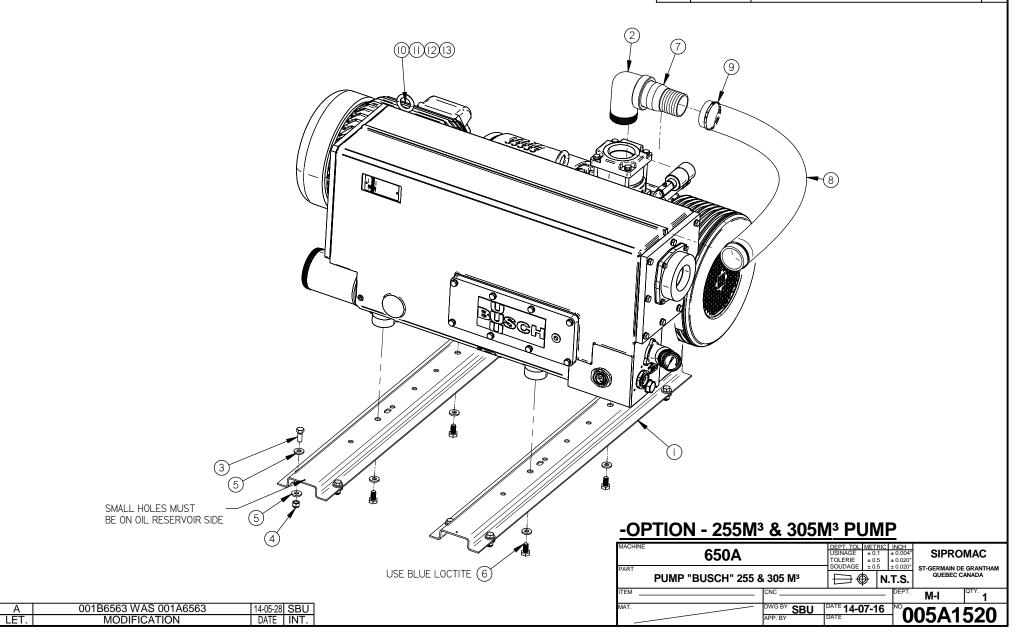


005A1521



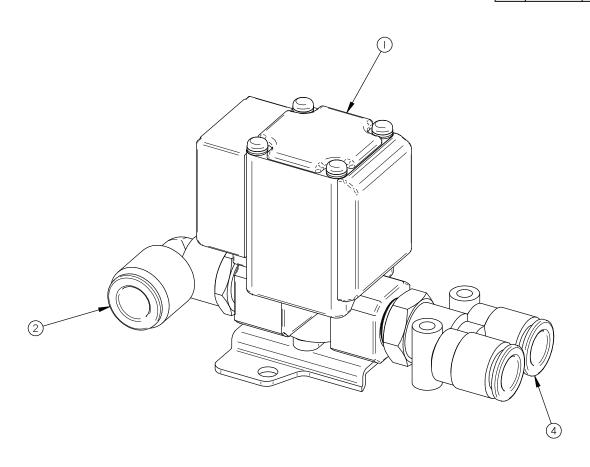
| 005A1520

ITEM	PART#	DESCRIPTION	QT.	ITEM	PART#	DESCRIPTION	QT.
8	104-0151	HOSE 2"ID VACUUM TIGERFLEX 560MM	1	1	001B6563	PUMP SUPPORT	2
9	105-0258	EAR CLAMP 2" S/S	2	2	004A4240	BELLOWS ELBOW CONNECTOR ASSY	1
10	125-0080	BUSCH RA-0255 230-460V/3PH/60HZ	1	3	051-0360	BOLT 3/8"-16nc. X 1" S/S	8
11	125-0085	BUSCH RA-0255 575V/3PH/60HZ	1	4	051-0622	NUT 3/8"-16nc. NYLON LOCK S/S	8
12	125-0087	BUSCH RA-0305 230-460V/3PH/60HZ	1	5	051-0783	WASHER 3/8" FLAT THICK S/S	20
13	125-0088	BUSCH RA-0305 575V/3PH/60HZ	1	6	051-09931	BOLT M10 X 20MM HEX SS	4
				7	100-1250	STRAIGHT 2"MNPT X 2" HOSE BARB SS	1



## | 004B4113

ITEM	PART#	DESCRIPTION	QT.
1	106-0010	VALVE 2WAY N.C. 24VAC 1/4" NPT(SMC)	1
2	102-0330	ELBOW 1/4" NPT X 3/8" HOSE QUICK	1
4	102-0361	Y BRANCH 1/4" MNPT X 3/8" T. QUICK	1

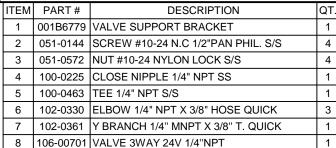


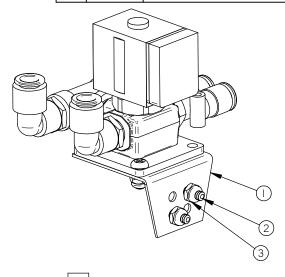
PTION - GAS				DOUBLE CHAMBER SINGLE CHAMBER MACHINE	2 1
				MACHINE	Q I I
VACUUM	DEPT. TOL. USINAGE TOLERIE	<u>METRIC</u> ± 0.1 ± 0.5	INCH ± 0.004" ± 0.020"	SIPROMAC	;
r	SOUDAGE	± 0.5	± 0.020"	ST-GERMAIN DE GRANT	THAM

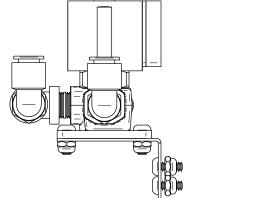
В	ENLEVER 100-0065	17-02-20	AG
Α	VALVE UPDATE	14-05-27	SBU
LET.	MODIFICATION	DATE	INT.

ΚI	GAS VALVE ASSEMBLY	(OPTION)	$\Rightarrow$	N.T.S.		EC CANADA	ı
М		CNC	Ψ	DEPT.	М	LISTE	
T.		280	DATE <b>14-05-2</b> DATE	27 NO. 0	04B	4113	

#### | 004B4105





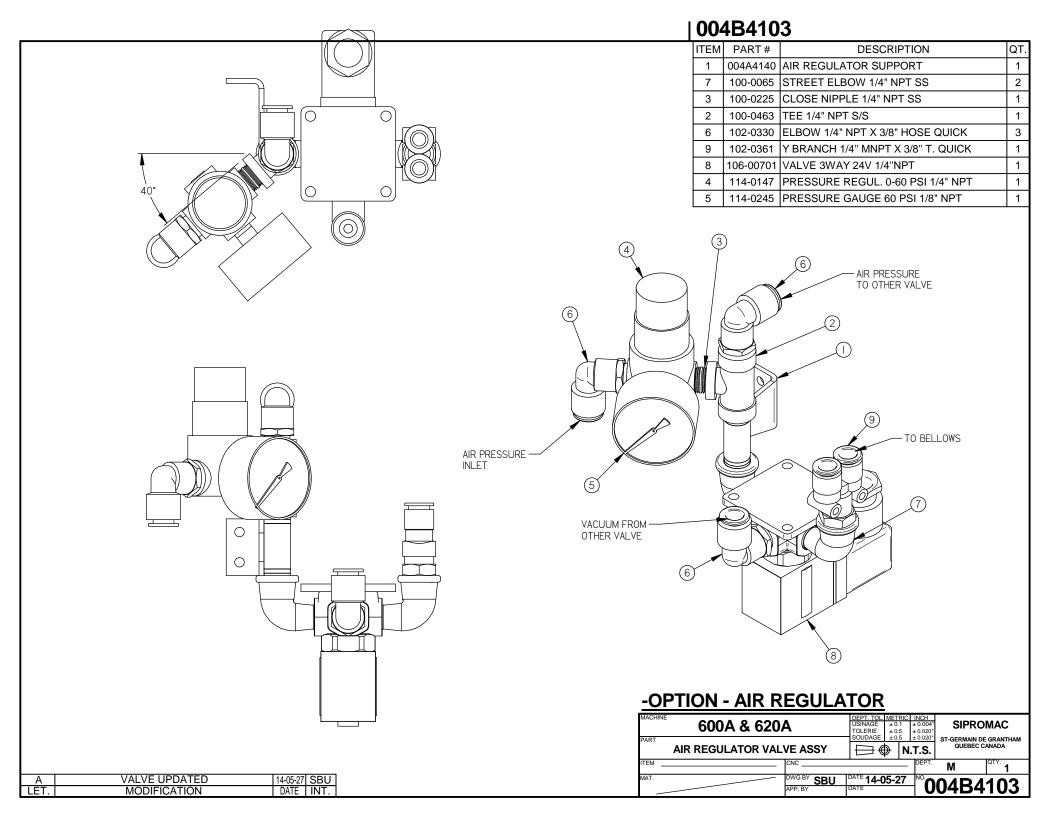


#### -OPTION - AIR REGULATOR

MACHINE <b>VA</b>	CUUM	USINAGE TOLERIE	# 0.1 ± 0.5	± 0.004" ± 0.020"		ROMAC
BELLOWS VAL	/E ASSY (OPT AIR REC	SOUDAGE	± 0.5	± 0.020*		N DE GRANTHAM EC CANADA
ITEM	CNC			DEPT.	М	QTY. <b>1</b>
MAT.	DWG BY SBU APP. BY	DATE 14-0	)5-27	-NO.	04B	4105

TO OTHER VALVE  TO OTHER VALVE  TO OTHER PRESSURE  FROM PUMP	AIR PRESSURE

B CHANGER LA POSITION DES FITTINGS 17-06-01 AG
A UPDATE VALVE 14-05-27 SBU
LET. MODIFICATION DATE INT.



005A0868 PART# ITEM DESCRIPTION 001A5413 SLANTED FILLER PLATE 2 001A4581 ADJUSTABLE STOPPER 2 3 005-0187 ASS. BARRURE 4 051-01845 BOLT 1/4"-20 x 1/2"CAP HEX SKT.S/S 057-0004 THMB SCREW KNOB 1/4" 179-0014 RUBBER 1/4"x3/8"x1/16"U SHAPED 860mm (2.8215') -SLANTED FILLER PLATE OPTION-650A **SIPROMAC** ST-GERMAIN DE GRANTHAM QUEBEC CANADA **SLANTED FILLER PLATE ASS'Y**  ⊕ N.T.S. LET. MODIFICATION

005-0469 ITEM PART# DESCRIPTION QT. 004-0243 8" COVER PRE-ASS'Y 1 NEOPRENE SPONGE 1/2" x 14,5 ' 179-0020 1 004B0207 UPPER SEAL BAR ASSEMBLY 2 BOLT 1/4-20 x 1-3/4" HEX SS 8 4 051-0255 16 WASHER 1/4" FLAT S/S 051-0740 051-0581 NUT 1/4"-20 NYLON LOCK S/S 8 USE PERMATEX RUBBER ADHESIVE 169-0013 TO GLUE (2) UTILISER PERMATEX RUBBER ADHESIVE 169-0013 POUR COLLER 87.5 TENIR SECTION A-A 650A & 680A **SIPROMAC** ± 0.1 ± 0.5 ± 0.5 ST-GERMAIN DE GRANTHAM QUEBEC CANADA

**8" COVER ASSEMBLY** 

DATE **02-08-08** 

005-0469

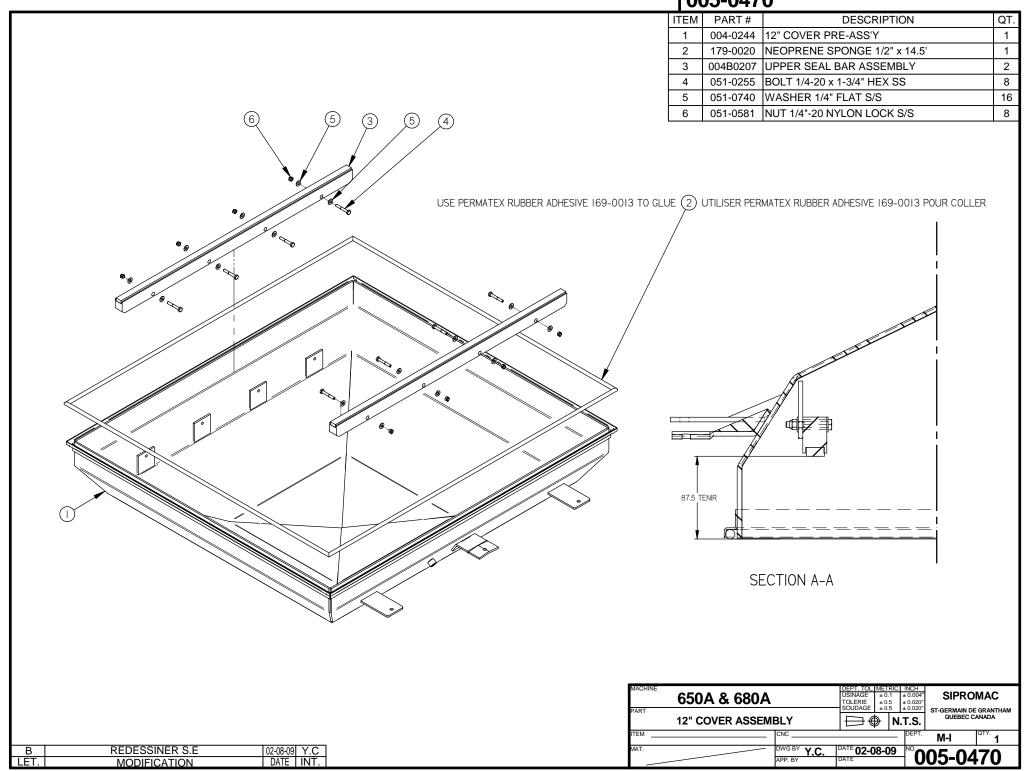
REDESSINER S.E

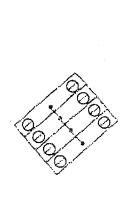
MODIFICATION

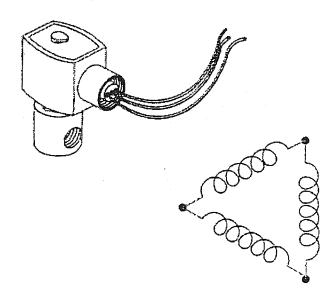
LET.

02-08-08 Y.C

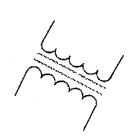
1005-0470

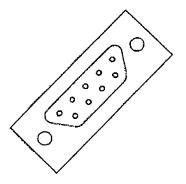


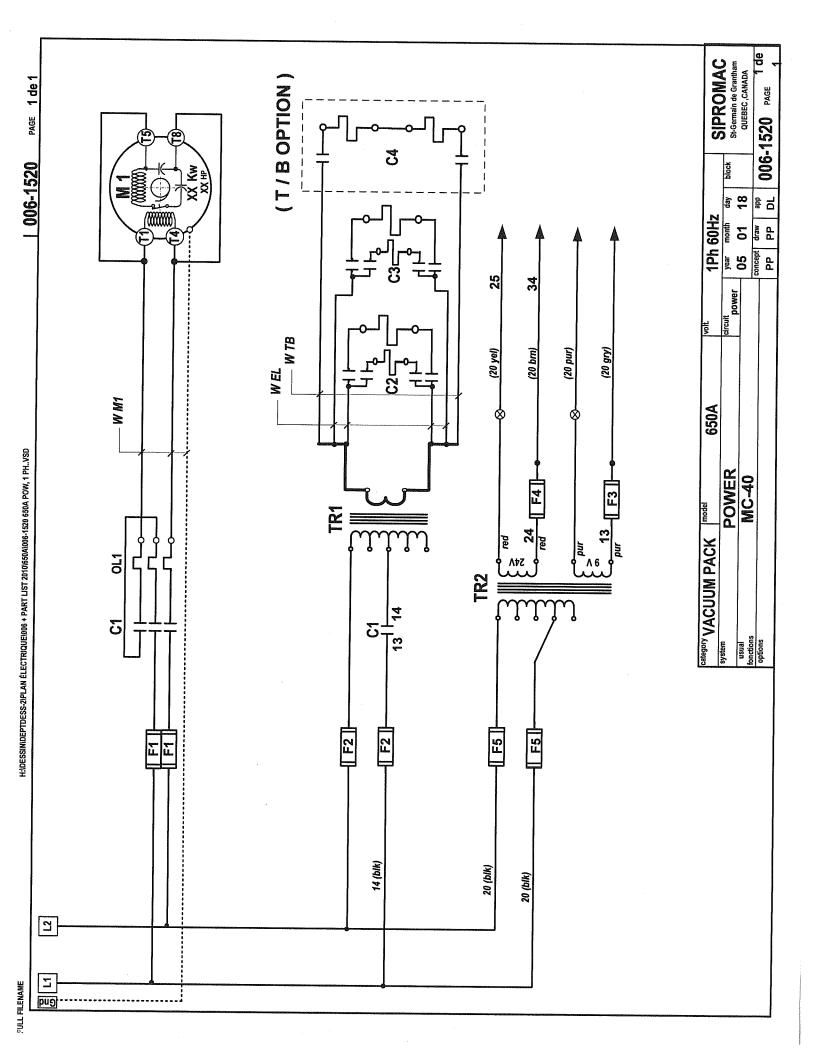


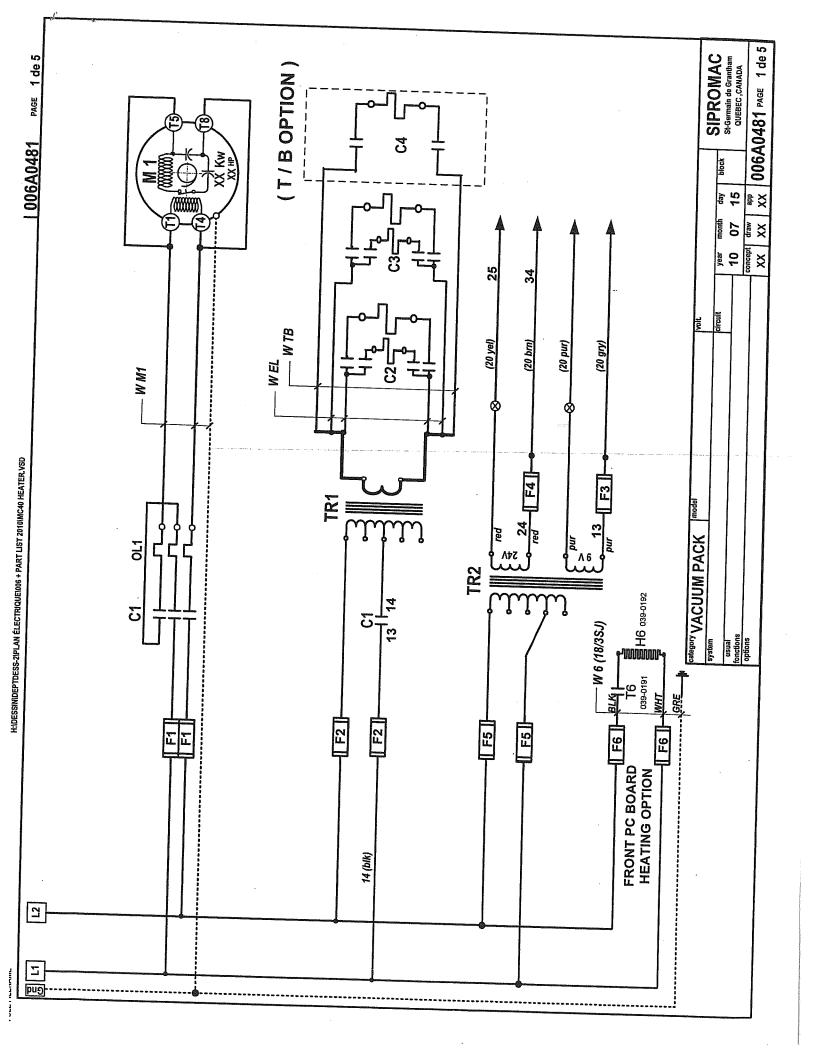


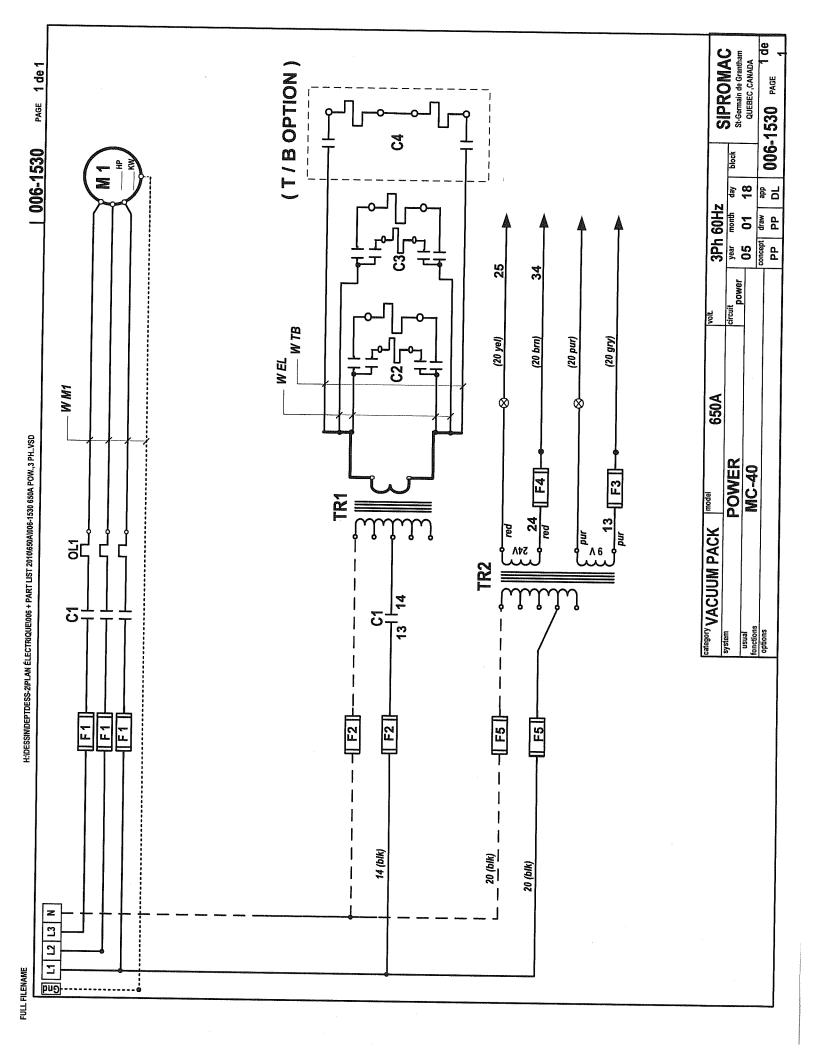
# **ELECTRICAL DRAWING**

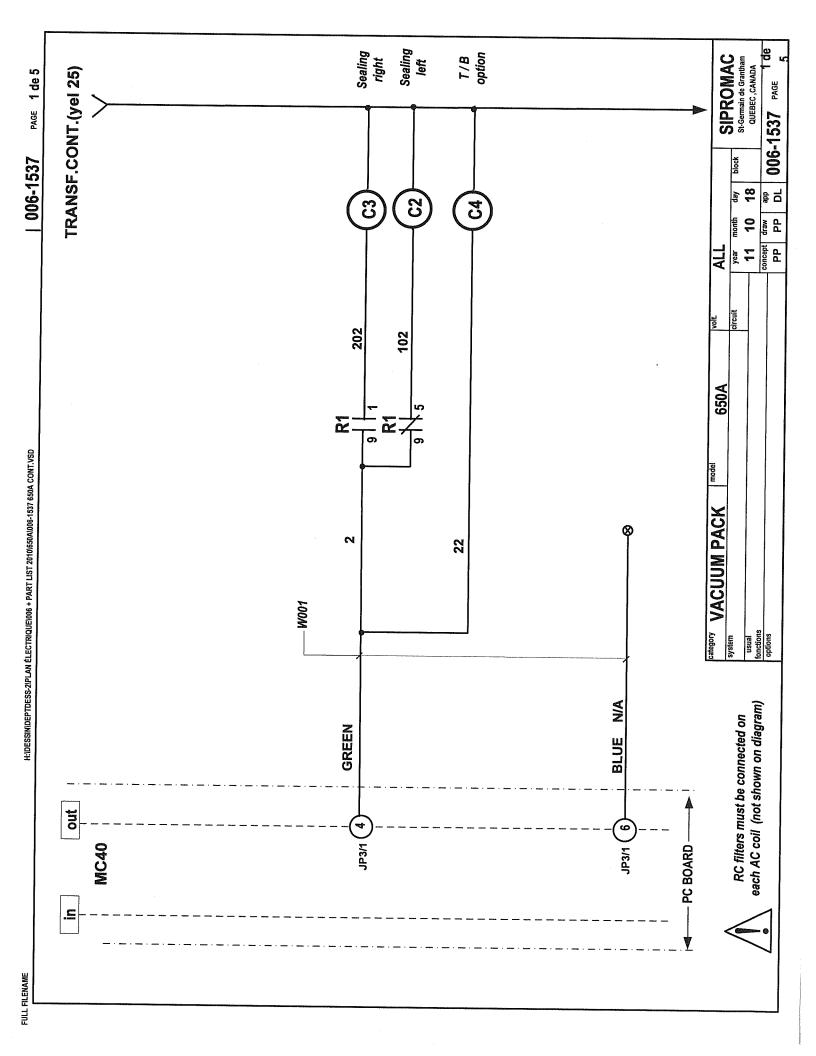


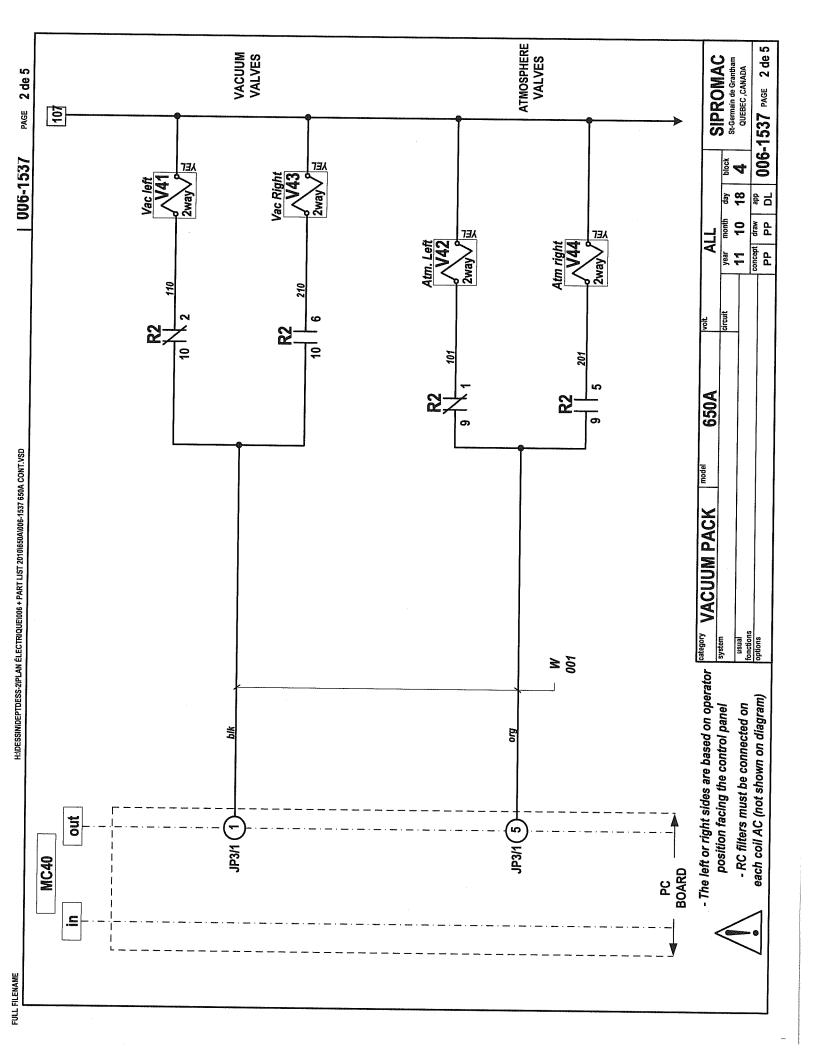


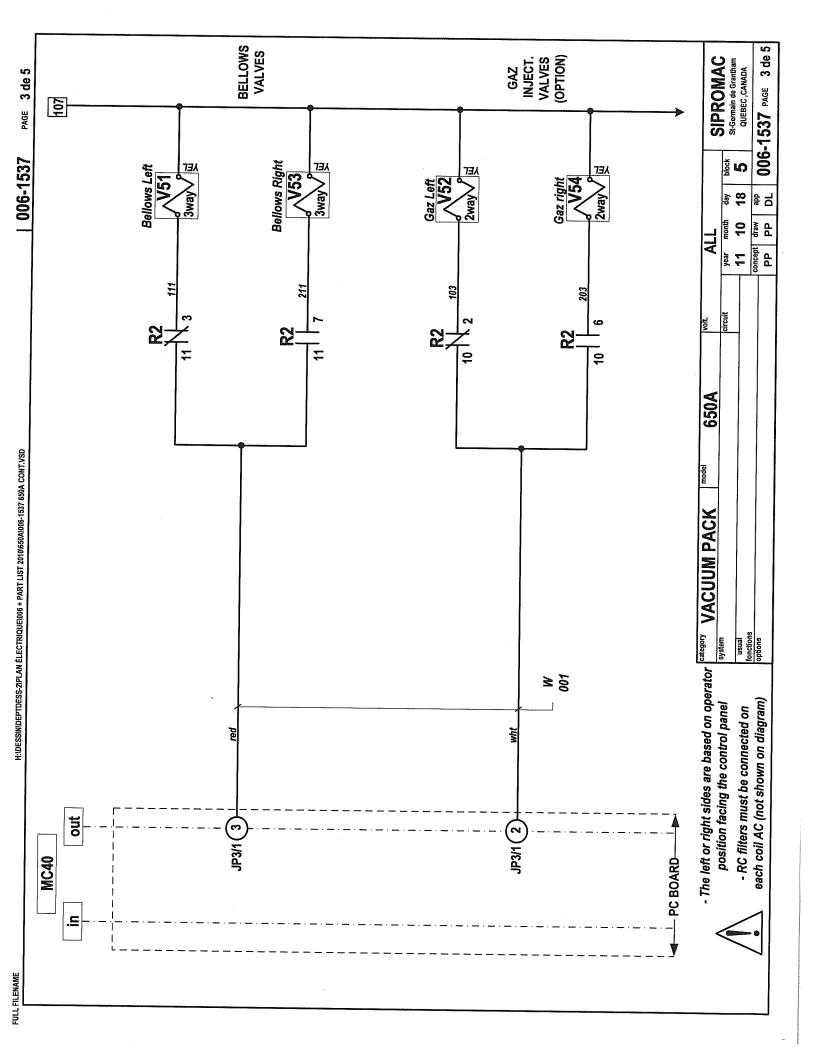


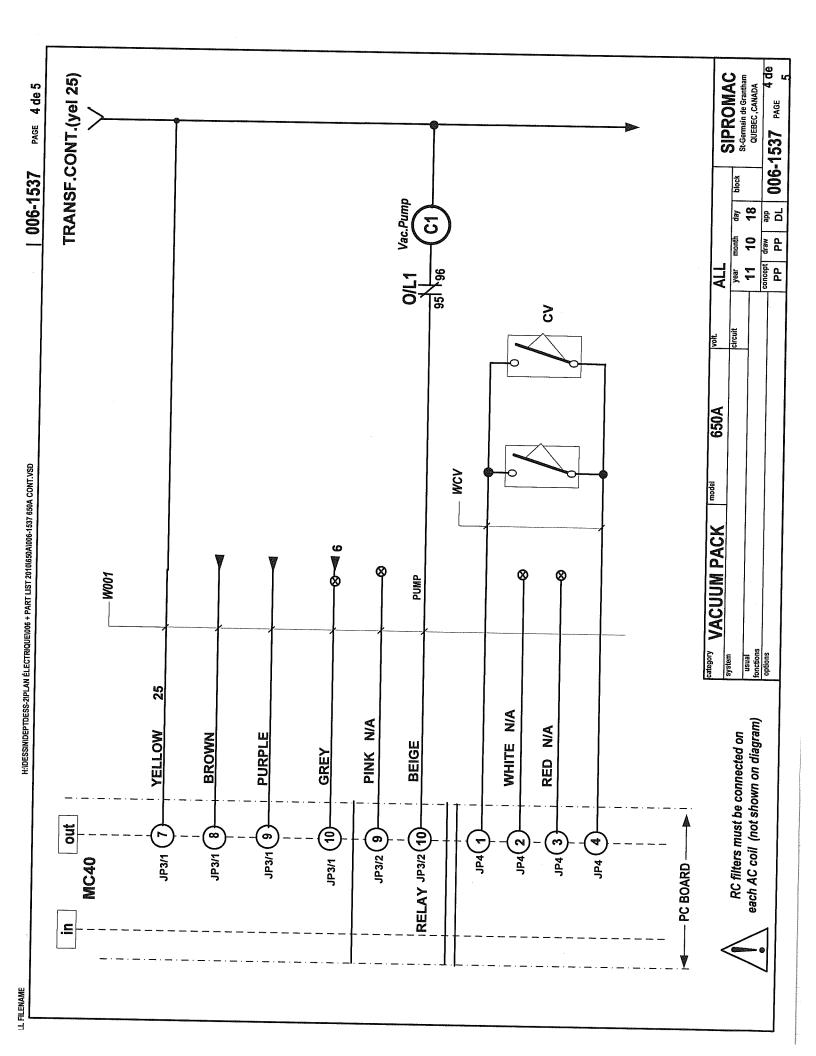


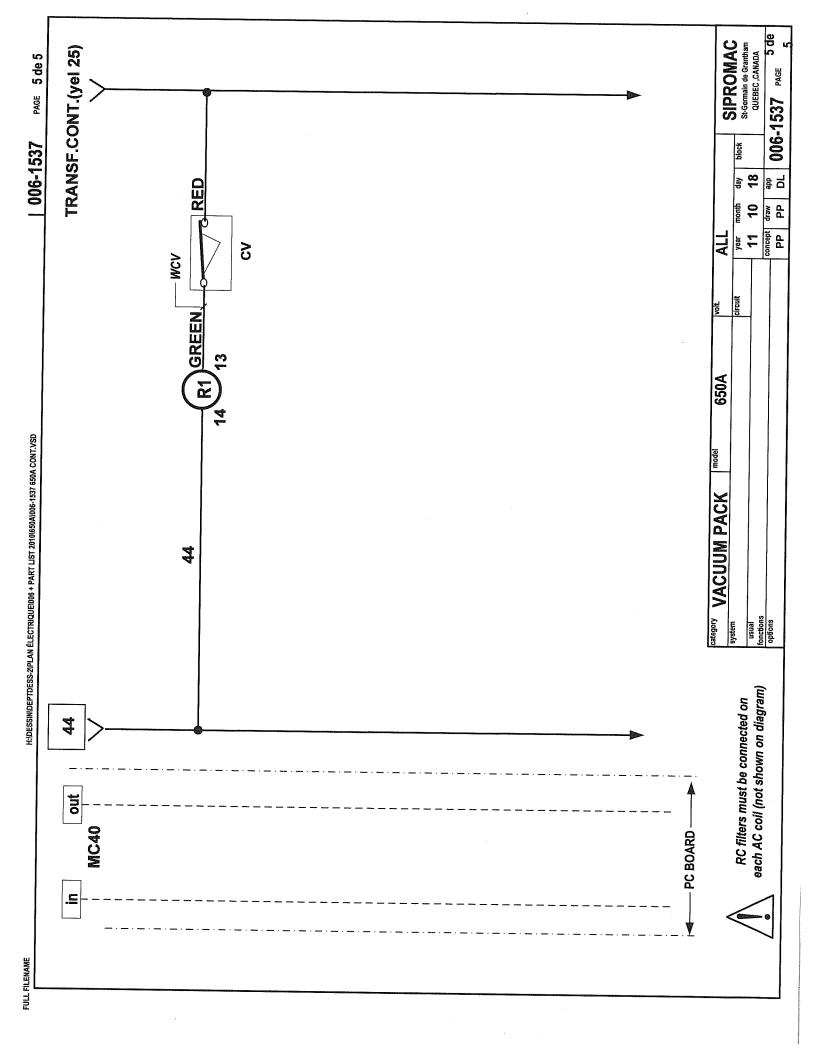






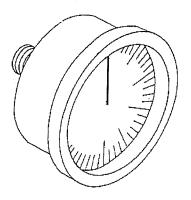




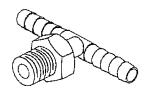


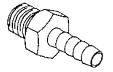
650A C1-12-L3 C50A CND C1-12-L3 C50A CND CND C50A CND C1-12-L3 C50A C50A C1-12-L3 C50A C50A C50A C1-12-L3 C50A C50A C50A C50A C50A C50A C50A C50A	钵	PART	PART	MACHINE	MACHINE	T T	Fac	) I
TERMINAL BLOCK MINDTE   SUPPLY   2009/3PH60HZ   650A   L14243	SIPRO	DESCRIPTION	APPLICATION	VOLTAGE			: )	entire and the second
BAME HOUSTON THE BLOCK MY 16172P   SUPPLY   Z08V/3PH/60HZ   650A   11-12.13	028-0022	TERMINAL BLOCK M10/10	SUPPLY	208V/3PH/60HZ	650A	L1-L2-L3	And Control of the Co	2
SEPARATOR MAGE   SUPPLY   ALL   660A   C14.21.3	028-0025	GROUND TERMINAL BLOCK M16/12P	SUPPLY	208V/3PH/60HZ	650A	GND		, ~
BAM BILD STOP BLANEED DARRET)   SUPPLY   ALL   650A   GND	028-0060	SEPARATOR M4/6	SUPPLY	208V/3PH/60HZ	650A	11-12-13		-   "
FISTER CONTROLOGR THE STATE	028-0080	BAM END STOP (BUTEE D'ARRET)	SUPPLY	ALL	650A	רויבהיבי		ء   د
FUSE HOLDER BANAGOV (HRCII)	028-0105	GROUND BARRIER (6 HOLES)	SUPPLY	ALL	6504	CNC		-   -
MOTOR CONTACTOR THE BRANCH SALES	034-0710	FUSE HOLDER 60A/600V (HRCII)	.—	208V/3PH/60HZ	SEON I			- [
MOTOR CONTACTOR 7148 PM 218 WINTERFANCES	034-0110	FUSE MIDGET 604/600V	VACUUM	208V/3PH/60H7	6504			۰
THERMAL OVERLOAD into sacesaul.   VACUUM RAJOTES   208V/3PH/60HZ   660A   WM1   A1	025-0040	MOTOR CONTACTOR 7.5HP IN 208V/3PH-CSA,UL	VACUUM RA-0165	208V/3PH/60HZ	V000	-		•
DUSCH RADIBE 23Q-480V3PH66HZ 7:sep 21A	025-0200	THERMAL OVERLOAD 17 TO 25A-CSA,UL	VACUUM RA-0165	Z108///3DH/60HZ	Voca	5   5	7	
BUSCH RA-0166 230-460V/3PH/80HZ rains an VacUUM RA-0165 200V/3PH/80HZ 650A WM1 A1	030-020	CAB TIRE		Z1100111-161400Z	Anco -	מורנו	A	-
MOTOR CONTACTOR tone in zouvare-casu.u.	125-0070	BUSCH RA-0165 230-460V/3PH/60HZ 7.5HP 21A		Z08V/3PH/60HZ	650A	WM1	A1	2M.
THERMAL OVERLOAD 210 3240 3240 3240 3240 3240 3240 3240 324	025-0050	MOTOR CONTACTOR 10HP IN 2081/3BH CSA !!!		ZUOVIJE NIOURZ	POGO	M1	A	
NACOUM RA-0286   208V/3PH/66HZ   660A   M/1   A2	025-0210	THERMAL OVERLOAD 23 TO 320 CSA !!!	VACUUM KA-UZ55	Z08V/3PH/60HZ	650A	ច	Α2	7
BUSCH RA-0256 230-460V/3PH/60HZ role zn VACUUM RA-0256	030 00 00		VACUUM RA-0255	208V/3PH/60HZ	650A	0/L1	8	T.
MOTOR CONTACTOR Hate Name	0000-000	CAB IIRE		Z08V/3PH/60HZ	650A	WM1	A2	2M:
MOLON CONTACTOR 16th in 200VJPHC6HZ   650A   C1   A3	0000-671	TOTOLOGICAL TOTOLOGICA TOTOLOGICA TOTOLOGICA TOTOLOGICA TOTOLOGICA TOTOLOGICAL TOTOLOGICA TOTO		208V/3PH/60HZ	650A	. W	Α2	L
HERMIAL OVERLOAD 30 TO 40A-CSAUL	025-0070	MOTOR CONTACTOR 15HP IN 208V/3PH-CSA,UL	VACUUM RA-0305	208V/3PH/60HZ	650A	5	A3	
CAB TIRE         VACUUM RA-0305         208V/3PH/60HZ         650A         WM1         A3           FUSE HOLDER 3036/00 Z0ULD         SEALING         208V/3PH/60HZ         650A         M1         A3           FUSE HOLDER 3036/00 Z0ULD         SEALING         208V/3PH/60HZ         650A         F2         A1           FUSE MIDGET 204Z50V TIME-DELAY         SEALING         208V/3PH/60HZ         650A         F2         A1           TRANISH COLOND STUD #10 seov 7sc         SEALING         A20V/3PH/60HZ         650A         F2         A1           TERMINAL ROUND STUD #10 seov 7sc         SEALING         ALL         650A         WEL         B1           TERMINAL FEMALE Z80° INSULATED seov 7sc         SEALING         ALL         650A         WEL         B1           SEAL BAR ASSY WISUPPORT         SEALING TWIN SEAL         ALL         650A         WEL         B2           TERMINAL FLAG FEMALE YELLOW 250°         SEALING TWIN SEAL         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW 250°         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           SEAL BAR ASSY WISUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           SEAL BAR ASSY WI	025-0220	THERMAL OVERLOAD 30 TO 40A-CSA,UL	VACUUM RA-0305	208V/3PH/60HZ	650A	O/L1	A3	
FUSE HOLDER 304/60/J2PH/60HZ care 324	030-0030	CAB TIRE	VACUUM RA-0305	208V/3PH/60HZ	650A	WW1	A3	) I
FUSE WIDGET 20A/250V TME-DELAY         SEALING         208V/3PH/60HZ         650A         F2           FUSE WIDGET 20A/250V TME-DELAY         SEALING         208V/3PH/60HZ         650A         F2           TRANSFO 1500VA 208-240-480-600/30V         SEALING         208V/3PH/60HZ         650A         TR1           TERMINAL ROUND STUD #10 600v 75°C         SEALING         ALL         650A         WEL           TERMINAL FEMALE .25°C INSULATED 600v 75°C         SEALING         ALL         650A         WEL           TERMINAL FEMALE .25°C INSULATED 600v 75°C         SEALING TOR ALL         650A         WEL         B1           SEAL BAR ASSY WISUPPORT         SEALING TOP & BOTTOM         ALL         650A         WEL           TERMINAL ROUND STUD #10 600v 75°C         SEALING TOP & BOTTOM         ALL         650A         WTB           SEAL BAR ASSY WISUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW. 250°C         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           SEAL BAR ASSY WISUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW. 250°C         SEALING TOP & BOTTOM         ALL         650A <td< td=""><td>125-0087</td><td>BUSCH RA-0305 230-460V/3PH/60HZ 12HP 32A</td><td>VACUUM RA-0305</td><td>208V/3PH/60HZ</td><td>650A</td><td>M1</td><td>Α3</td><td></td></td<>	125-0087	BUSCH RA-0305 230-460V/3PH/60HZ 12HP 32A	VACUUM RA-0305	208V/3PH/60HZ	650A	M1	Α3	
TERMINAL FOUND STUD #10 660 75°C SEALING	034-0700	FUSE HOLDER 30A/600V GOULD	SEALING	208V/3PH/60HZ	650A	F2		,
TERMINAL ROUND STUD#10 #00 / 1500   SEALING   SEALING   ALL   660A   TR1	034-0530	FUSE MIDGET 20A/250V TIME-DELAY	SEALING	208V/3PH/60HZ	650A	E2		، ا
TERMINAL ROUND STUD #10 600 v7sc   SEALING   ALL   650A   C2+C3	029-0172	TRANSFO 1500VA 208-240-480-600/30V	SEALING	208V/3PH/60HZ	650A	- 12 - 12 - 12 - 12 - 13		4
TERMINAL FEMALE	027-0220	TERMINAL ROUND STUD #10 600v 75°C	SEALING	ALL	650A			
TERMINAL FEMALE. 250" INSULATED 600v 75°C SEALING	025-0020	CONTACTOR ITH=25A-CSA,UL	SEALING	ALL	650A	2770		,
TERMINAL FEMALE .250" INSULATED 6004 75°C   SEALING	030-0410	TEW #10/104 BLACK		Ali	650A	WEI		7
SEAL BAR ASSY W/SUPPORT         SEALING TWIN SEAL         ALL         650A         WEL         B1           SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         B2           TERMINAL ROUND STUD #10 600x 75°C         SEALING TOP & BOTTOM         ALL         650A         C4         B3           CONTACTOR THE-28A-CSA,UL         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW .250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW .250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         F5         F3           FUSE HOLDER M4/8SF         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5         F5           FUSE HOLDER M4/8SF         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5         F5           FUSE SX20MM 4A/250V TIME DELAY         CONTROL 24VAC         ALL         650A         F4         F4           FUSE SX20MM 4A/250V TIME DELAY         CONTROL 24VAC         AL	027-0210	TERMINAL FEMALE .250" INSULATED 600v 75°C		AII	A 030	WEL		To™.
SEAL BAR ASSY W/SUPPORT         SEALING BAG CUT         ALL         650A         B2           TERMINAL ROUND STUD #10 600v 75°C         SEALING TOP & BOTTOM         ALL         650A         C4         B3           CONTACTOR ITH-28A-CSA,UL         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW 250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           JERMINAL FLAG FEMALE YELLOW 250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           JUPPER SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           LUPPER SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         F5         F3           FUSE HOLDER M4/8SF         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5         F5           FUSE SZ20MM 1A Z50V TIME DELAY         CONTROL TRANSFO         ALL         650A         F3         F4           FUSE SZ20MM 4A/250V TIME DELAY         CONTROL 24/AC         ALL         650A         F3         F4           Z0AWG/12COND PVC LINSHEID RADA         CONTROL 24/AC         ALL         650A         F4         F4	05B0547	SEAL BAR ASSY W/SUPPORT	SEALING TWIN SEAL	ALL	6504	i u a a	õ	آھ
TERMINAL ROUND STUD #10 600v 76°C SEALING TOP & BOTTOM ALL 650A C4 B3  CONTACTOR ITH=25A-C5A,UL SEALING TOP & BOTTOM ALL 650A WTB B3  CAB TIRE  SEALING TOP & BOTTOM ALL 650A WTB B3  SEAL BAR ASSY WISUPPORT SEALING TOP & BOTTOM ALL 650A WTB B3  SEAL BAR ASSY WISUPPORT SEALING TOP & BOTTOM ALL 650A WTB B3  UPPER SEAL BAR ASSY WISUPPORT SEALING TOP & BOTTOM ALL 650A F5  FUSE HOLDER MA/BSF  CONTROL TRANSFO 208V/3PH/60HZ 650A F5  FUSE HOLDER MA/8SF  CONTROL TRANSFO 208V/3PH/60HZ 650A F5  FUSE SX20MM 1A 250V T-DELAY  CONTROL TRANSFO 208V/3PH/60HZ 650A F5  FUSE SX20MM AA/250V TIME DELAY  CONTROL SAVACA ALL 650A F3  FUSE SX20MM 4A/250V TIME DELAY  CONTROL 24VAC ALL 650A F4  FUSE SX20MM 4A/250V TIME DELAY  CONTROL 24VAC ALL 650A F4	05B0548	SEAL BAR ASSY W/SUPPORT	SEALING BAG CUT	ALL	650A		- i	+ -
CONTACTOR ITH=28A-CSA,UL         SEALING TOP & BOTTOM         ALL         650A         CA         B3           TERMINAL FLAG FEMALE YELLOW .250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW .250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           UPPER SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           FUSE HOLDER M4/8SF         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5         F5           TRANSFO 115VA 575-400-230-208-190/24-9         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5           FUSE 5X20MM 2A/250V TIME DELAY         CONTROL SVAC+24VAC         ALL         650A         F3           FUSE 5X20MM 4A/250V TIME DELAY         CONTROL 24VAC         ALL         650A         F4	027-0220	TERMINAL ROUND STUD #10 600v 75°C	SEALING TOP & BOTTOM	Ali	GEOA	· ·	3 6	
CAB TIRE         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           TERMINAL FLAG FEMALE YELLOW .250"         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           UPPER SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         WTB         B3           FUSE HOLDER MA/8SF         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5         F5           TRANSFO 115VA 575-400-230-208-190/24-9         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5         F5           FUSE 5X20MM 2A/250V TIME DELAY         CONTROL 9VAC+24VAC         ALL         650A         F3         F4           FUSE 5X20MM 4A/250V TIME DELAY         CONTROL 24VAC         ALL         650A         F4         F4	325-0020	CONTACTOR ITH=25A-CSA,UL	SEALING TOP & BOTTOM	ALL	650A	25	3 8	7
TERMINAL FLAG FEMALE YELLOW .250"   SEALING TOP & BOTTOM   ALL   650A   WTB   B3	30-0120	CAB TIRE	SEALING TOP & BOTTOM	ALL	6504	arw	3 6	-   -
SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         B3           UPPER SEAL BAR ASSY W/SUPPORT         SEALING TOP & BOTTOM         ALL         650A         B3           FUSE HOLDER MA/8SF         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5           TRANSFO 115VA 575-400-230-208-190/24-9         CONTROL TRANSFO         208V/3PH/60HZ         650A         F5           FUSE 5X20MM 2A/250Y TIME DELAY         CONTROL 9VAC+24VAC         ALL         650A         F3+F4           FUSE 5X20MM 4A/250Y TIME DELAY         CONTROL 24VAC         ALL         650A         F4           FUSE 5X20MM 4A/250V TIME DELAY         CONTROL 24VAC         ALL         650A         F4	127-0065	TERMINAL FLAG FEMALE YELLOW .250"	SEALING TOP & BOTTOM	ALI	6504	a LA	3 6	N
UPPER SEAL BAR ASSY W/SUPPORT   SEALING TOP & BOTTOM   ALL   650A   B3	05B0549	SEAL BAR ASSY W/SUPPORT	SEALING TOP & BOTTOM	Ail	6504		3 6	₹ <b> </b> ,
FUSE 5X20MM 1A 250V T-DELAY CONTROL TRANSFO 208V/3PH/60HZ 650A F5  TRANSFO 115VA 575-400-230-208-190/24-9 CONTROL TRANSFO 208V/3PH/60HZ 650A F5  TRANSFO 115VA 575-400-230-208-190/24-9 CONTROL 9VAC+24VAC ALL 650A F3+F4  FUSE 5X20MM 2A/250V TIME DELAY CONTROL 9VAC ALL 650A F3  FUSE 5X20MM 4A/250V TIME DELAY CONTROL 24VAC ALL 650A F4  20AWG/12COND PVC LINSHIFL D 300V	05B0437	UPPER SEAL BAR ASSY W/SUPPORT	SEALING TOP & BOTTOM	ALL	6504		2 6	4 c
FUSE 5X20MM 1A 250V T-DELAY   CONTROL TRANSFO   208V/3PH/60HZ   650A   F5	34-0740	FUSE HOLDER M4/8SF	CONTROL TRANSFO	208V/3PH/60H7	SEO.A		3	, [
TRANSFO 115VA 575-400-230-208-190/24-9   CONTROL TRANSFO   208V/3PH/60HZ   650A   TR2	34-0205	FUSE 5X20MM 1A 250V T-DELAY	CONTROL TRANSFO	208V/3PH/60HZ	REOA	ב ב		7 .
FUSE 5X20MM 2A/250V TIME DELAY         CONTROL 9VAC+24VAC         ALL         650A         F3+F4           FUSE 5X20MM 4A/250V TIME DELAY         CONTROL 24VAC         ALL         650A         F4	29-0010	TRANSFO 115VA 575-400-230-208-190/24-9	CONTROL TRANSFO	208V/3PH/60HZ	6504	2 621		, ,
FUSE 5X20MM 2A/250V TIME DELAY CONTROL 9VAC ALL 650A F3  FUSE 5X20MM 4A/250V TIME DELAY CONTROL 24VAC ALL 650A F4	34-0740	FUSE HOLDER M4/8SF	CONTROL 9VAC+24VAC	ALL	6504	2 27.63		-   -
FUSE 5X20MM 4A/250V TIME DELAY CONTROL 24VAC ALL 650A F4	34-0210	FUSE 5X20MM 2A/250V TIME DELAY	CONTROL 9VAC	ALL	8504	; <u>(1</u>		7
20AWG/12COND PVC INSHIFI D 300V	34-0240	FUSE 5X20MM 4A/250V TIME DELAY	CONTROL 24VAC		A000	2 1		
	30-0590	20AWG/12COND PVC LINSHIFI D 30AV			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		]    -	- i - i

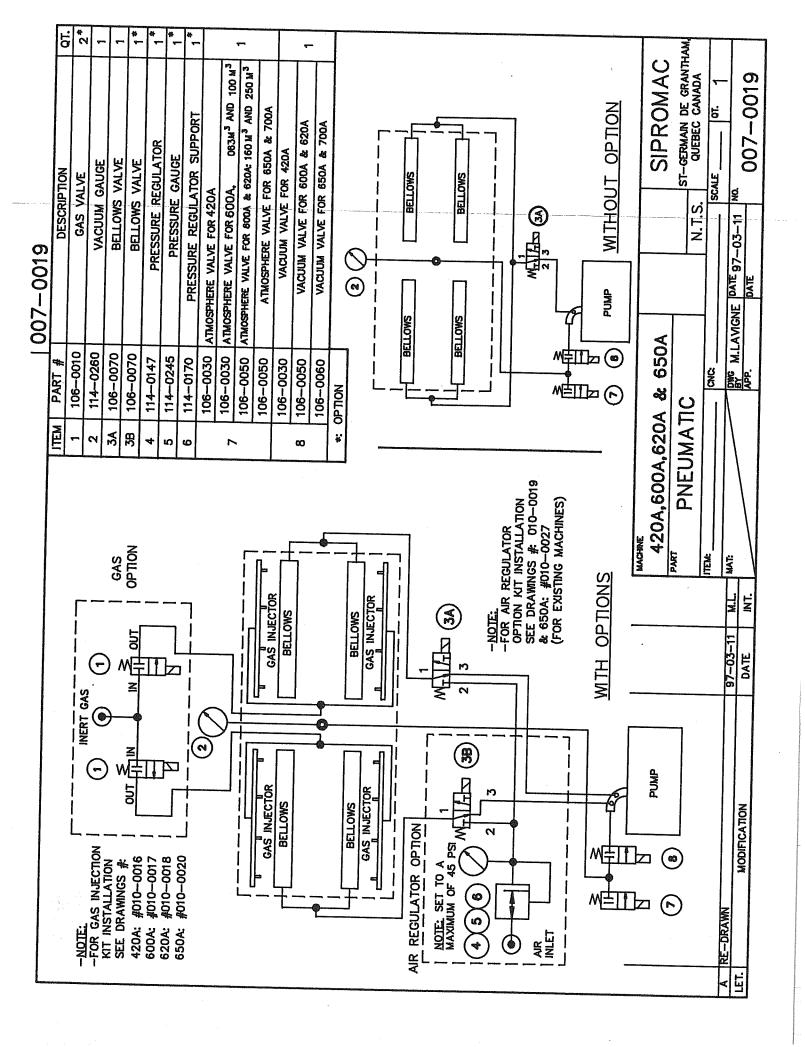
to and			MACHINE	MACH		<u>.</u>	Z Z
	DESCRIPTION	APPLICATION	VOLTAGE	,			
	12 CONTACTS CONNECTOR	OUTPUT CONTROL	ALL	650A	JP3/1-2	And the second s	1
7	22AWG/4COND.PVC,SHIELDED,300V.	INPUT CONTROL	ALL	650A	WCV1+WCV3		2.5M.
	PVC #22-2COND.300V CSA RED/BLK	INPUT CONTROL	ALL	650A	WCV2		0.5M.
ا	0.156" CENTERLINE CRIMP HOUSING	INPUT CONTROL	ALL	650A	JP4		-
_	0.156" CENTERLINE CRIMP TERMINAL	INPUT CONTROL	ALL	650A	JP4		7
MICH	MICROPROCESSOR MC-40 SENSOR VACUUM	IC-40 SENSOR VACUUM CONTROL WITH SENSOR	ALL	650A	MC-40	Շ	-
MICF	MICROPROCESSOR MC-40 NO SENSOR VAC.	CONTROL W/O SENSOR	ALL	650A	MC-40	22	-
	MEMBRANE MC-40 SIPROMAC	CONTROL SIPROMAC	ALL	650A		5	-
	MEMBRANE MC-40 BERKEL	CONTROL BERKEL	ALL	650A		50	.   -
	VALVE 2WAY 24V 2" NPT(B80) 60HZ	NACUUM		6504			· [
>	VALVE 2WAY 24V 1-1/4" NPT(B60) 60HZ	ATMOSPHERE	ALL	650.4	V42+V44		, 6
	VALVE 3WAY 24V 1/4 NPT(G176)60HZ	BELLOWS	ALL	650A	VS1		
	VALVE 3WAY 24V 1/4 NPT(G176)60HZ	OPTION AIR REGULATOR	ALI	650A	V53	L	
	VALVE 2WAY 24V 1/4 NPT(G22) 60HZ	OPTION GAS	AIT	SEO A	VESTVEA	ىا ـ	-   c
	LIMIT SWITCH LONG ROLLER 15A 250V	COVER POSITION		C 220	#04:304	<b>J</b>	7
	4PDT RELAY 24VAC (55.34-24VAC)	COVER POSITION	AII	650A	D44D2		
	4PDT RELAY SOCKET 24VAC	COVER POSITION	I IV	SFOA	24.00	roi e	y (
	RELAY SOCKET RETAINING CLIP	COVER POSITION	ALL	650A	R1+R2		2
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# PNEUMATIC DRAWING







## MANUEL D'UTILISATEUR

## MICROPROCESSEUR MC-40 AVEC OU SANS DÉTECTEUR DE VIDE

#### **EMBALLEUSE SOUS VIDE**

## TABLE DES MATIÈRES

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- II MÉCANIQUE
  - A- Vue de face
  - B- Vue de l'arrière
  - C- Procédure d'ajustement du couvert
  - D- Schéma de l'assemblage de l'axe central
  - E- Barres de scellage (Double scellage)
  - F- Dessin des barres de scellage (Option du coupe sac électrique)
  - G- Dessins des barres d'assemblage (Scellage du haut et du bas en option)
  - H- Gas injection kit installation drawing (gaz injection option)

#### III ELECTRIQUE

- A- Schéma électrique (Bas voltage)
- B- Schéma électrique (Haut voltage à une phase)
- C- Schéma électrique (Haut voltage à 3 phases)
- D- Schéma électrique (Haut voltage 1 phase 50 Hz
- E- Schéma électrique (Haut voltage 3 phase 50 Hz

#### IV PNEUMATQUE

A- Schéma Pneumatique

# EMBALLEUSES SOUS VIDE INSTRUCTIONS D'OPÉRATIONS

#### TABLE DES MATIÈRES

- 1. Mise en marche de la machine
- 2. Connexion Électrique
- 3. Opération
  - 3.1 Principes de travail
  - 3.2 Emballage Spécial
    - 3.2.1 Injection de Gaz
    - 3.2.2 Scellage haut et bas (bi-active sealing)
    - 3.2.3 Coupe sac électrique
  - 3.3 Ajustement des contrôles digital
  - 3.4 Nettoyage Quotidien
- 4. Trouble de lancement
  - 4.1 Échec durant le cycle d'emballage
  - 4.2 Vide insuffisant
    - 4.2.1 Fuites dans le sac
    - 4.2.2 Pas de fuite dans le sac
    - 4.2.3 Vide insuffisant dans la chambre
  - 4.3 Scellage Inadéquat
    - 4.3.1 Scellage insuffisant
    - 4.3.2 Pas de scellage
    - 4.3.3 Courant ininterrompu sur les barres de scellage
    - 4.3.4 Le scellage ne tient pas
  - 4.4 Problème avec les valves
  - 4.5 Problème du panneau de contrôle
- 5. Maintenance Régulière

### SIPROMAC INC. EMBALLEUSES SOUS VIDE

### 1. MISE EN PLACE DE LA MACHINE:

Avant de choisir le site d'installation de votre machine, veuillez considérer que vous aurez besoin d'espace pour les produits emballés et non-emballés à part de l'espace occupé par la machine elle-même.

Bien vouloir vous rappelez que vous aurez besoin d'un sol bien au niveau pour votre installation. Spécialement avec les modèles mobiles, le poids de la pompe peut gauchir la machine et le le couvercle ne fermera plus correctement.

Avant de commencer à travailler, vérifier l'huile de la pompe pour voir si elle est en quantité suffisante. Bien vouloir ne jamais utiliser une huile autre que celle recommandée par le fabricant. Ne pas excéder la quantité indiquée quand vous ajoutez ou faites le changement d'huile et faites votre vérification hebdomadairement.

En raison de la viscosité de l'huile, la machine sera plus difficile à démarrer à basses températures. Ainsi donc la pompe doit être placée dans un endroit où la température est d'au moins 50°F (+10°C). D'autre part, l'air doit circuler librement aux alentours de la pompe pour permettre le refroidissement dans les cas où la température des opérations atteindrait 160°F (70°C) ou la température maximale permise.

#### 2. CONNECTION ÉLECTRIQUE:

Les connections électriques doivent se faire par du personnel qualifié. La personne désignée doit s'assurer que les entrées électriques correspondent au voltage et à l'ampérage approprié de la machine.

Un schéma électrique accompagne chacune de nos machines.

Une étape importante dans le branchement de la machine est de s'assurer que le moteur de la pompe tourne dans une rotation appropriée.

Attention: Le moteur de la pompe ne devrait pas tourner plus de 3 ou 4 secondes dans une mauvaise rotation car il en résultera des dommages sérieux. La rotation est indiquée par une flèche dur le moteur de la pompe.

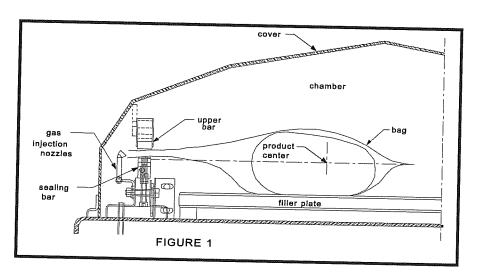
#### 3. OPÉRATION:

#### 3.1 Principes de travail:

Un empaquetage sous vide est un cycle composé de 3 étapes. Premièrement le vide est fait et l'air est complètement enlevé de la chambre et du sac contenant le produit. (Voir figure 1). Ensuite c'est possible d'injecter du gaz neutre par les conduits si le produit est très délicat. Finalement, un mécanisme pousse la barre de scellage sur le support de caoutchouc pour sceller le sac

Pour obtenir de beaux empaquetages, les produits et les sacs doivent être de taille proportionnelles. L'ouverture du sac ne devrait jamais excéder 2" (50cm) au delà des barres de scellage. Le produit doit être centré en hauteur par rapport aux barres de scellage en ajustant les écarteurs qui vous sont fournis.

Pour obtenir un bon scellage, assurez-vous qu'il n'y a pas de résidu de graisse qui reste entre les côtés intérieurs des sacs où le scellage doit être fait.



#### 3.2 Empaquetage Spécial:

#### 3.2.1 Injection de Gaz (option):

Il y a une pression atmosphérique de 14 lbs / pouce carré ( = 1 kg / cm carré) sur les produits quand le vide demandé est atteint. Les produits qui peuvent être endommagés par une haute pression doivent être empaquetés avec un vide partiel et la pression doit être contrebalancée en injectant du gaz dans le sac ( nitrogène ou dioxyde de carbone) avant le scellement et après avoir atteint le vide.

Pour l'injection de gaz, les sacs sont placés sur les barres de scellage, l'ouverture placée au dessus des conduits de gaz qui sont montés le long des barres de scellage. Après que le vide soit atteint, la valve du vide se ferme et la valve du gaz s'ouvre. Le pourcentage de gaz peut être ajusté par le menu du programme.

Le réservoir de gaz et la valve de pression qui est rattachée au réservoir ne sont pas fournis par Sipromac. La pression pour le régulateur de gaz devrait être ajustée approximativement à 5 lbs/pouce carré ( 1/3 Kg/cm carré). Chaque machine a un adapteur pour la connexion de gaz quand l'option de l'injection de gaz est commandée.

### 3.2.2 Scellage Haut et Bas (optionnel):

Pour le scellage des sacs en aluminium comme pour le café il est impératif d'avoir une barre de scellage en haut et en bas.

## 3.2.3 Coupe sac électrique: (optionnel):

Cette option est utilisée pour obtenir un paquet dont l'excédent de film au niveau du scellage doit être coupée très près de la ligne de scellage. ( cette option ne peut pas être utilisée avec le scellage Haut et Bas)

### 3.3 Les opérations de l'empaquetage sous vide:

Note: Reportez-vous aux menus structure de la page 8 et aux détails du panneau de contrôle sur la page 9

#### 3.3.1 <u>Bases</u>:

Utilisez la touche "POWER" pour initier le bouton ON/OFF sur votre machine sous vide. Quand votre unité sera en fonction le dernier programme exécuté apparaîtra sur l'écran à cristaux liquides.

Utilisez la touche "ESC" pour passer du menu programme au menu fonctions et du menu des fonctions au menu des programmes.

Dans le menu des fonctions, utilisez la touche "SELECT" pour sélectionner une fonction et la touche "ENTER" pour exécuter la sélection.

Dans le menu des programmes, utilisez la touche "SELECT" pour sélectionner un programme et la touche "Enter" pour accéder ou modifier la sélection.

Dans les programmes du sous menu, utilisez la touche "ENTER" pour voir défiler les paramètres et lorsque ces derniers clignotent pour indiquer ils sont dans le mode d'acquisition. Quand la séquence de tous les paramètres se sont affichés, on revient automatiquement au début de la liste.

Dans les programmes du sous menu, utilisez la touche "ESC" pour revenir au menu des programmes. Pressez n'importe quelle touche pour effacer les messages d'erreur qui peuvent s'afficher sur l'écran à cristaux liquide.

#### 3.3.2 Menu des fonctions:

#### 3.3.2.1 <u>Créer un programme</u>:

Quand vous exécuter la fonction "create a program", le programme sous menu est atteint en commençant par l'identification. L'identification initiale "PxxNO NAME" est donné au programme et tous les paramètres sont établis à zéro; le numéro du programme est alloué automatiquement.

#### 3.3.2.2 Supprimer un programme:

En exécutant la fonction de "delete a program", vous avez accès au menu des programmes et le numéro du premier programme en mémoire clignote pour indiquer le mode de suppression. Utilisez la touche "SELECT" pour sélectionner un programme et la touche "ENTER" pour avoir accès et confirmer la suppression de la sélection. Utilisez la touche "ESC" pour annuler une suppression et quitter la fonction. Quand vous quittez la fonction, le nombre des programmes actuels sur l'écran à cristaux liquides cesse de clignoter.

#### 3.3.2.3 Choisir le mode d'opération:

Quand vous exécutez la fonction "Select Operating Mode", laquelle est disponible seulement pour les unités automatiques, la sélection en cours clignote pour vous indiquez le mode. Utilisez la touche "SELECT" pour parcourir les modes d'opération, lesquels sont automatiques, semi-automatiques et manuels.

Le mode d'opération sera validé et exécuté automatiquement. Utilisez la touche "ESC" ou "ENTER" pour quitter la function et retourner au menu des programmes.

#### 3.3.3 Menu des Programmes:

#### 3.3.3.1 <u>Identification des Programmes:</u>

Pour un programme sélectionné, choisissez l'identification en utilisant le panneau de contrôle numérique avec la chartre des caractères et pressez sur la touche numérique jusqu'à ce que le caractère soit sélectionné (4 x pour la valeur numérique). Utilisez la touche "ENTER" pour valider le caractère ainsi que la chaîne de caractères jusqu'à la fin ( la nouvelle chaîne de caractères clignote). Vous pouvez utilisez la touche "ESC" pour revenir en arrière dans le cas où vous vous êtes trompé et que vous voulez effacer le caractère.

Example: EXAMPLE 1 → (9 caractères)

Touche 2, 2, ENTER **→** E Touche 8, 8, 8, ENTER **→** X Touche 1, ENTER **→** A Touche 5, ENTER → M Touche 6, ENTER **→** P Touche 4, 4, 4, ENTER **→** L Touche 2, 2, ENTER → E Touche 9, 9, 9, ENTER → espace Touche 1, 1, 1, 1, ENTER → 1

Touche ENTER pour valider la chaîne de caractères

## 3.3.3.2 <u>L'ajustement du niveau de Vide (capteur de vide désactivé</u>):

Pour un programme sélectionné, ajustez le niveau de vide, en secondes; la validation est automatiquement exécutée après la deuxième entrée digitale (Le nouveau temps de vide clignote). En cours de traitement, utilisez la touche "ENTER" pour valider la valeur du niveau de vide et la touche "ESC" pour revenir en arrière et changer la valeur du niveau de vide (La valeur du niveau de vide la plus ancienne clignotera à ce moment).

Exemples:

1 sec. → Touches 0, 1 ou 1, ENTER

15 sec. → Touches 1, 5

## 3.3.3.3 <u>L'ajustement du niveau de Vide (capteur de vide en activé)</u>:

Pour un programme sélectionné, ajustez le niveau de vide avec les valeurs; le point décimal est automatiquement inséré suivant la deuxième entrée digitale et la validation est automatiquement exécutée après la troisième entrée digitale (La nouvelle valeur du niveau du vide clignote). Le niveau de vide est arrondi à la demie la plus près de la valeur. En cours de traitement, utilisez la touche "ENTER" pour valider la valeur du niveau de vide et la touche "ESC" pour revenir en arrière et changer la valeur du niveau de vide (La valeur du niveau de vide la plus ancienne clignotera à ce moment). Ajustez le niveau du vide à zéro pour pouvoir contourner le capteur de vide et procédez en réglant seulement le "Temps de vide Plus" (Vacuum plus time).

Exemples: 90.0% Touches 9, 0, 0 ou 9, 0, ENTER ou

Touches 9, 0, 1 ou 9, 0, 2 or 9, 0, 3 ou 9, 0, 4

97.5% -> Touches 9, 7, 5 ou

Touches 9, 7, 6 ou 9, 0, 7 or 9, 0, 8 ou 9, 0, 9

0.0% Touches 0, 0, 0 ou 0, ENTER

#### 3.3.3.4 Ajustement du Temps de Vide "Plus" (capteur de vide activé):

Pour un programme sélectionné, réglez le "temps de vide plus" en secondes; la validation est automatiquement exécutée après la deuxième entrée digitale ( La nouvelle valeur du "temps de vide plus" clignotera à ce moment). En cours de traitement, utilisez la touche "ENTER" pour valider la nouvelle valeur du "temps de vide plus" et la touche "ESC" pour revenir et recommencer avec de nouvelles valeurs ( la valeur la plus ancienne du "temps de vacuum plus" clignotera).

Exemples:

1s → Touche 0, 1 or 1, ENTER

15s → Touche 1. 5

#### 3.3.3.5 Ajustement de l'injection de gaz (capteur de vide désactivé):

Pour sélectionner un programme placer le niveau d'injection de gaz en suivant la même procédure que pour le niveau de vide. Gardez en mémoire que plus le temps d'injection de gaz est haut, moins la pression du sellage sera forte. Un certain niveau de vide doit être maintenu pour un bon fonctionnement.

#### Ajustement de l'injection de gaz (capteur de vide activé): 3.3.3.6

Pour sélectionner un programme placer le niveau d'injection de gaz en suivant la même procédure que pour le niveau de vide; L'ajustement pour le gaz le plus haut devrait être de 10% au-dessous du niveau de l'ajustement de vide.

#### 3.3.3.7 Ajustement du cachetage:

Pour sélectionner un programme le temps de cachetage, en commençant par les secondes; le point décimale est automatiquement insérée après la première entrée de chiffre et la validation est automatiquement effectuée après la troisième entrée de chiffre (le nouveau temps de cachetage clignote). Le temps de cachetage est arrondi à la moitié la plus proche du cent. À un milieu l'entrée des données, utiliser la clé "ENTER" pour valider l'heure du cachetage et la clé " ESC " pour revenir en arrière et reprogrammer le temps cachetage avec de nouvelles données (le vieux temps de cachetage clignote).

Examples:

4.50s → clés 4, 5, 0 or 4, 5, ENTER or

clés 4, 5, 1 or 4, 5, 2 or 4, 5, 3 or 4, 5, 4

2.35s > clés 2, 3, 5 or

clés 2, 3, 6 or 2, 3, 7 or 2, 3, 8 or 2, 3, 9

0.00s → clés 0, 0, 0 or 0, ENTER

#### 3.3.4 Exécution de cycle de vide :

Pour les unités manuels ainsi que les unités automatiques faire la mise en marche manuelle, fermer le couvercle afin de lancer un cycle de vide. Pour l'unité automatique faire mise en marche semi-automatique ou automatique, utilisez le bouton "ARRÊT / DÉBUT" pour lancer ou interrompre un cycle de vide. Le programme sélectionné peut être lancé seulement dans le programme du menu, au moment où aucune modification n'est nécessité, et l'accès des autres programmes et des fonctions ne sont pas requis. Pendant l'exécution du cycle le statut d'opération est séquentiellement affiché sur l'écran à cristaux liquides, excepté pour les paramètres établis à zéro, qui ne sont pas montrés:

- niveau de vide de la chambre pendant la séquence,
- vide additionné du temps pendant le vide plus la séquence,
- niveau de vide de la chambre pendant la séquence d'injection de gaz,
- statut de temps de cachetage pendant la séquence de cachetage,
- niveau de vide de la chambre pendant La séquence d'atmosphère .7

Pendant l'exécution du cycle, utilisé la clef "1" pour interrompre la séquence de vide et pour exécuter la séquence suivante, sois l'injection du gaz ou le cachetage, suivi de la clé "ENTER" afin d'accéder et modifier le programme; les paramètres deviennent valides seulement pour les cycles suivants de vide.

#### 3.3.5 System monitor:

Pour accéder le menu des diagnostics, monter la puissance de la machine d'emballage sous vide tout en maintenant le bouton "ESC" enfoncé. Utilisez la clé "SELECT" pour choisir la fonction du système du moniteur et "ENTER" pour accéder et visualiser les paramètres surveillés. Employez la clé "SELECT" pour changer la révision de logiciel, la quantité d'heures de travail faites et de la quantité de cycles complets exécutés depuis la première

## **NOTES**

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