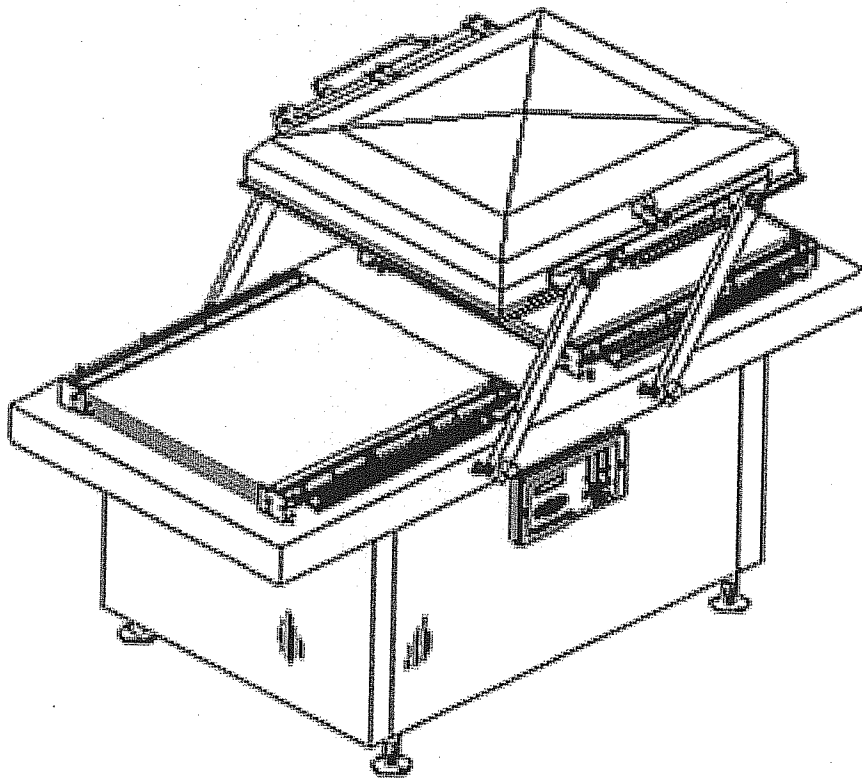


# VACUUM PACKAGING MACHINE

## MODEL 680A



### OWNERS MANUEL (MANUEL D'UTILISATION) (MANUAL DE UTILIZACION)



## 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 680A

(MC-40 SIPROMAC)

### GENERAL TABLE OF CONTENTS

#### I OPERATION INSTRUCTIONS

#### II MECHANICAL

- A- Front view general assembly drawing
- B- Rear view general assembly drawing
- C- Cover adjustment procedure
- D- Central shaft assembly drawing
- E- Seal bar assembly drawings  
(twin seal)
- F- Seal bar assembly drawings  
(electrical bag cut option)
- G- Seal bar assembly drawings  
(top and bottom sealing option)
- H- Gas injection kit installation drawing  
(gas injection option)

#### III ELECTRICAL

- A- Electrical drawings

#### IV PNEUMATIC

- A- Pneumatic drawing

# VACUUM PACKAGING MACHINES

## OPERATION INSTRUCTIONS

### TABLE OF CONTENTS

1. Setting up the machine
2. Electrical connection
3. Operation
  - 3.1 Working principles
  - 3.2 Special packaging
    - 3.2.1 Gas flushing
    - 3.2.2 Top and bottom sealing (bi-active)
    - 3.2.3 Electrical bag cut
  - 3.3 Setting of digital controls
  - 3.4 Daily cleaning
4. Trouble shooting
  - 4.1 Failure during a packaging cycle
  - 4.2 Insufficient vacuum
    - 4.2.1 Leakage in the bag
    - 4.2.2 No leakage in the bag
    - 4.2.3 Insufficient vacuum in the chamber
  - 4.3 Faulty seal
    - 4.3.1 Insufficient seal
    - 4.3.2 No seal
    - 4.3.3 Permanent sealing current
    - 4.3.4 Seal does not stick
  - 4.4 Fault in the valves
  - 4.5 Control board failure
5. Regular maintenance

2010-08-30

# 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 recommended 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 completely 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.

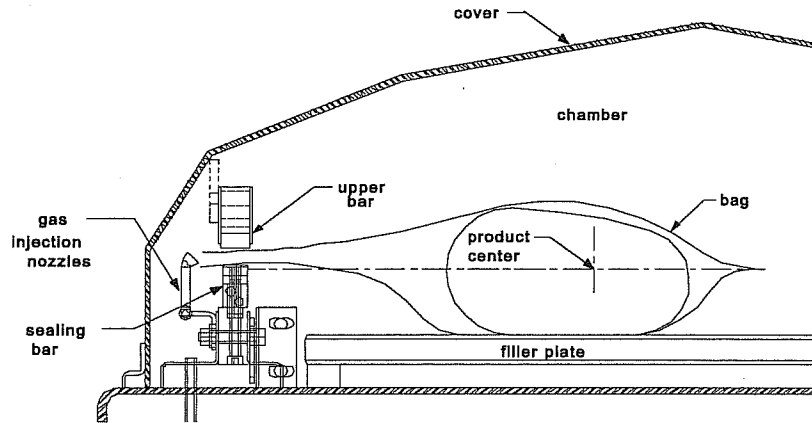


FIGURE 1

### **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).



### **3.2.3 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 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 Delete a program:**

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 until 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.

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

### 3.3.3.2 Vacuum level setting:

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 Vacuum plus time setting:

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 → keys 0, 1 or 1, ENTER  
                  15s → keys 1, 5

#### **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 sequentially 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.

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)

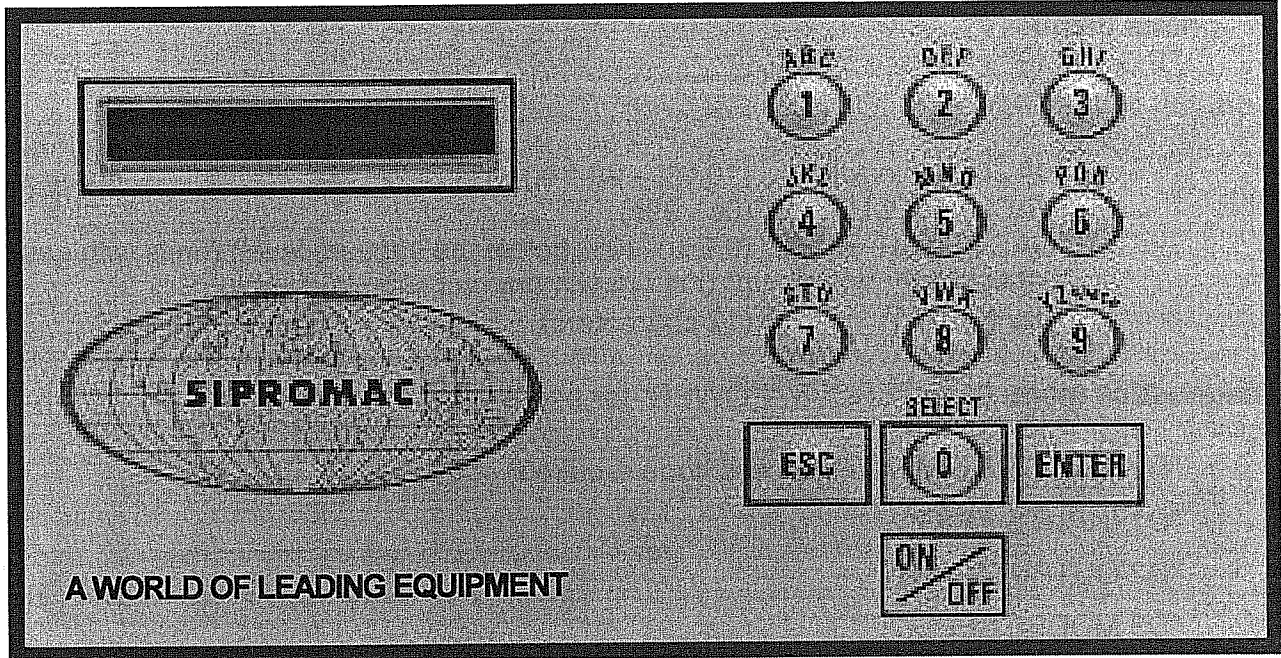
- "SOFTWARE: R x.xx"

- "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 hygienic 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 "VACUUM ERROR" message is displayed on LCD:**

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 "ATMOSPHERE ERROR" message is displayed on LCD:**

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 Insufficient vacuum in chamber:**

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 verifying 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.

Contactors does not work.

#### **4.3.3 Permanent sealing current:**

Contactors 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).

**Caution:** 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 damage 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.

# 680A

## OPERATING GUIDE

- 1 st Push **POWER ON**.
- 2 nd Adjust vacuum level, gas level and seal time, if or as needed (refer to sec. 3.3).
- 3 rd Select manual, semi-automatic or automatic mode.
- 4 th Place the chamber half way down on one side (left or right).  
**IMPORTANT: Never push start when the chamber is in the middle.**
- 5 th Place products on the opposite side.
- 6 th To change vacuum level, gas level or seal time, push stop button before attempting to change.
- 7 th When the machine is stopped during a vacuum cycle, the ON/OFF button must be pressed, then the start button to be able to re-start the machine.

MACHINE SHOULD BE STRAIGHT & LEVEL

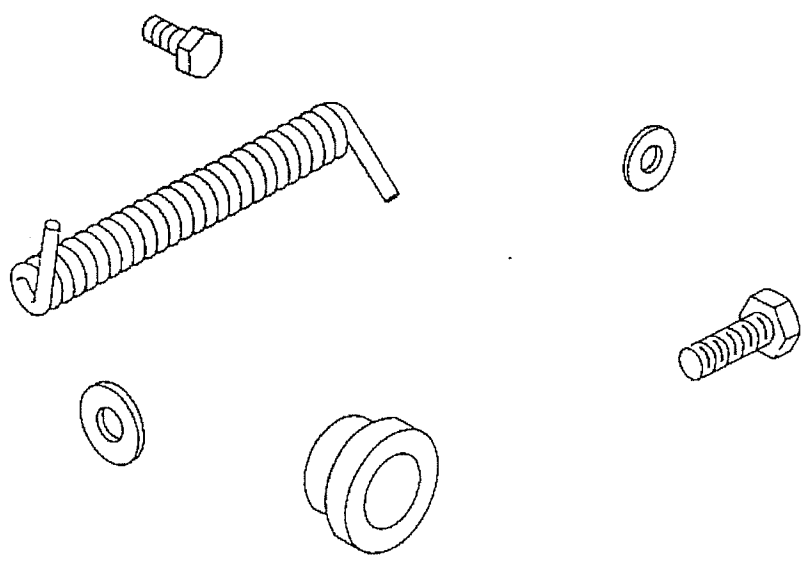
### HOW TO ADJUST SPEED OF COVER

- 1 st Machine should be level (adjustable feet)
- 2 nd Put machine in automatic mode, vacuum time 99.5%.  
Adjust cylinder pressure regulator at 80 PSI.
- 3 rd Bring cover close to the table, start machine and adjust the exhaust flow control on the lifting solenoid valve (See drawing #007-0039) to the desired speed.
- 4 rd Adjust the exhaust flow control on the chamber lowering solenoid valve (turning screw clockwise will reduce the speed).

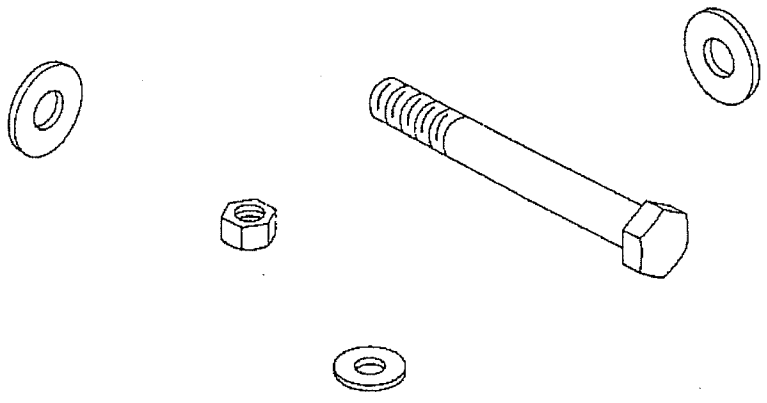
### MACHINE STOPPED WITH CHAMBER UNDER VACUUM:

#### HOW TO RE-START THE MACHINE:

- 1 st Press on/off switch on the membrane to stop the machine.
- 2 nd Press on/off again to re-start the machine (vacuum valve will open and machine will continue its cycle).
- 3 rd Press start to have the automatic movement of cover.

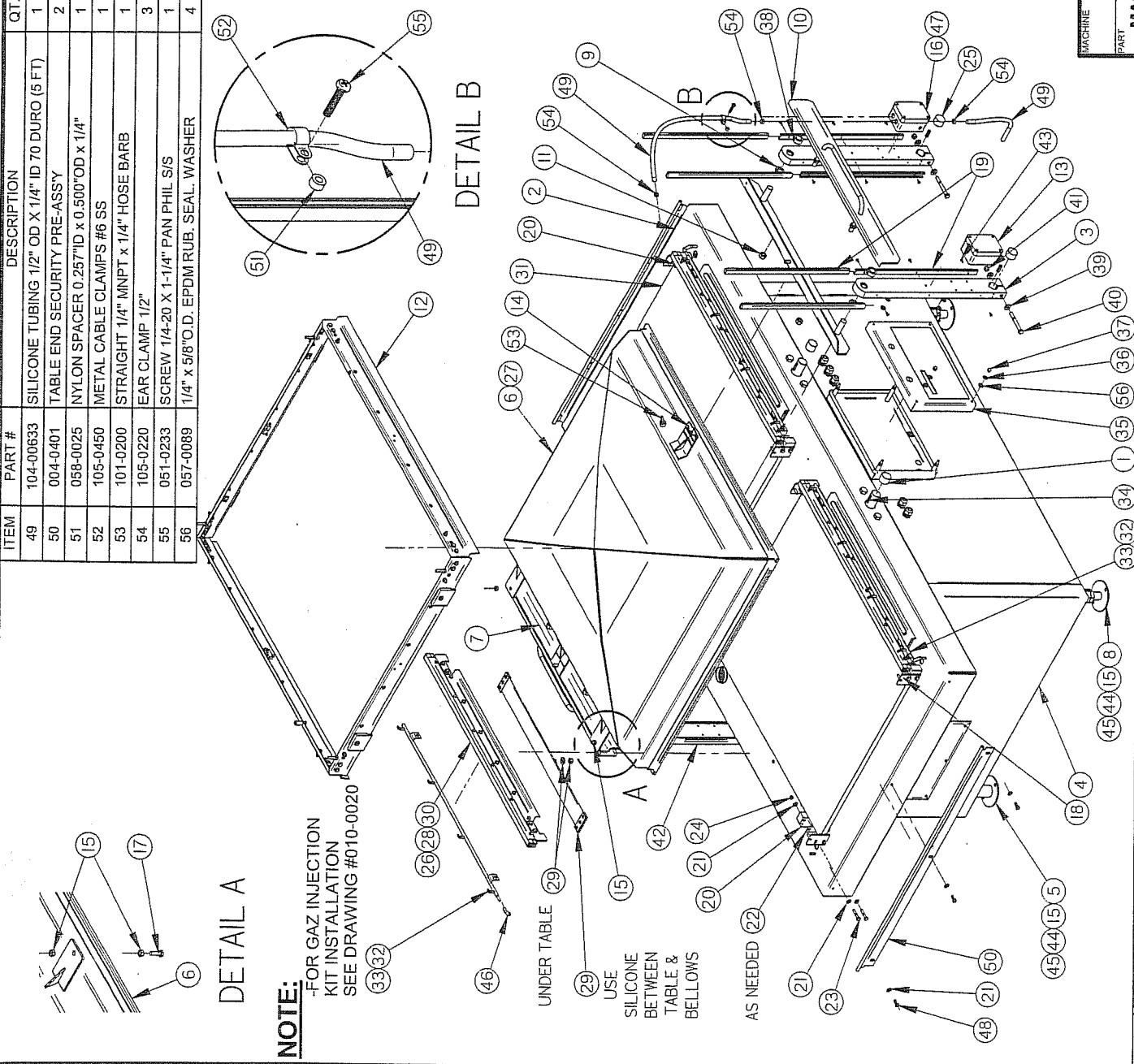


**MECHANICAL DRAWING**



1005A0438

ITEM	PART #	DESCRIPTION	QTY.	ITEM	PART #	DESCRIPTION	QTY.
49	104-00653	SILICONE TUBING 1/2" OD X 1/4" ID 70 DURO (5 FT)	1	1	030-0720	SHRINK BLACK 1-1/2" x 24mm (0.0827 EACH)	4
50	004-0401	TABLE END SECURITY PRE-ASSY	2	2	004A0239	TABLE & CENTRAL SHAFT ASSY	1
51	058-0025	NYLON SPACER 0.257" ID x 0.500" OD x 1/4"	1	3	004A0381	COVER ARM ASSY	4
52	105-0450	METAL CABLE CLAMPS #6 SS	1	4	005-0472	STRUCTURE ASSY	1
53	101-0200	STRAIGHT 1/4" MNPT x 1/4" HOSE BARB	1	5	005-0362	REAR LEG ASSY	1
54	105-0220	EAR CLAMP 1/2"	3	6	005-0469	8" COVER ASSEMBLY	1
55	051-0233	SCREW 1/4-20 X 1-1/4" PAN PHIL S/S	1	7	005-0359	ARM SUPPORT ASSEMBLY	2
56	057-0089	1/4" x 5/8" O.D. EPDM RUB. SEAL WASHER	4	8	005-0361	FRONT LEG ASSY	2
				9	008-0368	ARM SUPPORT SPACER	4
				10	004-0213	COVER HANDLE ASSY	2
				11	051-0630	NUT 1/2"-13 S/S	4
				12	005-0617	COVER GUARD ASSEMBLY	1
				13	003B0126	JUNCTION BOX (LEFT)	1
				14	056-0125	HITCH PIN CLIPS 3mm X 60mm S/S	1
				15	051-0600	NUT 5/16"-18 S/S	20
				16	004A0447	JUNCTION BOX ASSY (RIGHT)	1
				17	051-0305	BOLT 5/16"-18 NC X 1" S/S	2
				18	002-0326	LEFT SEAL BAR GUIDE BLOCK	4
				19	003-0107	SECURITY BUMPER HOLDER 500	8
				20	002-0327	RIGHT SEAL BAR GUIDE BLOCK	4
				21	051-0740	WASHER 1/4" FLAT S/S	38
				22	001-0892	SEAL BAR GUIDE BLOCK SPACER	1
				23	051-0250	BOLT 1/2"-20nc. X 1 1/2" S/S	16
				24	051-0581	NUT 1/4"-20 NYLON LOCK S/S	16
				25	057-0013	SHAFT END CAP 1-1/4"	4
				26	005A0549	SEAL BAR ASSY W/SUPP. (TOP & BOT. OPT.)	1
				27	005-0470	12" COVER ASSEMBLY (OPT)	1
				28	005A0548	SEAL BAR ASSY W/SUPP. (BAG CUT. OPT.)	1
				29	005-0651	BELLOWS ASSEMBLY	3
				30	005A0547	SEAL BAR ASSY W/SUPPORT	4
				31	005-0349	FILLER PLATE ASSEMBLY	2
				32	005A0350	GAS INJECTION BAR ASSEMBLY	2
				33	005A0814	GAS INJECTION BAR ASSEMBLY	1
				34	056-0167	KEY 1/4"sq.x1" OVERSIZED	4
				35	005A0392	FRONT PC BOARD SUPPORT ASSY	1
				36	052-2045	FLAT WASHER 1/4" COPPER	4
				37	051-0591	NUT 1/4"-20 ACORN S/S	4
				38	105-0430	SCREW COLLARD 3/4" x 1 1/4" x 9/16" S/S	4
				39	051-0783	WASHER 3/8" FLAT THICK S/S	4
				40	051-0422	BOLT 3/8"-16nc. X 3/4" S/S	2
				41	051-0822	NUT 3/8"-16nc. NYLON LOCK S/S	2
				42	003-0107	SECURITY BUMPER HOLDER 500	9
				43	051-0097	SCREW 6-32 x 3/8" TYPE F PAN PHIL S/S	24
				44	051-0760	WASHER 5/16" FLAT S/S	32
				45	051-0300	BOLT 5/16"-18nc. X 3/4" S/S	16
				46	008-0464	GAS INJECTION CONNECTION TUBE	4
				47	051-0192	SCREW 1/4-20NC X 3/4" PAN PHILL S/S	8
				48	051-0190	BOLT 1/4-20 x 3/4" HEX S/S	6



NOTE:  
FOR GAS INJECTION  
KIT INSTALLATION  
SEE DRAWING #010-0020

UNDER TABLE  
USE  
SILICONE  
BETWEEN  
TABLE &  
BELLOWS  
AS NEEDED

**680A**

**MACHINE ASSEMBLY FRONT VIEW**

INCH  
TOLERANCE  
±0.005  
±0.002  
±0.002  
SOLDERAGE ±0.5

N.T.S.

DATE 04-08-27  
BY B.C.  
APP. BY B.C.

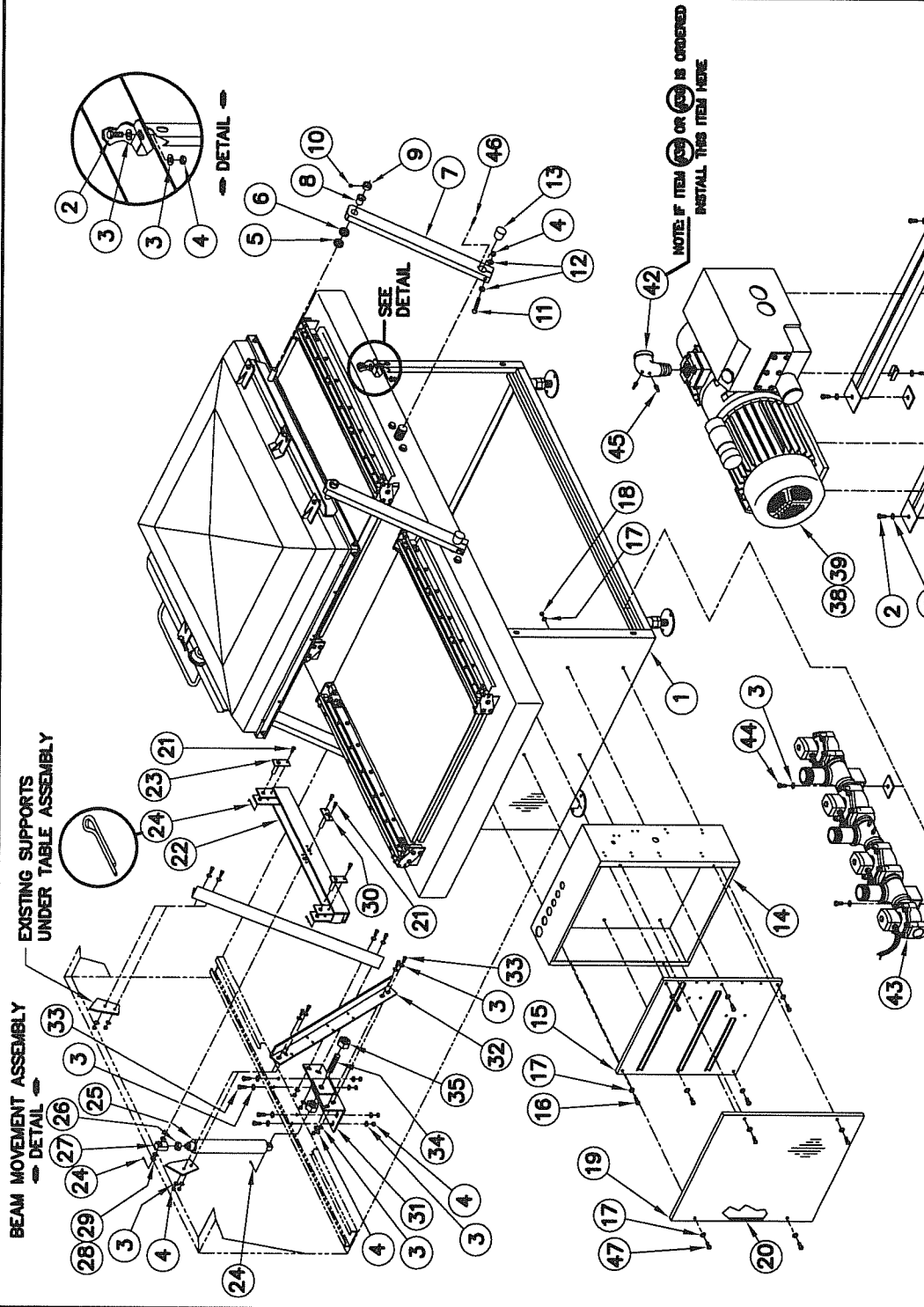
NO. 005A0438

DEPT. M-I

ST-GERMAIN DE GRANTHAM  
QUEBEC CANADA

LET.	DATE	INT.	MODIFICATION
H	05-08-11	M.A.	MODIFIED VIEW ITEM 4 & 35, ADDED PART 057-0089
G	04-11-18	M.A.	ADDED PARTS #48 TO #55
F	04-08-27	B.C.	REDRAWN
LET.			MODIFICATION

ITEM	PART #	DESCRIPTION	QT.
1	005-0438	MACHINE ASSEMBLY FRONT VIEW	1
2	051-0350	HEX. BOLT 3/8"-16 x 3/4" S.S.	10
3	051-0780	FLAT WASHER 3/8" S.S.	44
4	051-0620	HEX. NUT 3/8"-16 S.S.	22
5	---	REAR SPACER	2
6	008-0368	SPACER	2
7	002A0361	COVER ARM	2
8	075-0620	BUSHING	2
9	105-0430	COLLAR	2
10	051-0420	SET SCREW 5/16"-18 x 3/8" S.S.	2
11	051-0520	HEX. BOLT 3/8"-16 x 3/8" S.S.	2
12	051-0783	FLAT WASHER 3/8" (THICK) S.S.	4
13	057-0013	SHAFT END CAP	2
14	005-0401	ELECTRICAL BOX ASSEMBLY	1
15	004-0218	FALSE BOTTOM ELECTRICAL BOX	1
16	051-0210	HEX. BOLT 1/4"-20 x 1" S.S.	6
17	051-0740	FLAT WASHER 1/4" S.S.	16
18	051-0580	HEX. NUT 1/4"-20 S.S.	18
19	001-1545	ELECTRICAL BOX COVER	1
20	179-0004	SELFSTICK NEOPRENE	1
21	051-0180	HEX. BOLT 1/4"-20 x 1/2" S.S.	4
22	004-0191	BEAM MOVEMENT ASSEMBLY	1
23	004-0192	ARM AXIS MOVEMENT ASSEMBLY	1
24	056-0120	COTTER PIN 1/8" $\phi$ x 1" S.S.	4
25	003A0180	CYLINDER REWORKED	1
26	051-0645	HALF NUT 1/2"-20 UNF-S.S.	1
27	002-0387	CYLINDER EXTENSION	1
28	058-0060	SPACER	1
29	058-0050	SPACER	5
30	004-0193	UPPER CYLINDER AXIS ASSY	1
31	004-0205	CYLINDER SUPPORT ASSEMBLY	1
32	004-0947	CYLINDER SUPPORT REINFORCEMENT	2
33	051-0360	HEX. BOLT 3/8"-16 x 1" S.S.	12
34	002A0388	CYLINDER AXIS	1
35	051-0675	HEX. NUT 3/4"-10 S.S.	2
36	005-0354	PUMP SUPPORT ASSEMBLY	2
37	005-0088	PUMP SUPPORT	6
38	125-	PUMP 160 M <sup>3</sup> (OPTION)	1
39	125-	PUMP 250 M <sup>3</sup> (OPTION)	1
40	001-0199	SUPPORT	4
41	052-4240	HEX. BOLT M10 x 30 S.S.	4
42	003-0083	ELBOW BELLOW CONNECTOR	1
43	004-0505	VACUUM/ATMOSPHERE VALVE ASSY	1
44	051-0380	HEX. BOLT 3/8"-16 x 1 1/2" S.S.	2
45	101-0190	STRAIGHT 1/8" MNPT x 1/4" HOSE	2
46	056-0167	KEY 1/4" SQ x 1" W/ ROUNDED END	4
47	052-0402	HEX. BOLT 1/4"-20 x 1 1/2" BRASS	4



MACHINE: **680A**

PART: **SIPROMAC**

ST-GERMAIN DE GRANTHAM  
QUEBEC CANADA

ITEM: **MACHINE ASSEMBLY REAR VIEW**

DATE: 99-11-29

SCALE: 1

NO. **005A0439**

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

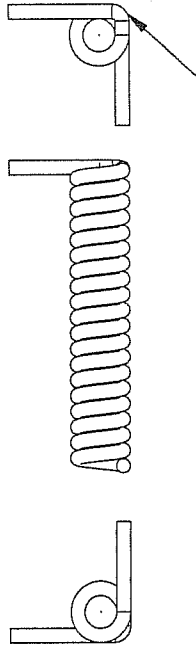
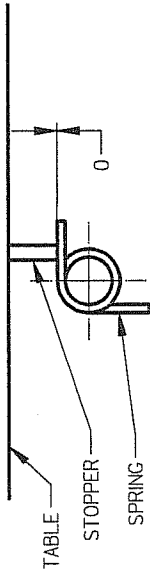
DATE: \_\_\_\_\_

LET.	MODIFICATION	DATE	INT.
D	MODIF. #A-0337	02-11-06	Y.C.
C	REDRAWN/ ADD KEYWAY ON COVER ARM	99-11-29	S.L.
B	CHANGE PIPE ON ITEM #42 FOR ITEM #47	99-04-07	S.L.
A	WAS 004-0217 / MODIF. #A-0281	98-01-15	M.L.
	RE-DRAWN		

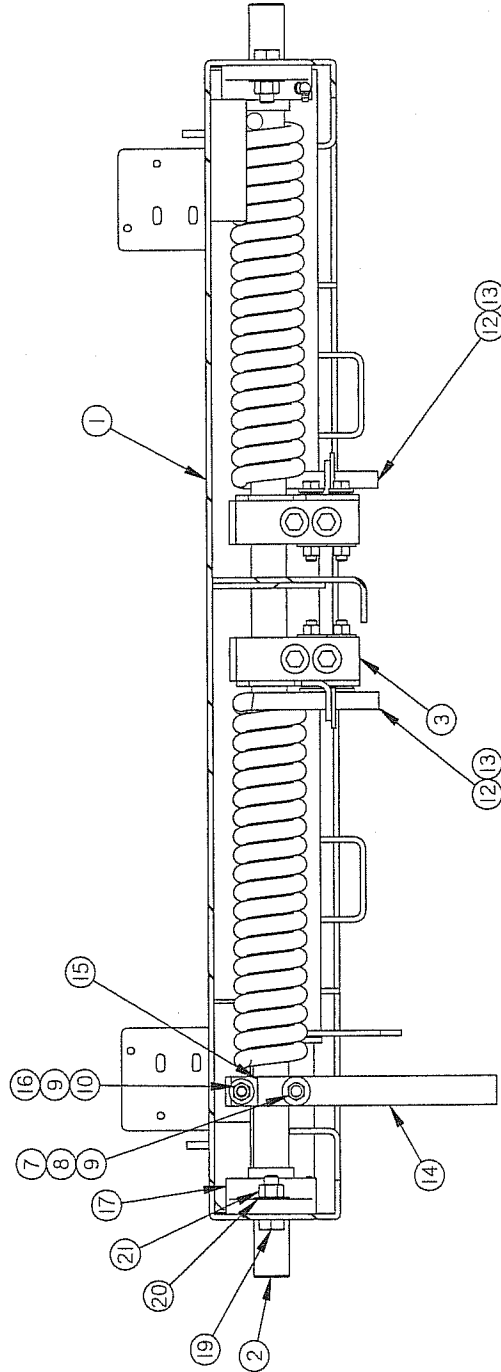
1004A0239

SPRING ADJUSTMENT PROCEDURE

- A - PLACE COVER UP ( ARMS VERTICAL ) TO FREE TENSION OF SPRINGS.
- B - LOOSEN BOLTS ITEM #10 ON THE LEFT & RIGHT SPRING SUPPORT PLATE ASSY ITEM #4 & #5
- C - TURN SPRING/BLOCK ASSEMBLY TO OBTAIN 0mm AS SHOWN BELOW.
- D - RETIGHTEN BOLTS ITEM #10 ON LEFT & RIGHT SPRING SUPPORT PLATE ASSY

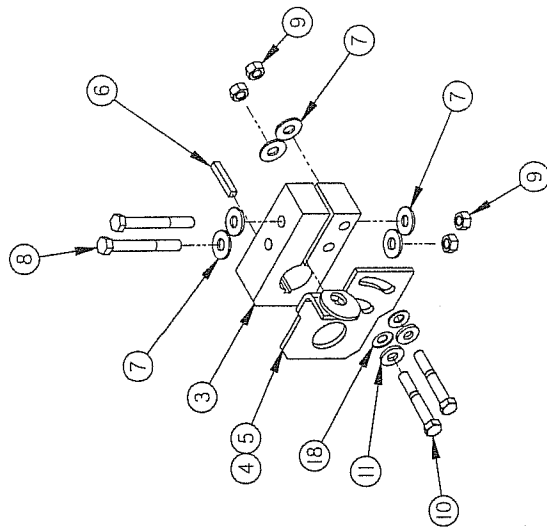


IF THE END OF THE SPRING HAS A 90° CORNER AS SHOWN,  
THIS END IS TO BE INSERTED INTO ITEMS #4 & #5



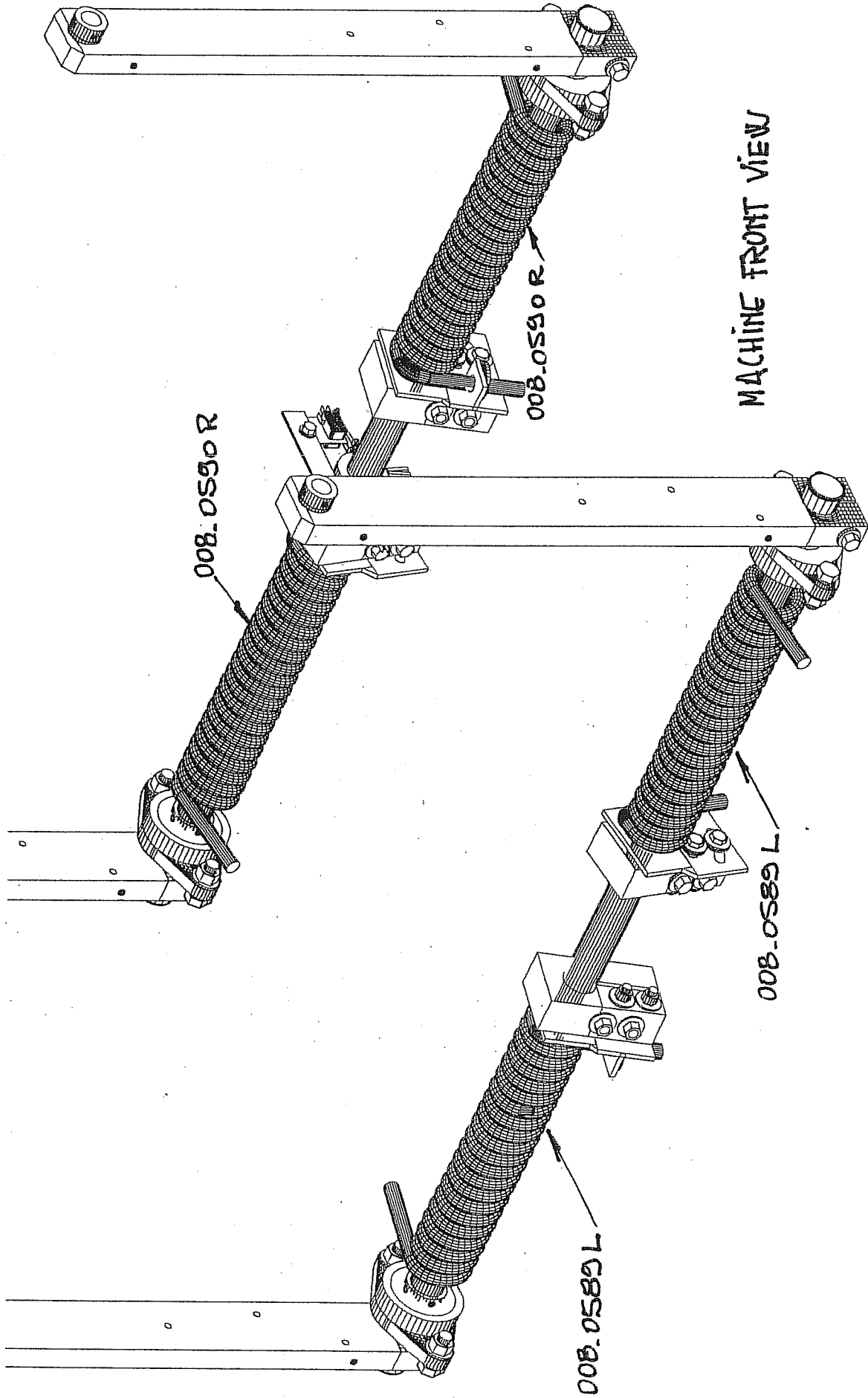
SECTION A-A

ITEM	PART #	DESCRIPTION	QT.
1	005-0436	TABLE ASSEMBLY	1
2	009A0054	CENTRAL SHAFT	2
3	002A0319	SPRING BLOCK	4
4	004A0222	LEFT SPRING SUPPORT ASSY	2
5	004A0170	RIGHT SPRING SUPPORT ASSY	2
6	056-0168	KEY 1/4" SQ. x 1-1/2"	4
7	052-2060	FLAT WASHER 3/8" ZINC	28
8	052-0777	BOLT 3/8"-24 x 3" ZINC	10
9	052-3128	NUT 3/8"-24 UNF ZINC	20
10	052-0775	BOLT 3/8"-24x2-1/2" ZINC	10
11	051-0783	WASHER 3/8" FLAT THICK S/S	8
12	008-0590	LEFT COVER SPRING	2
13	008-0589	RIGHT COVER SPRING	2
14	004A0382	AUTO. MOVEMENT ARM ASSY	2
15	056-0167	KEY 1/4"sq.x1" OVERSIZED	2
16	051-0780	WASHER 3/8" FLAT S/S	4
17	075-1650	FLANGED BEARING W/ GREASE FITTING 90°	4
18	052-2071	WASHER 3/8" CONTACT BELLVILLE STL.	8
19	051-0441	BOLT 1/2"-13 x 1 1/2" SS	8
20	051-0790	WASHER 1/2" FLAT SS	8
21	051-0630	NUT 1/2"-13 SS	8



MACHINE: 680A  
 PART: TABLE & CENTRAL SHAFT ASSY  
 ITEM: CMC  
 DATE: 04-08-27  
 DWG BY: B.C.  
 APP BY: [Signature]
 N.T.S.  
 DEPT: M  
 QTY: 1  
 NO: 004A0239  
 DATE: 04-08-27  
 DATE: 04-11-93  
 SIPROMAC  
 ST-GERMAIN DE GRANTHAM  
 QUEBEC CANADA

A LET. REDRAWN S.E. 04-08-27 B.C. DATE INT. MODIFICATION



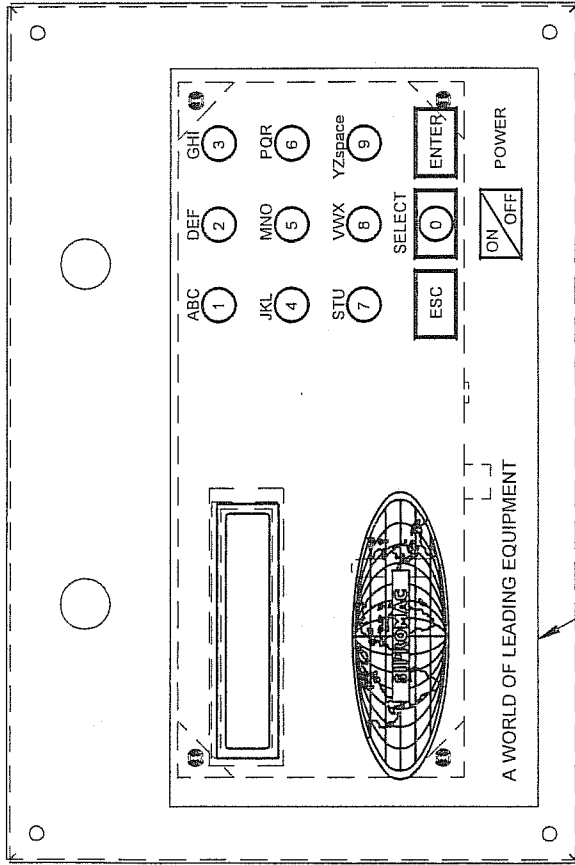
650-680-700 A

CENTRAL SHAFT ASSEMBLY



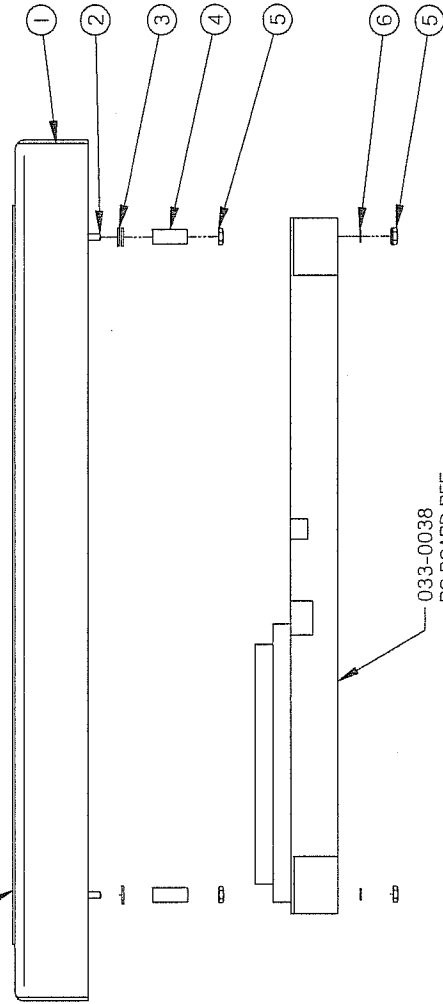
005A0392

ITEM	PART #	DESCRIPTION	QTY.
1	004A0378	FRONT P.C. BOARD SUPPORT PRE-ASSY	1
2	051-0092	SCREW #4-40 x 1 1/4" FLAT SLT S/S	4
3	051-0713	WASHER #4 FLAT S/S	4
4	058-0120	CPVC SPACER 0.120" x 1/4" x 5/8"	4
5	051-0540	NUT #4-40 HEX S/S	8
6	051-0715	WASHER #4 LOCK SS	4



USE JIG TO INSTALL, IN REGARDS TO OPENINGS IN ITEM #1

033-0015 OR 033-0017  
KEYBOARD (NOT INCLUDED)

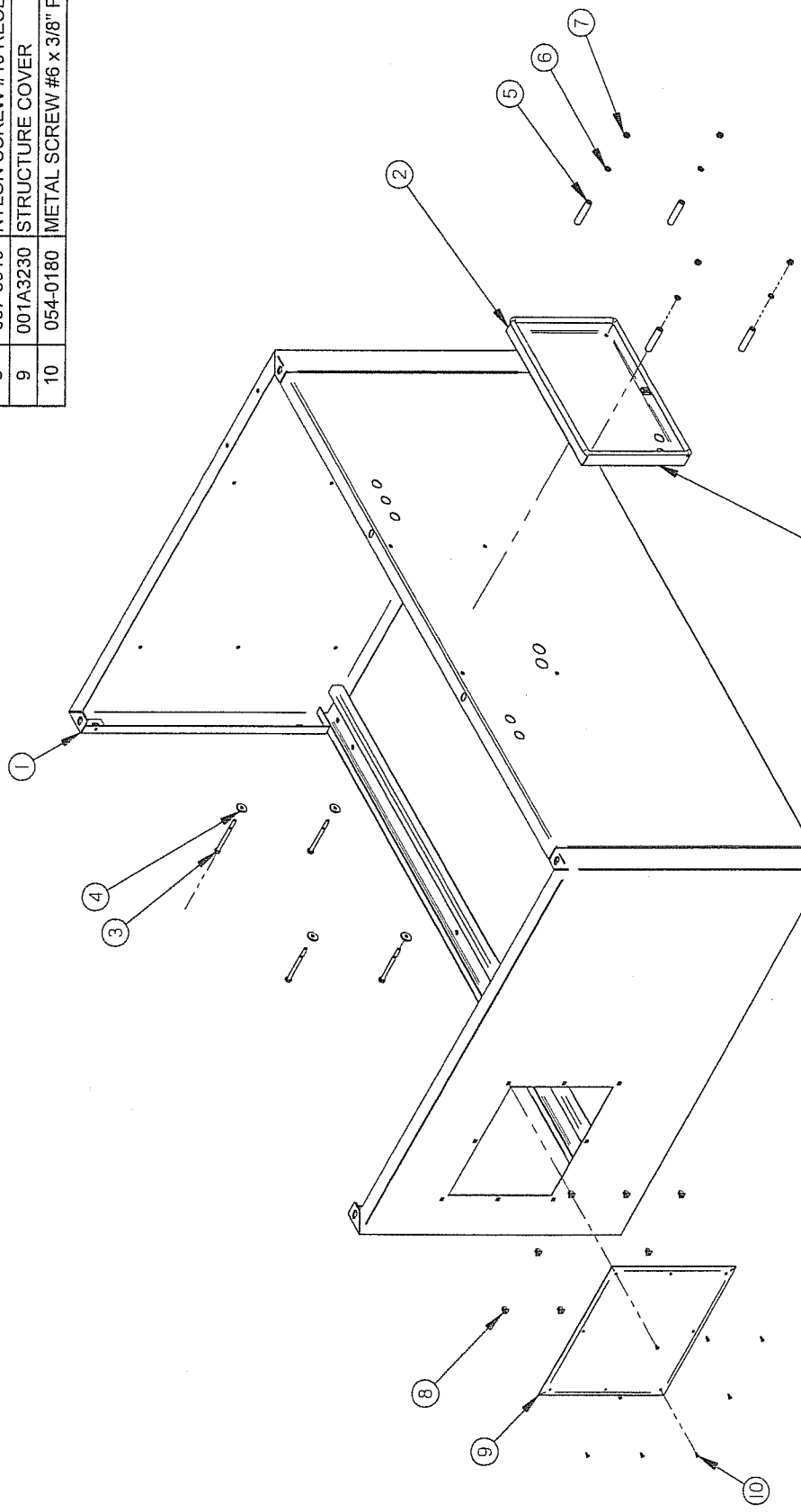


MACHINE	680A & 700A	DEPT. 101	METRIC	INCH
USINAGE	± 0.1	± 0.004		
OLEVAGE	± 0.05	± 0.002		
SCOURAGE	± 0.5	± 0.002		
PART	FRONT PC BOARD SUPPORT ASSY	N.T.S.		
ITEM	CNC	DEPT.	M	QTY. 1
DWG BY	M.A.L.	DATE	05-08-11	NO
APP. BY		DATE	05-10-25	005A0392

E	REDRAWN/GASKET REMOVED	060811	M.A.
LET.	MODIFICATION		DATE INT.

005-0472

ITEM	PART #	DESCRIPTION	QT.
1	004-0176	STRUCTURE PRE-ASSY	1
2	005-0582	REAR MC-40 SUPPORT ASSY	1
3	051-0287	BOLT 1/4-20 x 3-1/4" S/S	4
4	051-0757	WASHER 1/4" FLAT THICK S/S	4
5	058-0140	PLASTIC SPACER 0.266" x 1/2" x 2 1/4"	4
6	051-0750	WASHER 1/4" LOCK S/S	4
7	051-0580	NUT 1/4"-20nc. S/S	4
8	057-5010	NYLON SCREW #10 RECEPTACLE INSERT	8
9	001A3230	STRUCTURE COVER	1
10	054-0180	METAL SCREW #6 x 3/8" PAN SLOT S/S	8



-UNE FOIS L'ITEM 2 INSTALLÉ, UTILISER DE L'ADHÉSIF MARIN 5200 #169-0210 POUR SCELLER LE HAUT, LES CÔTÉS ET LES COINS DU BAS (LE CÔTÉ DU DESSOUS N'EST PAS SCELLÉ)  
 -ONCE ITEM 2 IS INSTALLED, USE 169-0210 5200 MARINE ADHESIVE TO SEAL TOP, SIDES & BOTTOM CORNERS (UNDER SIDE NOT SEALED).

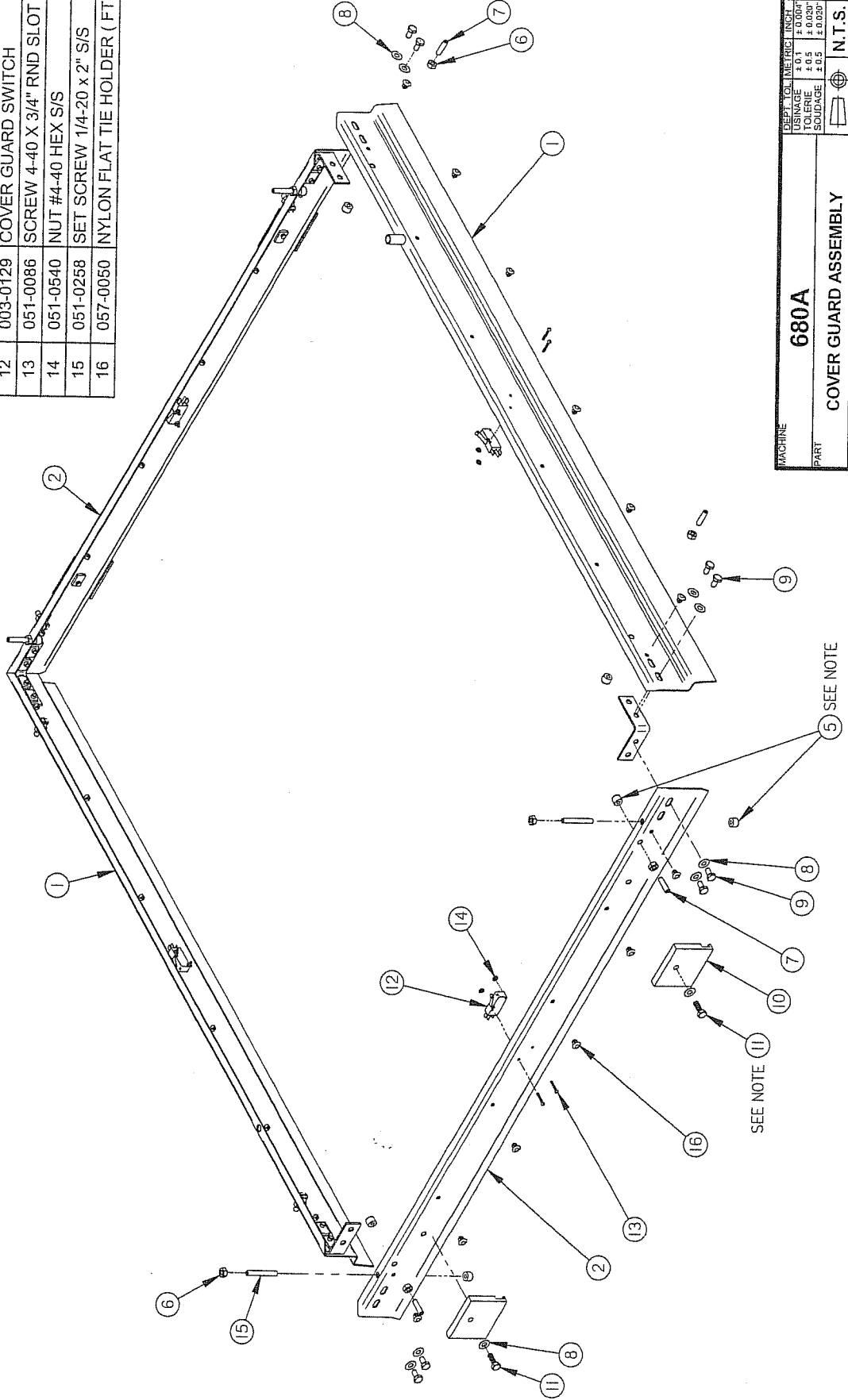
MACHINE	700A & 680A	DEPT. TOL. METRIC INCH	±0.1 ±0.004	STIPROMAC
PART	STRUCTURE ASSY	USINAGE	±0.5 ±0.002	ST-GERMAN DE GRANTHAM
ITEM		SOUDAGE	±0.5 ±0.002	QUÉBEC CANADA
DATE	04-02-17	N.T.S.		DEPT.
APP. BY		M-1		QTY.
		NO		005-0472

B	AJOUTER 680A	0404-22	J.G.
A	REDESSINE ET MODIF. #A-0382	0402-17	B.C.
LET.	MODIFICATION	DATE	INT.

1005-0617

ITEM	PART #	DESCRIPTION	QT
1	004-0214	COVER GUARD PRE ASSY	2
2	004-0215	SIDE COVER GUARD PRE-ASSY	2
3	004-0208	COVER GUARD CORNER ASSY	4
5	057-0120	PLASTIC THUMB NUT 1/4-20 "	12
6	051-0580	NUT 1/4"-20nc. S/S	12
7	051-0217	SET SCREW 1/4"-20nc. X 1" S/S	8
8	051-0740	WASHER 1/4" FLAT S/S	20
9	051-0180	BOLT. HEX. 1/4"-20 NC. x 1/2" S/S	16
10	002-0491	COVER GUARD BUMPER	4
11	051-0190	BOLT 1/4-20 x 3/4" HEX S/S	4
12	003-0129	COVER GUARD SWITCH	4
13	051-0086	SCREW 4-40 X 3/4" RND SLOT S/S	8
14	051-0540	NUT #4-40 HEX S/S	8
15	051-0258	SET SCREW 1/4-20 x 2" S/S	4
16	057-0050	NYLON FLAT TIE HOLDER ( FTH-9 )	24

**NOTE:**  
-USE "BLUE-242" THREAD LOCK #169-0415



MACHINE		DEPTH	TOL	METRIC	INCH
PART		USINAGE	±0.1	±0.004	
ITEM		TOLERIE	±0.5	±0.020	
DATE		SOUDAGE	±0.5	±0.030	
DRAWN BY		N.T.S.			
APP BY		DEPT.			
DATE		NO			
DATE		M-I			
DATE		QTY.			
DATE		1			

**680A**  
COVER GUARD ASSEMBLY

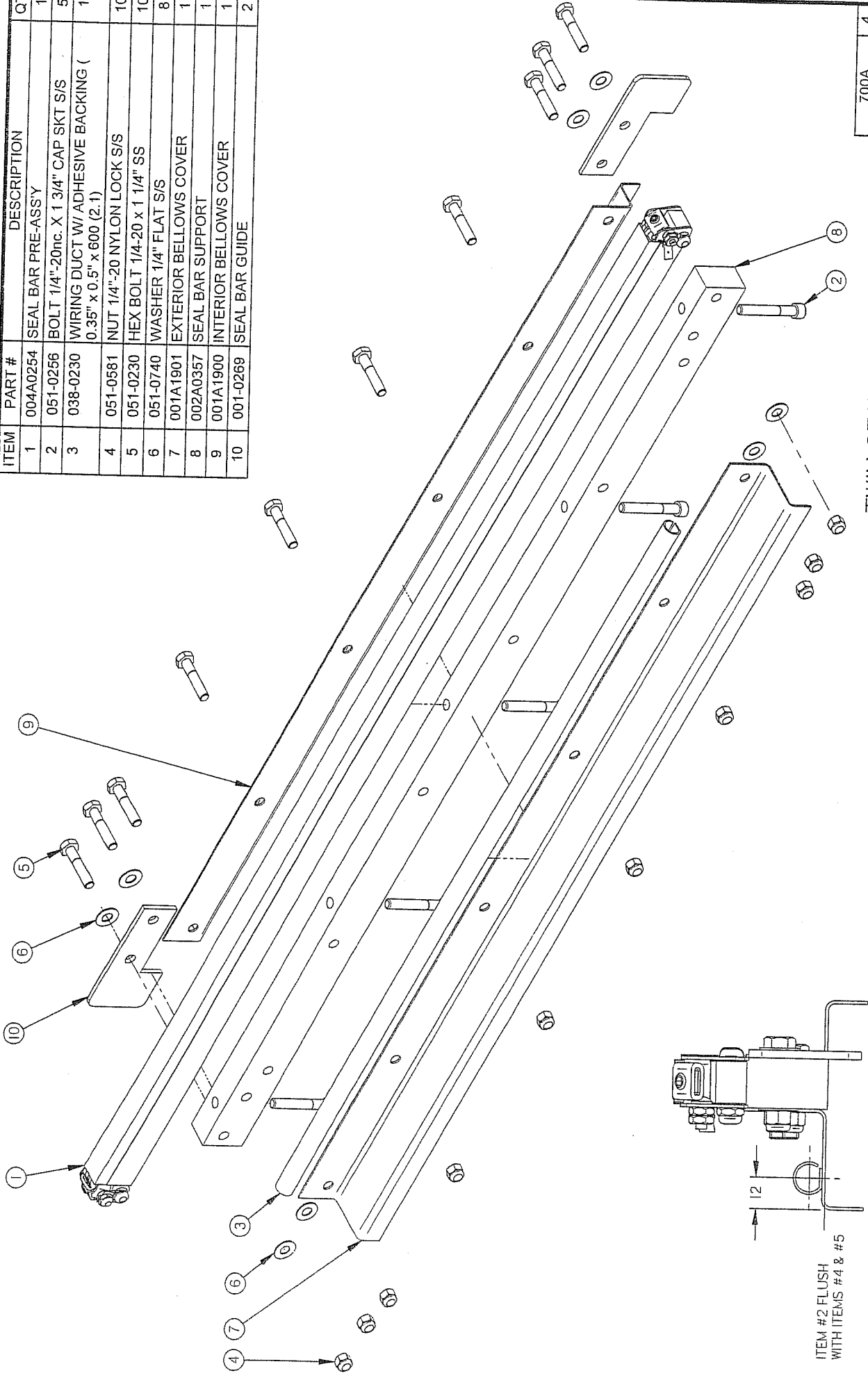
SIPROMAC  
ST-GERMAIN DE GRANTHAM  
QUEBEC CANADA

005-0617

A	REDRAWN S.E.	04-08-02	B.C.
LET.	MODIFICATION	DATE	INT.

# 005B0547

ITEM	PART #	DESCRIPTION	QT.
1	004A0254	SEAL BAR PRE-ASSY	1
2	051-0256	BOLT 1/4"-20nc. X 1 3/4" CAP SKT S/S	5
3	038-0230	WIRING DUCT W/ ADHESIVE BACKING ( 0.35" x 0.5" x 600 (2:1)	1
4	051-0581	NUT 1/4"-20 NYLON LOCK S/S	10
5	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	10
6	051-0740	WASHER 1/4" FLAT S/S	8
7	001A1901	EXTERIOR BELLOWS COVER	1
8	002A0357	SEAL BAR SUPPORT	1
9	001A1900	INTERIOR BELLOWS COVER	1
10	001-0269	SEAL BAR GUIDE	2



-TWIN SEAL\_OPTION-

MACHINE	700A	4
	680A	4
	650A	4
MACHINE_QTY		
PART	SIPROMAC	
	ST-GERMAIN DE GRANTHAM	
	QUEBEC CANADA	
ITEM	DEPT.	QTY
	M-I	LIST
DATE 06-01-16		
DRAWN BY M.A.L.		
APP BY V.M.E.		
NO 005B0547		

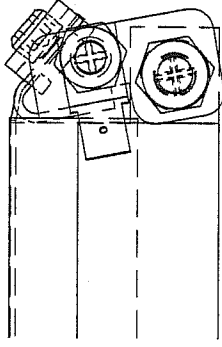
MACHINE		650A, 680A & 700A
PART		SEAL BAR ASSY WISUPPORT
ITEM		N.T.S.
MATERIAL		
CNC		
DATE		06-01-16
DRAWN BY		M.A.L.
APP BY		V.M.E.
NO		005B0547
DATE INT.		
M.A.		
REDRAWN		
MODIFICATION		

ITEM #2 FLUSH WITH ITEMS #4 & #5

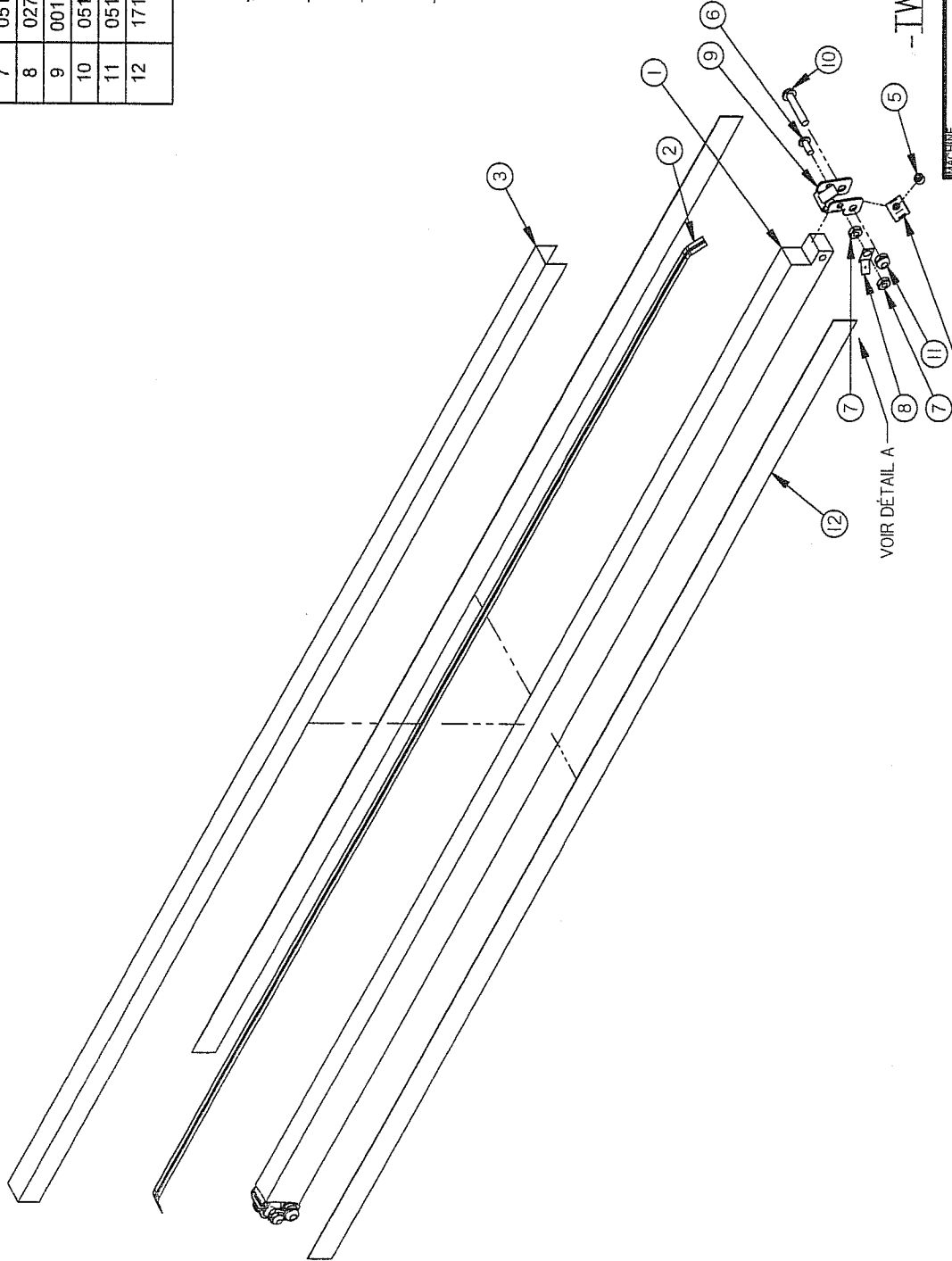
VUE A

1004A0254

ITEM	PART #	DESCRIPTION	QT.
1	002A0332	SEAL BAR	1
2	039-0268	DOUBLE SEAM BAND (8MM) (3.1)	1
3	176-0200	TEFLON TAPE 5MIL (0.104)	1
4	056-1401	3/8" SET SCREW BANDING BUCKLE S/S	2
5	052-0393	SCREW 1/4-28x3/16" SKT SET OVAL POINT ZINC	2
6	051-0100	SCREW 8-32 X 3/8" PAN PHIL S/S	2
7	051-0550	NUT #8-32 SS	4
8	027-0400	CONNECTOR ADAPTOR	2
9	001A2742	8mm ELEMENT BINDER	2
10	051-0146	SCREW 10-24 X 1" PAN PHIL S/S	2
11	051-0572	LOCK NUT #10-24 S/S	2
12	171-0180	TAPE CLEAR SUPER BOND 3/4" 854.5mm (0.026)	2



-DÉTAIL A-



-TWIN SEAL OPTION-

700A	4
680A	4
650A	4
580A	2
MACHINE	QTY

USINAGE	± 0.020"
TOLERANCE	± 0.5
SOUDEAGE	± 0.5
FINISSE	N.T.S.
DEPT.	

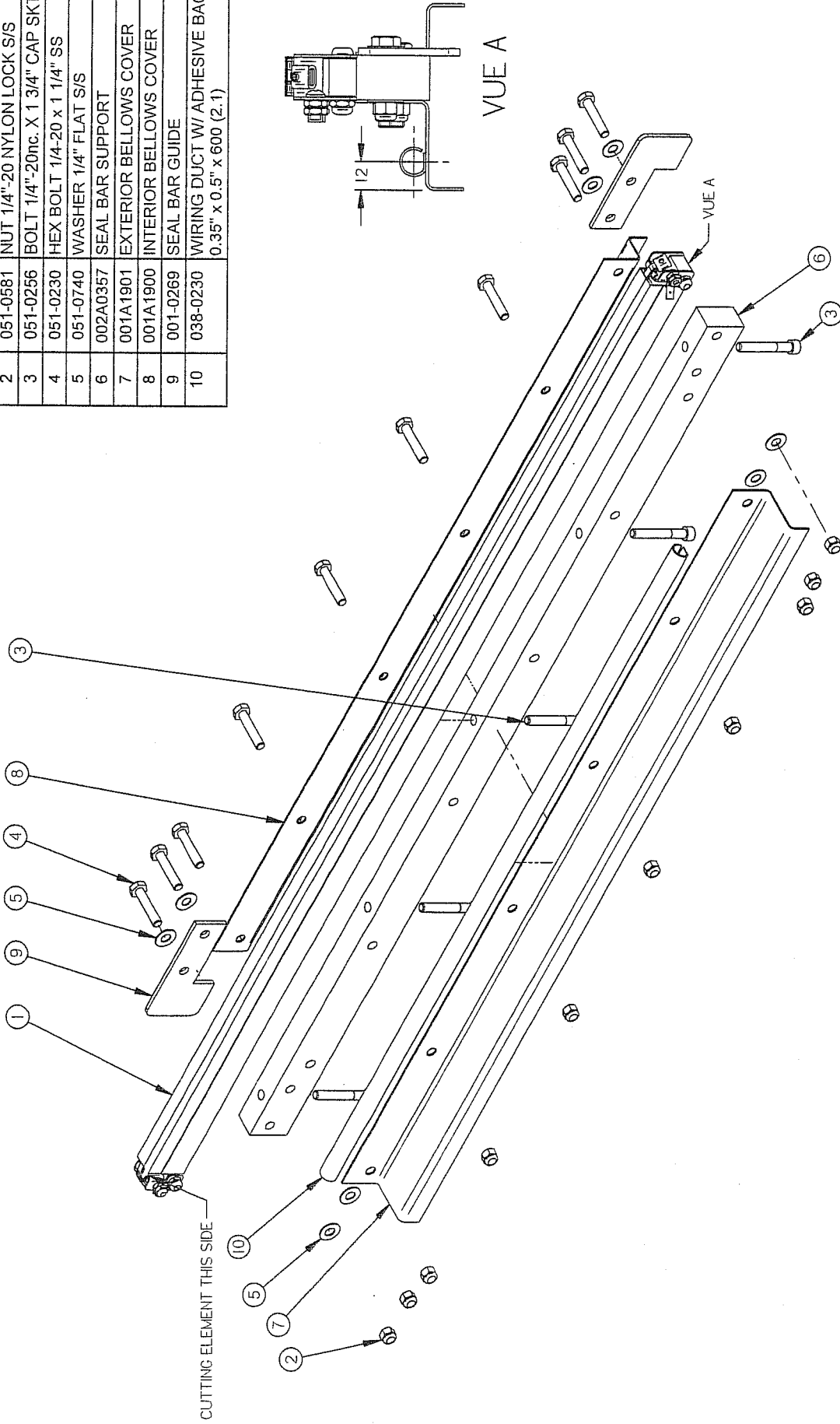
PROJETS	580A, 650A, 680A & 700A
PART	SEAL BAR PRE-ASSY
DATE	06-01-16
APP. BY	M.A.L.
NO	004A0254
LIST	

INSTALLER CONTRE L'ENCOCHE DE L'ITEM #8 (4) INSTALL AGAINST NOTCH OF ITEM #8

E	ADDED 052-0393	06-04-19	M.A.
D	REDRAWN	06-01-16	M.A.
LET.	MODIFICATION	DATE	INT.

# 005B0548

ITEM	PART #	DESCRIPTION	QT.
1	004A0255	SEAL BAR PRE-ASSY	1
2	051-0581	NUT 1/4"-20 NYLON LOCK S/S	10
3	051-0256	BOLT 1/4"-20nc. X 1 3/4" CAP SKT S/S	5
4	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	10
5	051-0740	WASHER 1/4" FLAT S/S	8
6	002A0357	SEAL BAR SUPPORT	1
7	001A1901	EXTERIOR BELLOWS COVER	1
8	001A1900	INTERIOR BELLOWS COVER	1
9	001-0269	SEAL BAR GUIDE	2
10	038-0230	WIRING DUCT W/ ADHESIVE BACKING ( 0.35" x 0.5" x 600 (2.1)	1



-BAG CUT OPTION-

MACHINE	650A, 680A & 700A
PART	SEAL BAR ASSY W/SUPPORT
ITEM	
DATE	06-01-16
BY	M.A.L.
APP. BY	
DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

F	REDRAWN	06-01-16	M.A.
LET.	MODIFICATION		INT.

MACHINE	700A	4
	680A	4
	650A	4
	MACHINE	QTY

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

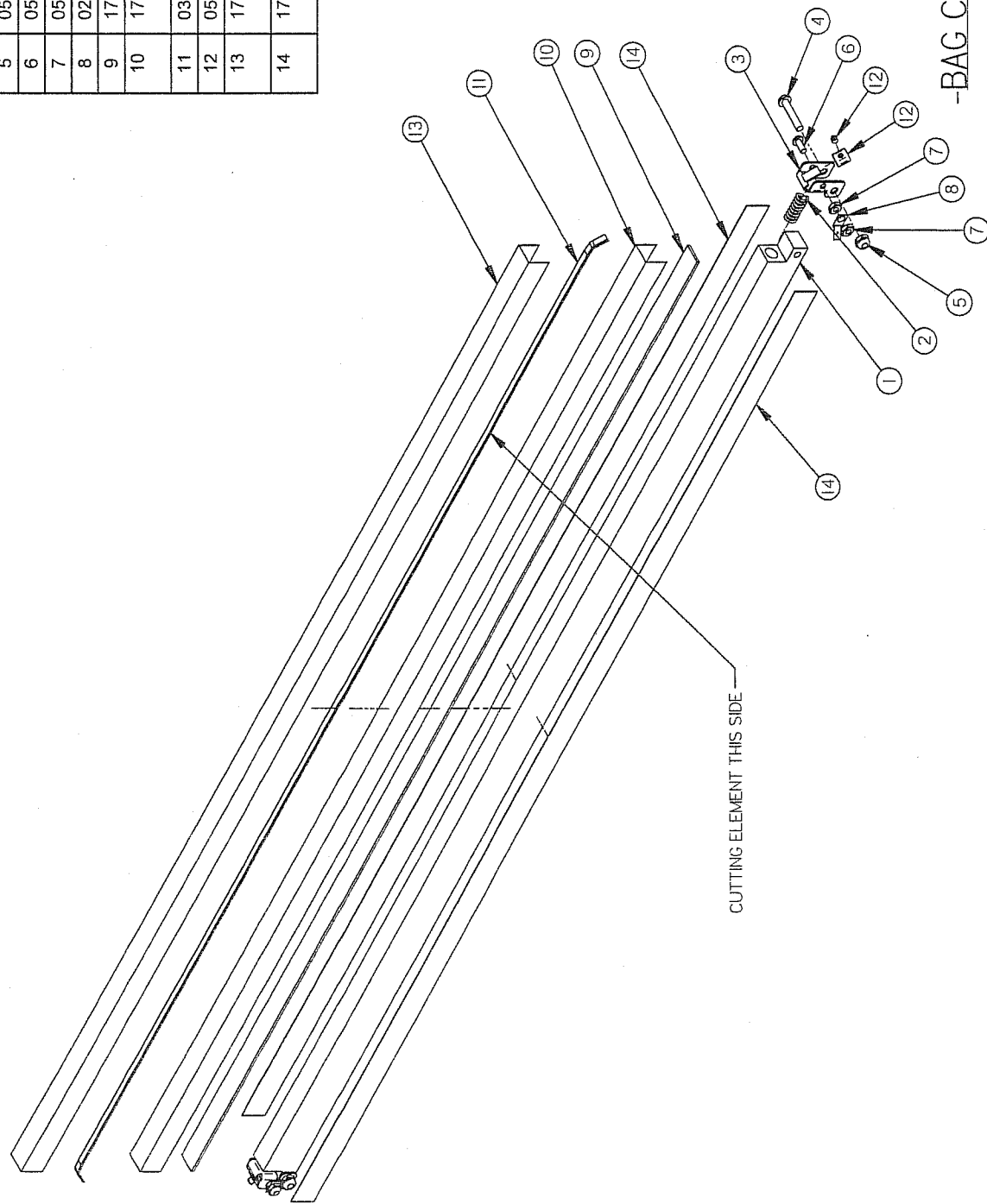
DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

DEPT.	M-I
NO.	005B0548

**004A0255**

ITEM	PART #	DESCRIPTION	QT.
1	009A0193	ECO SEAL BAR	1
2	077-0095	SPRING C 0360-059-1250 S/S	2
3	001-2666	ELEMENT BINDER	2
4	051-0146	SCREW 10-24 X 1" PAN PHIL S/S	2
5	051-0572	LOCK NUT #10-24 S/S	2
6	051-0100	SCREW 8-32 X 3/8" PAN PHIL S/S	2
7	051-0550	NUT #8-32 SS	4
8	027-0400	CONNECTOR ADAPTOR	2
9	179-0003	SILICONE 2mm x 15mm ADHESIVE (0.89)	1
10	176-0220	TEFLON TAPE, PRESS SENSITIVE 2" 854.5mm (0.104)	1
11	039-0269	SEAL CUT ELEMENT (0.0892)	1
12	056-1400	1/4" SET SCREW BANDING BUCKLE S/S	2
13	176-0203	TEFLON TAPE, 5MIL UNCOATED ZONE 854.5mm (0.085)	1
14	171-0180	TAPE CLEAR SUPER BOND 3/4" 854.5mm (0.026)	2



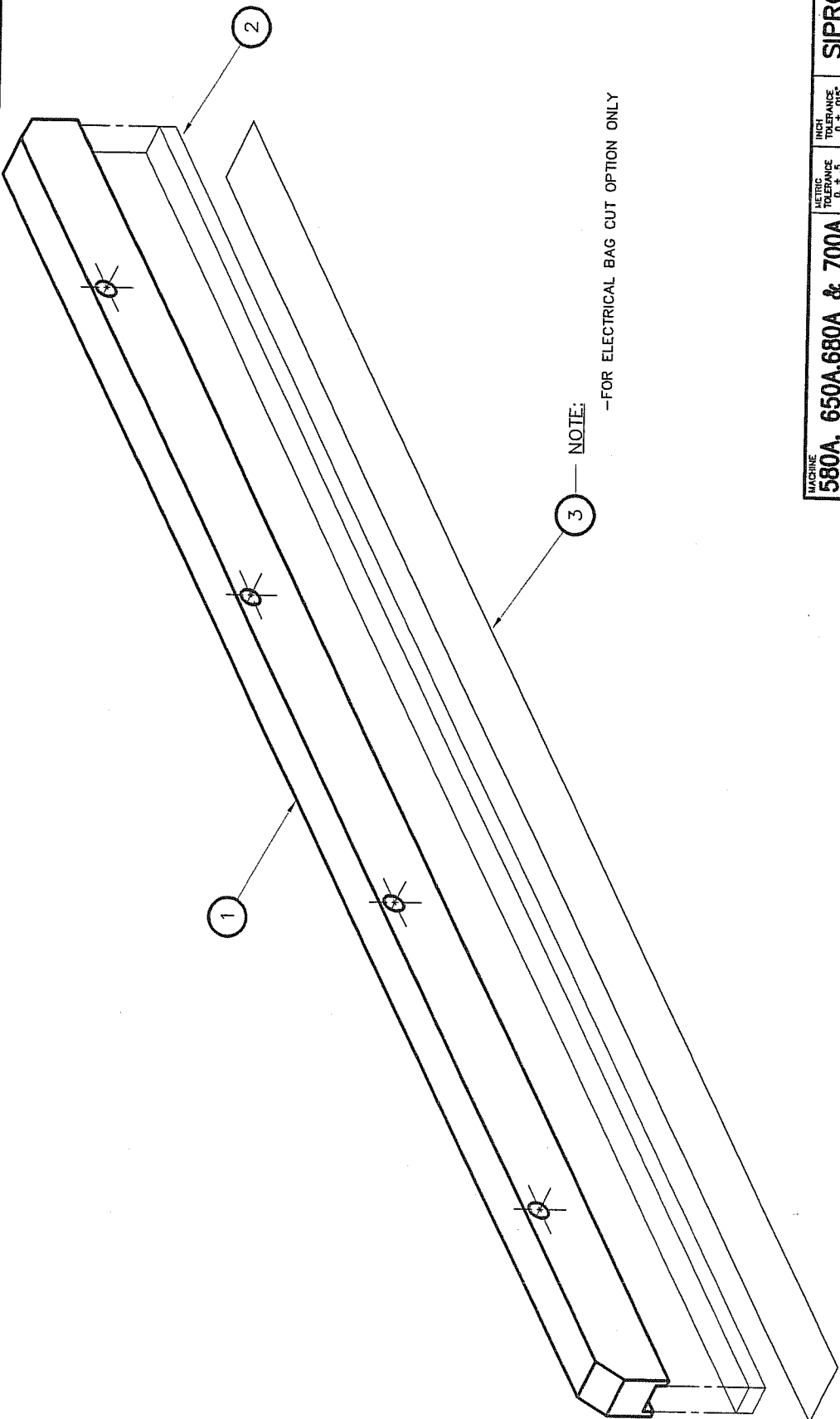
-BAG CUT OPTION-

700A	4
680A	4
650A	4
580A	2
MACHINE QTY	

MACHINE <b>580A, 650A, 680A &amp; 700A</b>	DEPT. TOL. METRIC INCH TOLERANCE ± 0.5 ± 0.025 SOUDAGE ± 0.5 ± 0.020	INCH
PART	DATE	NO.
ITEM	DATE	NO.
MAT.	DATE	NO.
SEAL BAR PRE-ASSY		
CNC	DATE	NO.
APP. BY	DATE	NO.
N.T.S.		
SIPROMAC		
ST. GERMAN DE GRANTHAM		
QUEBEC CANADA		
M-I	QTY	LIST
		<b>004A0255</b>

LET.	REDESSINE	06-01-16	M.A.
	MODIFICATION	DATE	INT.

ITEM	PART #	DESCRIPTION	QTY.
1	002B0364	UPPER SEAL BAR SUPPORT	2
2	008-0374	UPPER SEAL BAR RUBBER	2
3	176-0200	TEFLON TAPE (5S) ADHESIVE (2" x 936MM) 0.12	



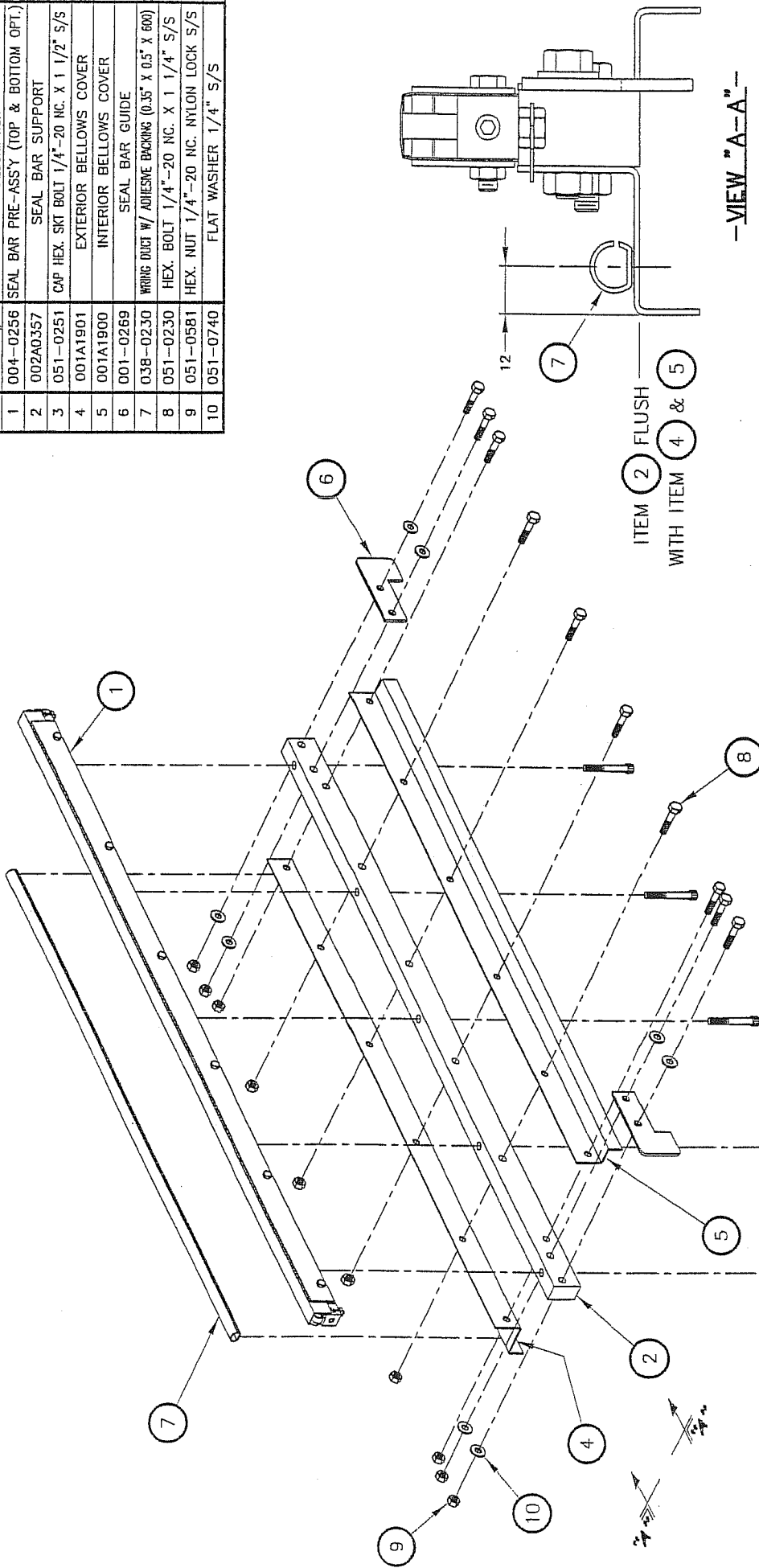
NOTE:  
-FOR ELECTRICAL BAG CUT OPTION ONLY

MACHINE	580A, 650A, 680A & 700A	METRIC TOLERANCE	0.00 ± .005 0.00 ± .005 0.00 ± .005 0.00 ± .005	INCH TOLERANCE	0.00 ± .005 0.00 ± .005 0.00 ± .005 0.00 ± .005	ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	UPPER SEAL BAR ASSEMBLY	ANGLE ± 1°	N.T.S.	SCALE	1:1	QTY. 2
ITEM:		DATE	99-08-20	NO	004B0207	
MAT:		BY:	S. LAROUICHE	DATE		

DATE	DATE	DATE	DATE	M.A.L.	S.L.	S.L.	INT.
04-11-08	00-02-01	99-08-20					
ADDED 580A	ADDED 650A WAS 004B0139	REDRAWN WAS 004A0207	MODIFICATION				



ITEM	PART #	DESCRIPTION	QTY.
1	004-0256	SEAL BAR PRE-ASSY (TOP & BOTTOM OPT.)	1
2	002A0357	SEAL BAR SUPPORT	1
3	051-0251	CAP HEX. SKT BOLT 1/4"-20 NC. X 1 1/2" S/S	5
4	001A1901	EXTERIOR BELLOWS COVER	1
5	001A1900	INTERIOR BELLOWS COVER	1
6	001-0269	SEAL BAR GUIDE	2
7	038-0230	WRING DUCT W/ ADHESIVE BACKING (0.35" X 0.5" X 600)	2.07
8	051-0230	HEX. BOLT 1/4"-20 NC. X 1 1/4" S/S	10
9	051-0581	HEX. NUT 1/4"-20 NC. NYLON LOCK S/S	10
10	051-0740	FLAT WASHER 1/4" S/S	8



-VIEW "A-A"-

ITEM 2 FLUSH WITH ITEM 4 & 5

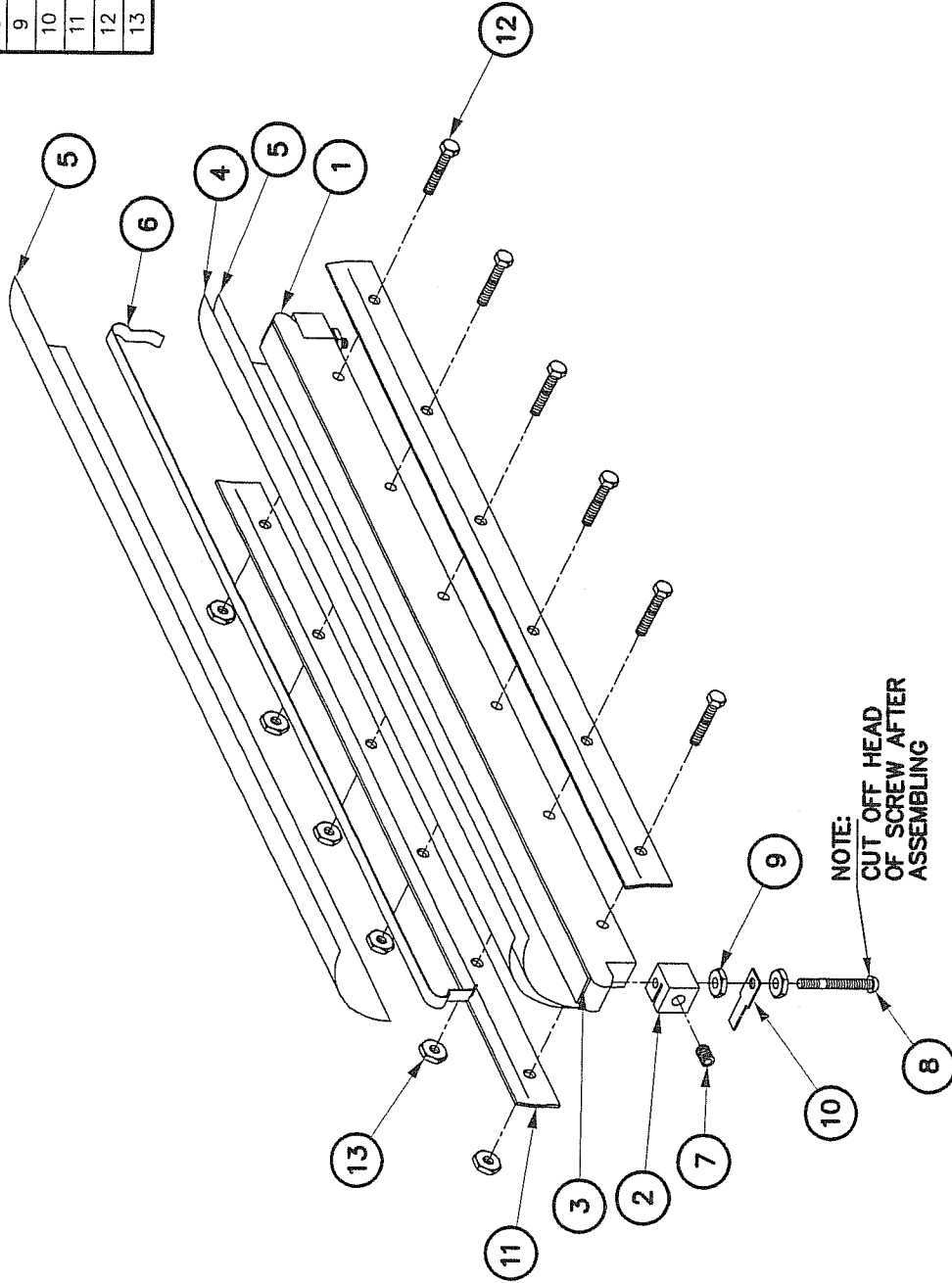
-OPTION-  
TOP & BOTTOM SEALING OR  
BI-ACTIVE SEALING OPTION

MACHINE	650A, 680A & 700A	INCH TOLERANCE +0.0000 -0.0005	METRIC TOLERANCE +0.0000 -0.0005	SCALE	1:1	QTY.	4
PART	SEAL BAR ASS'Y W/ SUPPORT	N.T.S.		DATE	98-03-11	NO.	005A0549
ITEM:		DATE					
APP.		DATE					

LET.	MODIFICATION	DATE	INT.
E	MODIF #A-0389	04-04-27	B.C.
D	ADDED 650A WAS 005A0369	00-02-01	S.L.
C	40 BOLTS #051-0230 WAS 24	98-05-14	L.M.
B	REMOVE BOLTS #051-0250/MODIF. #A-0263	98-03-11	A.P.
A	REDRAWN / MODIF. NO. A-0245		

1004-0256

ITEM	#PART	DESCRIPTION	QT.
1	002-0332	SEAL BAR (TABLE)	1
2	009-0029	CONNECTOR	2
3	179-0003	SILICONE 2mm x 15mm ADHESIVE (852mm EA.)	0.890
4	176-0220	TEFLON TAPE (10S) ADHESIVE (862mm EA.)	0.109
5	176-0200	TEFLON TAPE (5S) ADHESIVE (2 x 862mm)	0.218
6	039-0220	BI-ACTIVE SEALING ELEM. (992mm EA.)	0.104
7	052-0395	SET SCREW 1/4" - 20 x 5/16" (OVAL POINT)	2
8	052-0250	SCREW #8-32 x 1 1/2" RND SLOT BRASS	2
9	051-0550	NUT #8-32 S/S	4
10	027-0400	CONNECTOR ADAPTOR	2
11	001-0266	TEFLON HOLD DOWN PLATE	2
12	051-0147	HEX. BOLT #10-24 x 1" S.S.	6
13	051-0571	HEX. NUT #10-24 S.S.	6



--TOP AND BOTTOM SEALING OPTION--

MACHINE 580A, 650A, 680A & 700A	TOLERANCE ± 0.1 ± 0.004 ± 0.020	FINISH N.T.S.	DATE 95-12-29	NO. 4
PART SEAL BAR ASSEMBLY	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA			M-I
ITEM: _____	GNC: _____	DATE 04-11-29	M.L.	
MAT: _____	APP: _____	DATE 95-12-29	M.L.	
			DATE 04-11-29	M.A.L.
			DATE 04-04-19	J.G.
			DATE 95-12-29	M.L.
LET.	MODIFICATION	DATE	INT.	

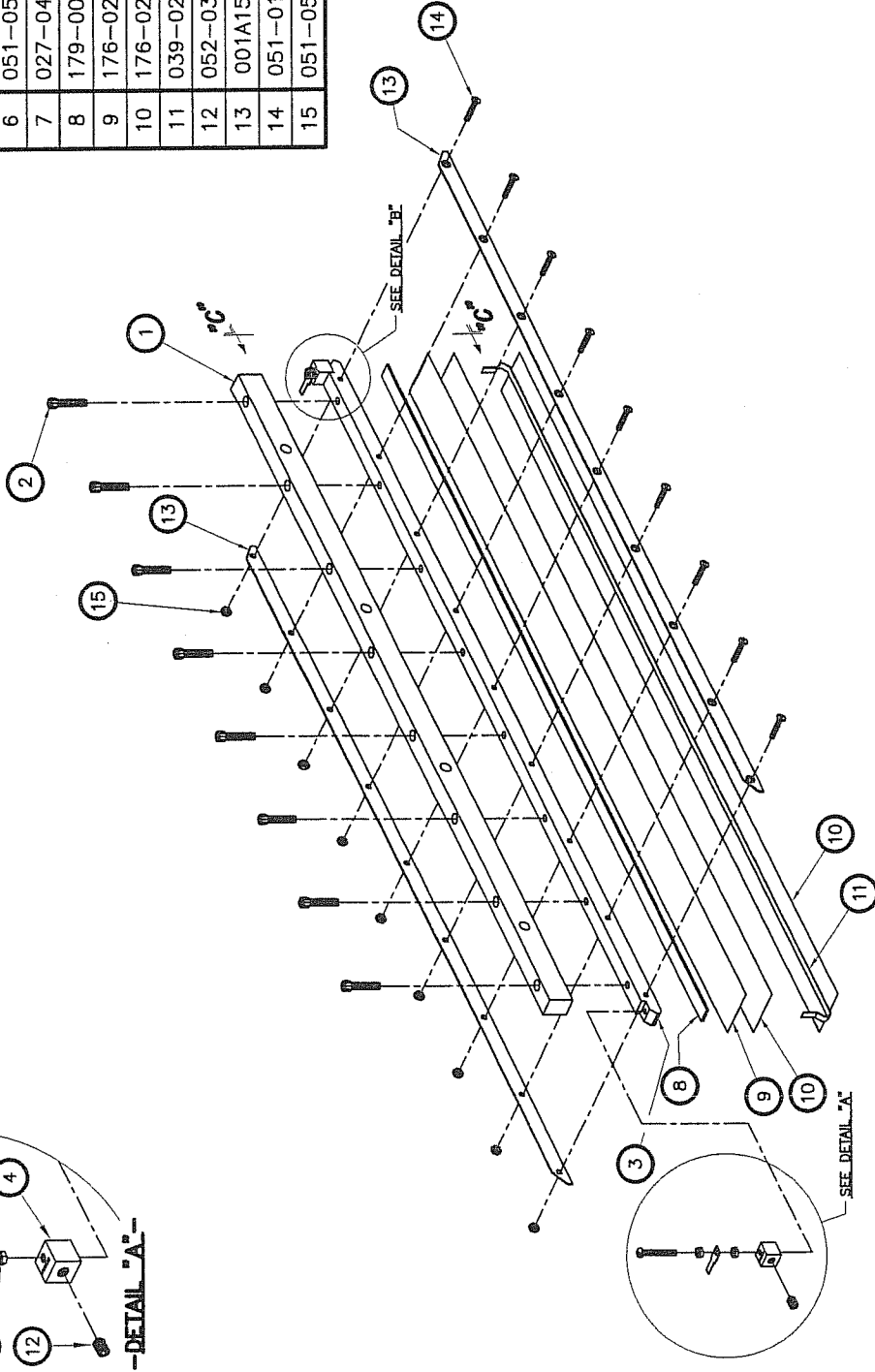
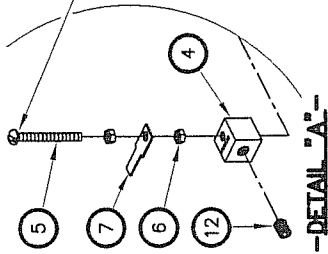
D	ADDED 580A	04-11-29	M.A.L.
C	MODIFICATION #A-0398 (CONNECTEUR)	04-04-19	J.G.
B	RE-DRAWN	95-12-29	M.L.
LET.	MODIFICATION	DATE	INT.

004-0256

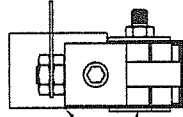
# 005A0437

ITEM	#PART	DESCRIPTION	QT.
1	002A0378	UPPER SEAL BAR SUPPORT	1
2	051-0220	SCREW 1/4"-20 NC. X 1" CAP HEX. SKT S/S	8
3	002A0396	UPPER SEAL BAR	1
4	009-0029	TOP & BOTTOM SEAL CONNECTOR WELDED	2
5	052-0250	SCREW #8-32 NC. X 1 1/2" RND SLOT BRASS	2
6	051-0550	HEX. NUT #8-32 NC. S/S	4
7	027-0400	CONNECTOR ADAPTOR	2
8	179-0003	SILICONE 2mm x 15mm ADHESIVE (852mm EA.)	0.890
9	176-0200	TEFLON TAPE (5S) ADHESIVE (862mm EA.)	0.109
10	176-0220	TEFLON TAPE (10S) ADHESIVE (2x862mm)	0.218
11	039-0220	BI-ACTIVE SEALING ELEM. (992mm EA.)	0.104
12	052-0395	SET SCREW 1/4"-20 NC. X 5/16" (OVAL POINT)	2
13	001A1571	UPPER TEFLON HOLDER	2
14	051-0121	SCREW #8-32 NC. X 1" FLAT PHILL. S/S	9
15	051-0550	HEX. NUT #8-32 NC. S/S	9

**NOTE**-CUT OFF HEAD OF SCREW AFTER ASSEMBLING

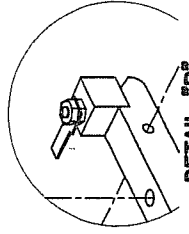


THIS SIDE OF SEAL BAR TO FIT FLUSH W/ SUPPORT



VIEW "C-C"  
(END VIEW ASSEMBLY)

## -TOP & BOTTOM SEALING OPTION-



DETAIL "B"

LET.	DATE	INT.
G	04-12-15	M.A.L.
F	04-04-19	J.G.
E	00-02-01	S.L.
D	98-04-20	A.P.
	MODIFICATION	

**580A, 650A, 680A & 700A**  
 MACHINE TOLERANCES UNLESS OTHERWISE SPECIFIED  
 FINISH: ± 0.004" INCH  
 SURFACE: ± 0.1" INCH  
 TOLERANCE: ± 0.5% INCH  
 SCRAPAGE: ± 0.5% INCH  
 N.T.S.  
 DATE 98-04-20 NO. 005A0437  
 DATE 98-04-20  
 DATE 98-04-20  
 DATE 98-04-20  
 DATE 98-04-20

**SIPROMAC**  
 ST-GERMAIN DE GRANTHAM  
 QUEBEC CANADA

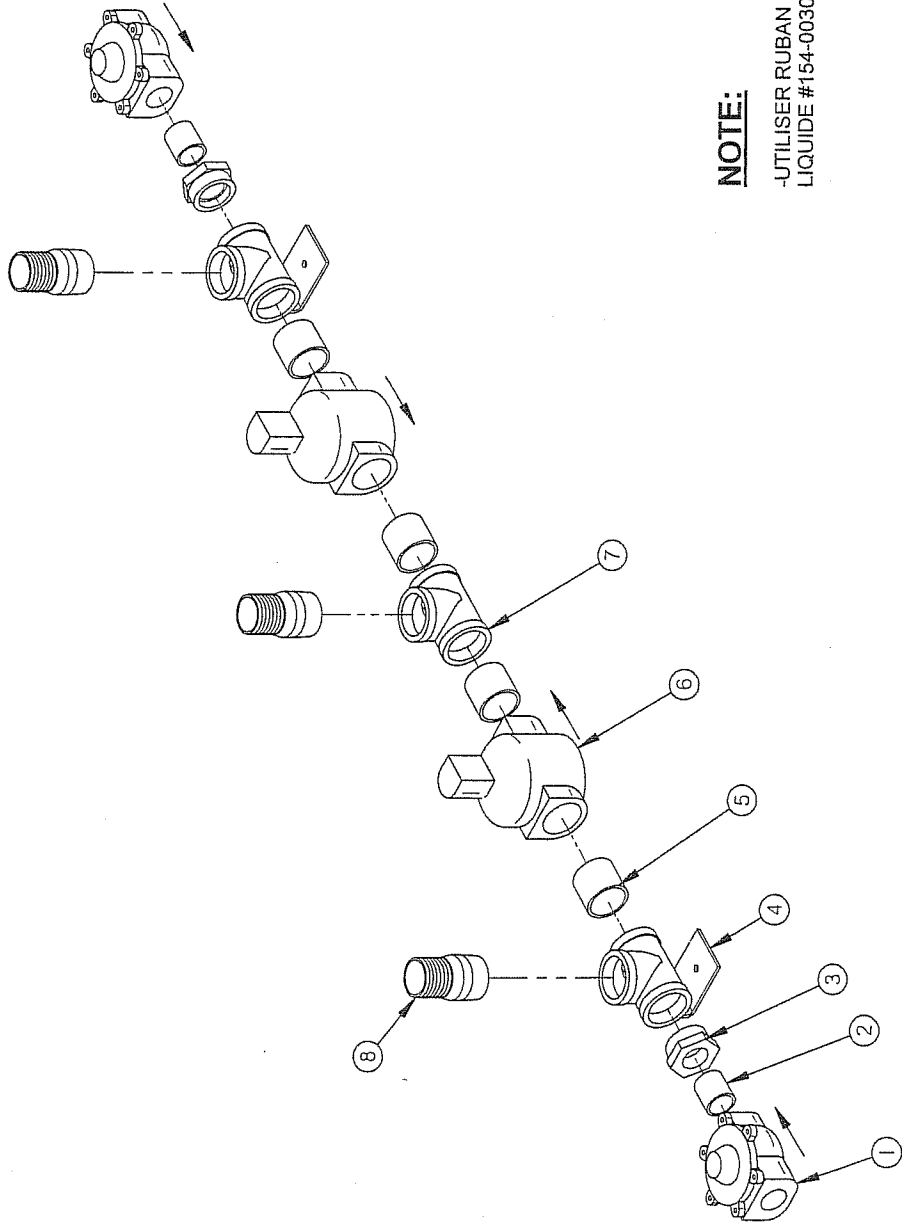
UPPER SEAL BAR ASS'Y W/SUPPORT

ITEM: \_\_\_\_\_ QTY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

DATE 98-04-20 NO. 005A0437  
 DATE 98-04-20  
 DATE 98-04-20  
 DATE 98-04-20

1004-0505

ITEM	PART #	DESCRIPTION	QT.
1	106-0050	VALVE 2WAY 24V 1-1/4"NPT(B60)60Hz	2
2	103-0247	CLOSE NIPPLE 1 1/4" NPT ZINC	2
3	103-0587	RED. BUSH. 2"npt. X 1 1/4"npt ZINC	2
4	004A1621	VAC./ATM. VALVE SUPP. PRE-ASSY	2
5	103-0260	CLOSE NIPPLE 2"NPT ZINC	4
6	106-0060	VALVE 2WAY / 24V / 60Hz / 2" NPT	2
7	103-0487	T 2" NPT GALV.	1
8	103-0760	STRAIGHT 2"mnpt. X 2" HOSE ZINC	3

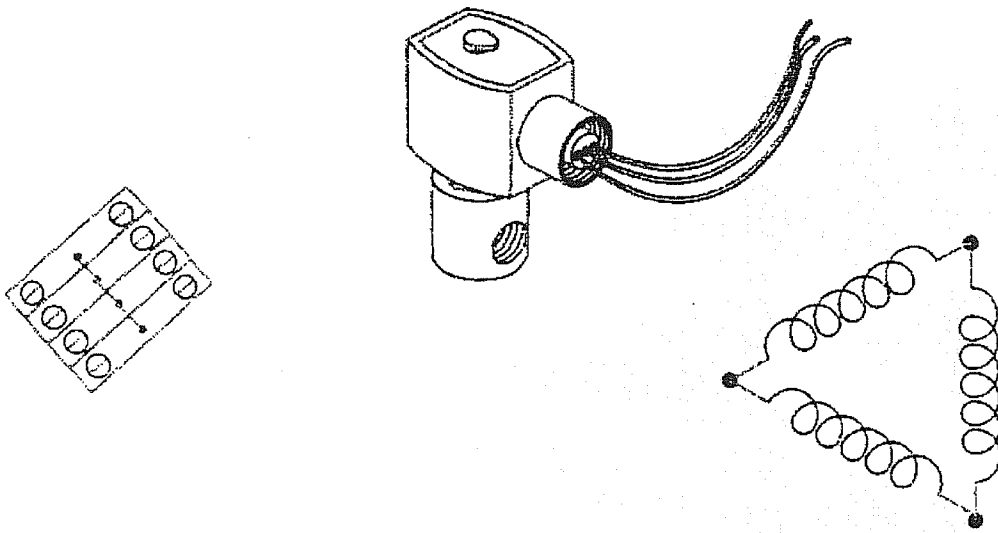


**NOTE:**

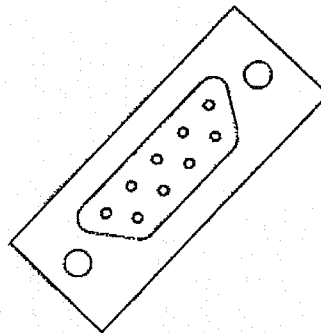
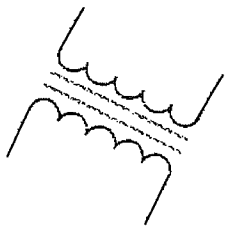
-UTILISER RUBAN DE TEFLON #154-0060 & TEFLON LIQUIDE #154-0030 POUR L'ASSEMBLAGE.

MACHINE		DEPT. FOR METRIC INCH		SIPROMAC	
650A, 680A & 700A		1/16" ± 0.001		ST-GERMAIN DE GRANTHAM	
PART		1/8" ± 0.001		QUEBEC CANADA	
VACUUM / ATMOSPHERE VALVE ASSY		1/4" ± 0.001		DEPT. M-I	
ITEM		3/8" ± 0.001		NO. 004-03-03	
MAT.		SOUDEUSE ± 0.5 ± 0.027		DATE 04-03-03	
		N.T.S.		DATE 05-17-04	
		CNC		APP. BY	
		DWS BY B.C.		QTY. 1	
		APP. BY		NO. 004-0505	

LET.	MODIFICATION	DATE	INT.
H	REMOVED SORT AIR OPTION	05-10-31	M.A.
G	004A1621 WAS 004-0183	06-09-27	M.A.
F	REMOVED 2 ITEMS 103-0092	05-09-21	M.A.
E	REDESSINE ET AJOUT OPTION	04-03-03	B.C.



# ELECTRICAL DRAWING

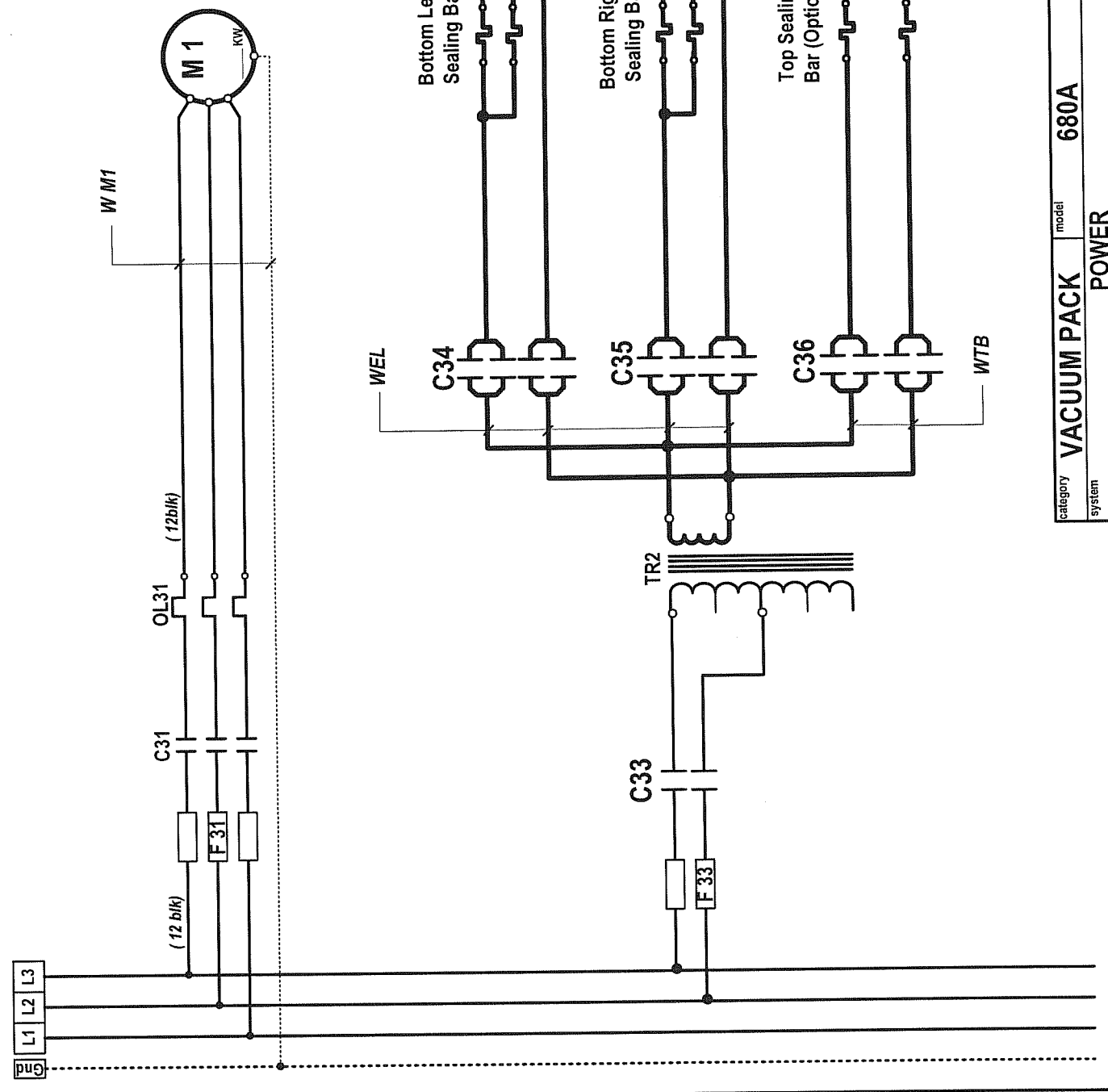


Tested with: V 3 Ph Hz

name plate \_\_\_\_\_  
measured \_\_\_\_\_

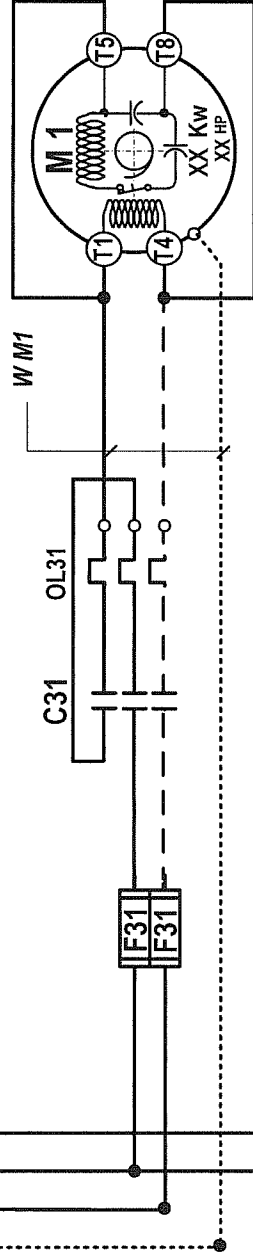
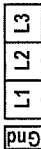
VACCUUM PUMP

- Pump Model : \_\_\_\_\_
- Sn : \_\_\_\_\_
- Motor Model : \_\_\_\_\_
- Sn : \_\_\_\_\_
- Vac : \_\_\_\_\_
- Vacuum : \_\_\_\_\_ mb



category system	VACUUM PACK		model	680A	vol.	3 Ph / 50 Hz			SIPROMAC			
	POWER		circuit		year	month	day	Sk-Germain de Grantham QUEBEC, CANADA				
usual fonctions options					concept	draw	app	DL	PP	PP	DL	006-1610
							18					PAGE 1 de 1

Tested with: V 3 Ph Hz

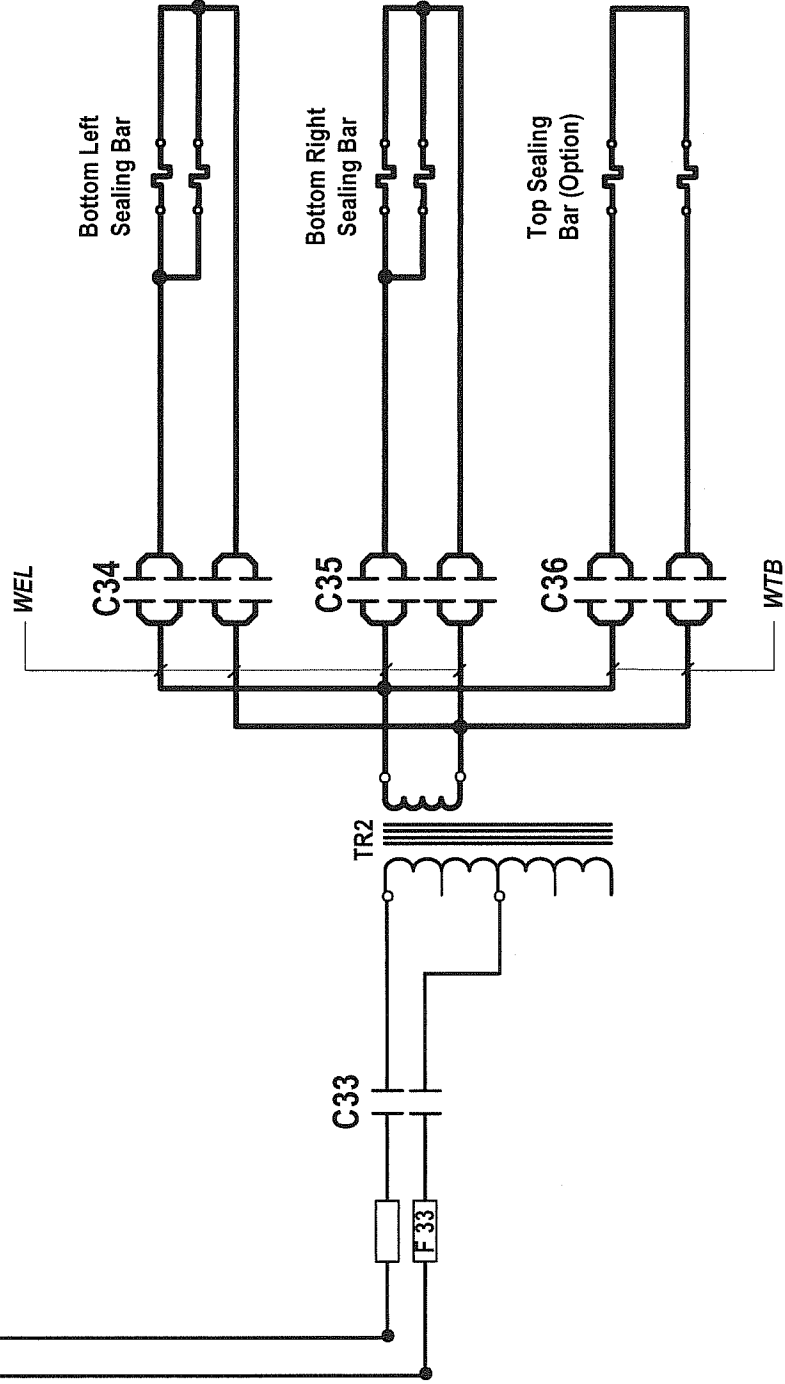


VACUUM PUMP

- Pump Model : \_\_\_\_\_
- Sn : \_\_\_\_\_
- Motor Model : \_\_\_\_\_
- Sn : \_\_\_\_\_
- Vac : \_\_\_\_\_
- Vacuum : \_\_\_\_\_ mb

name plate

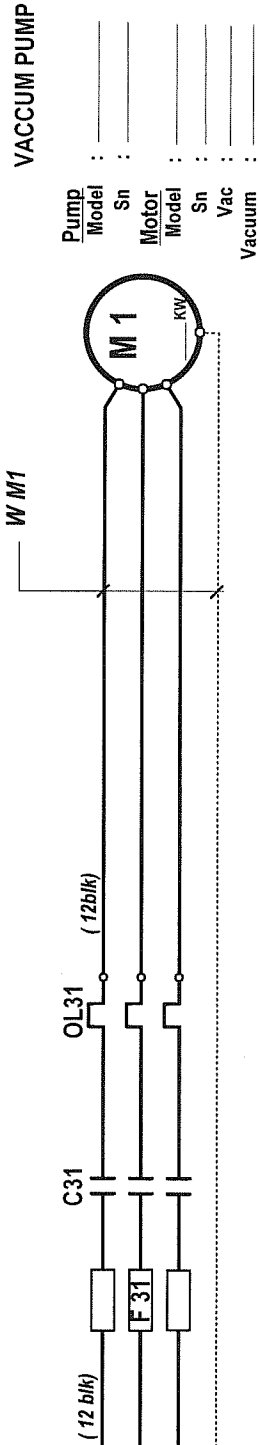
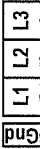
measured



category	VACUUM PACK	model	680A	volt.	1 Ph / 50 Hz
system	POWER		circuit	year	month
usual functions				05	01
options				18	18
				concept	draw
				PP	PP
				DL	DL
				006-1600	PAGE 1 de 1

SIPROMAC  
St-Germain de Grantham  
QUEBEC, CANADA

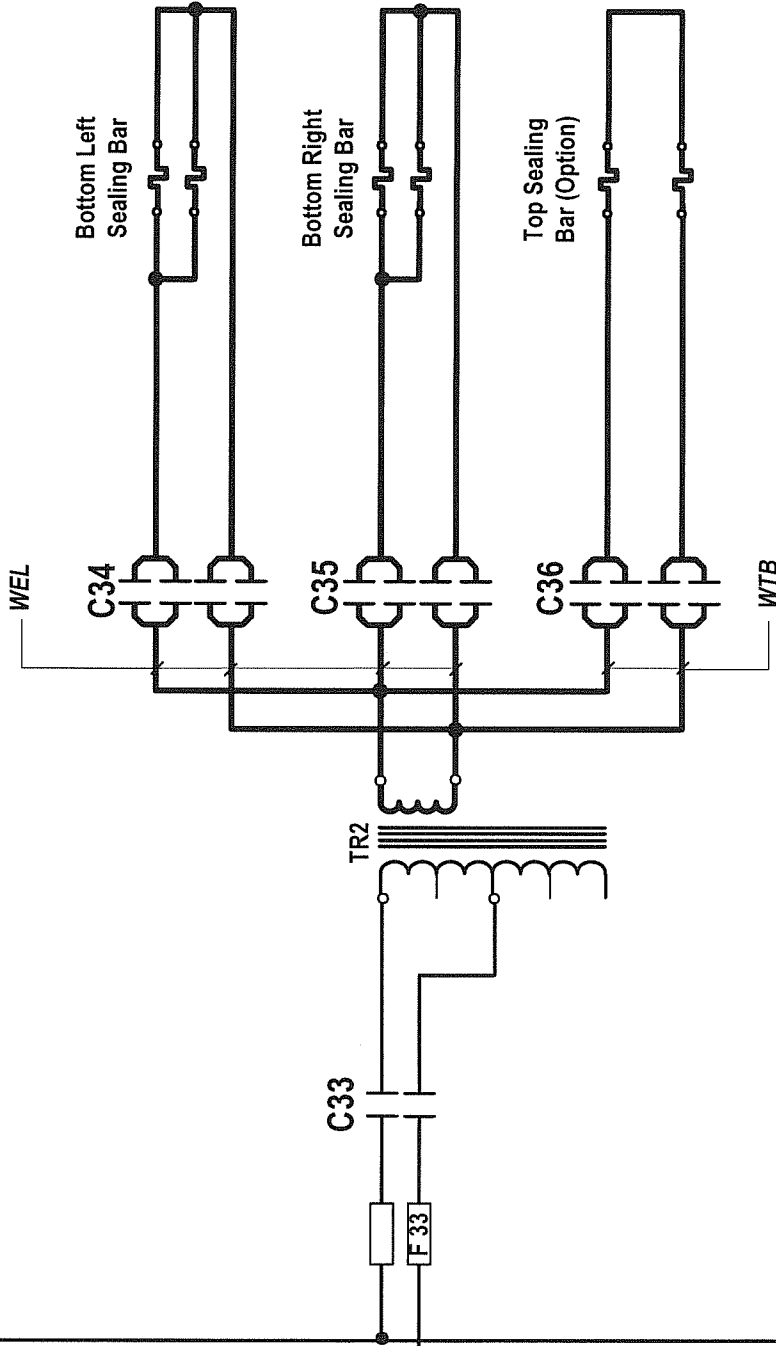
Tested with: V 3 Ph Hz



W M1

Pump Model : Sn : Motor Model : Sn : Vac : mb

VACCUUM PUMP



name plate

Table with 2 columns: name plate and measured. The table is mostly empty with some faint lines.

category	VACUUM PACK	model	680A	volt.	3Ph 60Hz
system	POWER			year	month
usual functions				day	18
options				concept	draw
				app	DL
				PP	PP
				DL	DL
				006-1630	PAGE 1 de 1

SIPROMAC

St-Germain de Grantham QUEBEC, CANADA

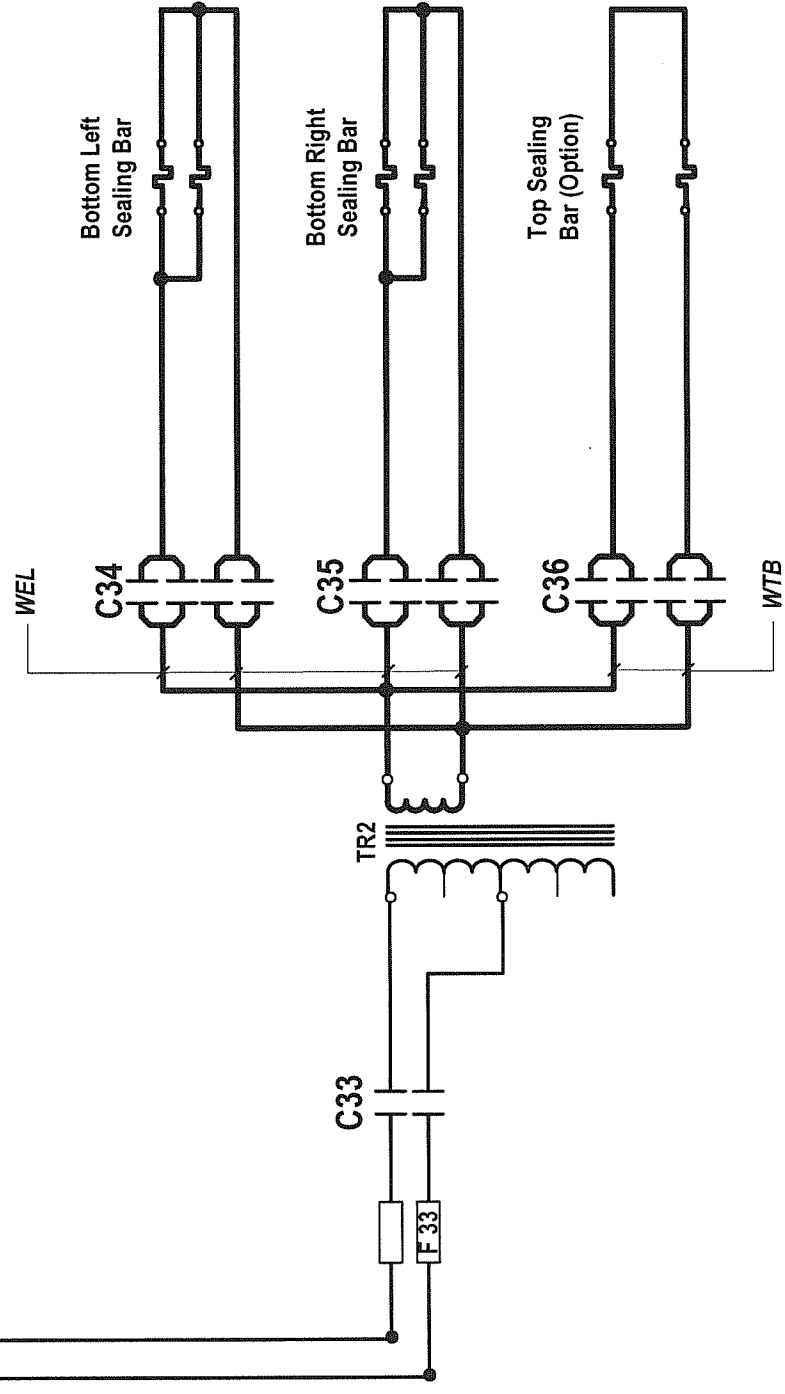
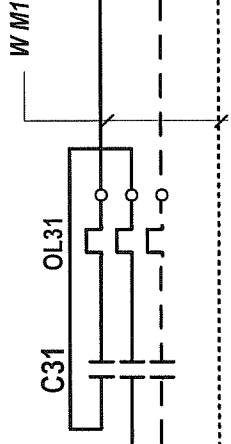
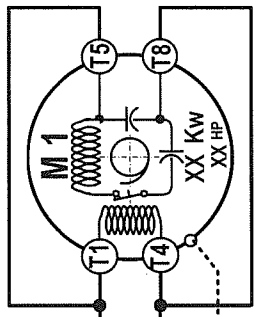


Tested with: V 3 Ph Hz

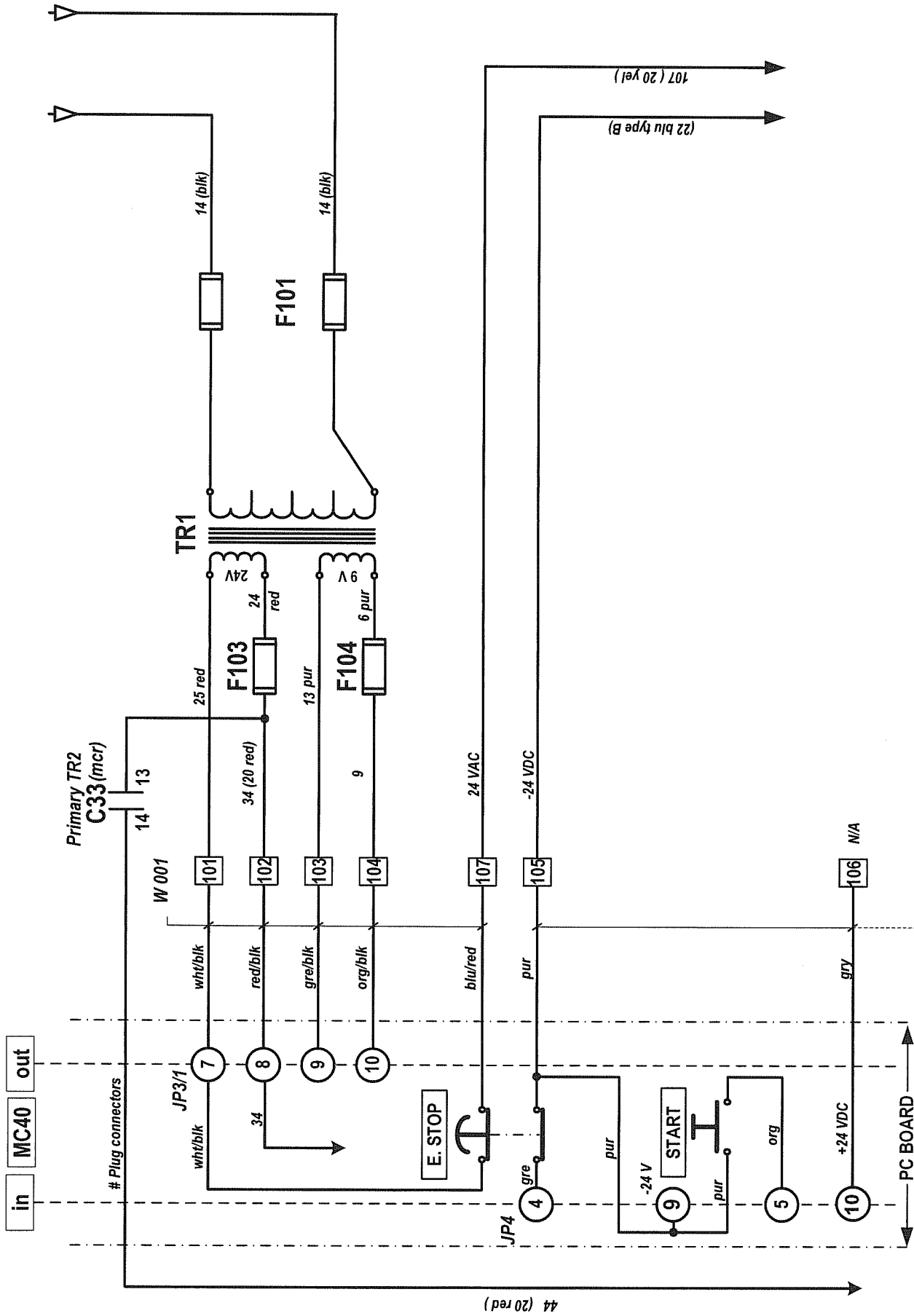
name plate

measured

VACUUM PUMP  
 Pump Model :  
 Sn :  
 Motor Model :  
 Sn :  
 Vac :  
 Vacuum : mb



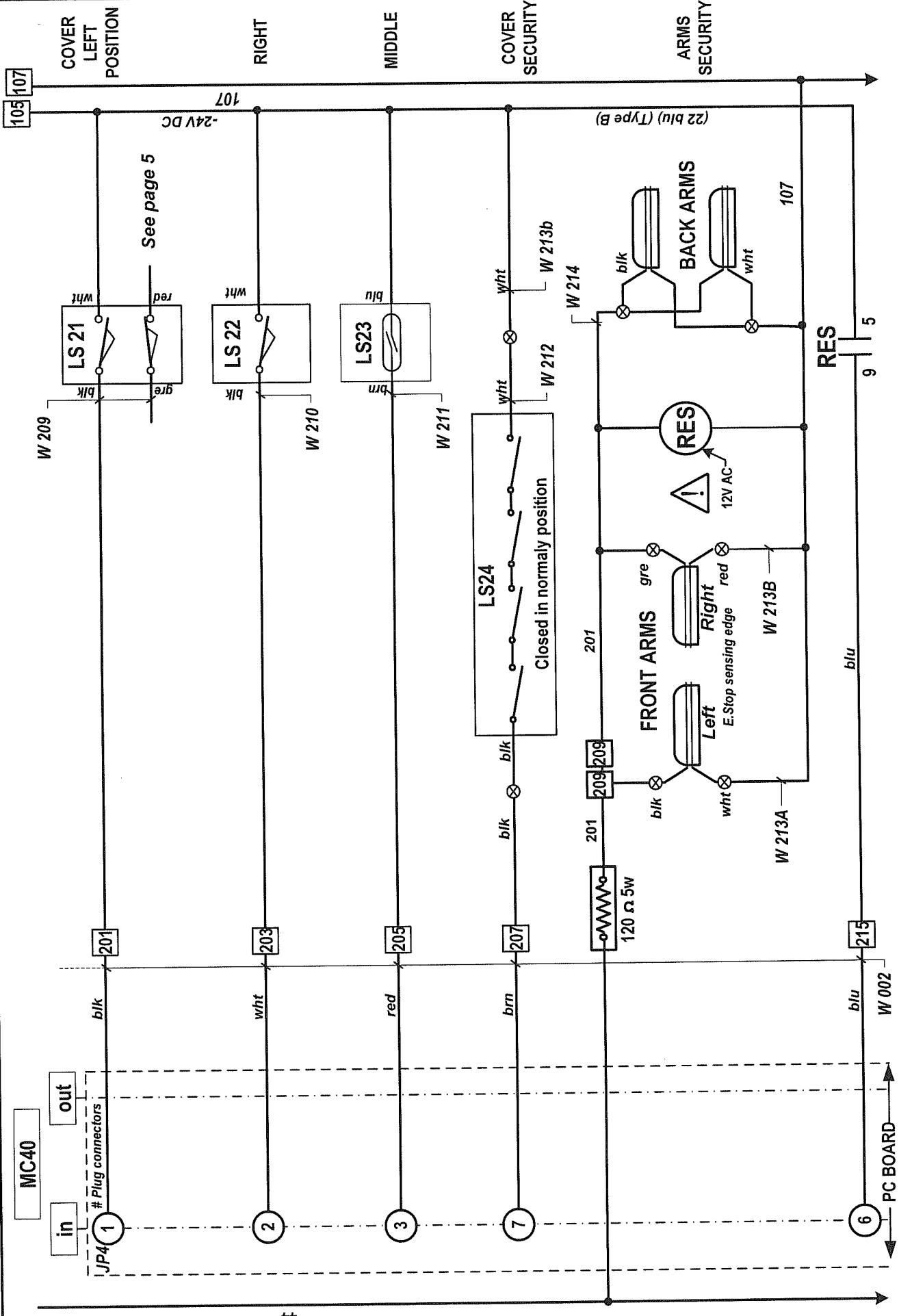
category	VACUUM PACK	model	680A	vol.	1Ph 60Hz
system	POWER			year	05 01 18
usual functions				month	01 18
options				day	18
				block	
				concept	PP
				draw	PP
				app	DL
				DL	
				006-1620	PAGE 1 de 1
				SIPROMAC	
				St-Germain de Grantham	
				QUEBEC, CANADA	



category		model		volts	
VACUUM PACK		680A		ALL	
system		circuit		block	
CONTROL SUPPLY		control			
usual		year	month	day	03
functions		concept	d/aw	app	DL
options		PP	PP	PP	DL
		05 03 03		006-1637	
		PAGE		1 de 8	

**RC filters must be connected on each coil AC (not shown on diagram)**

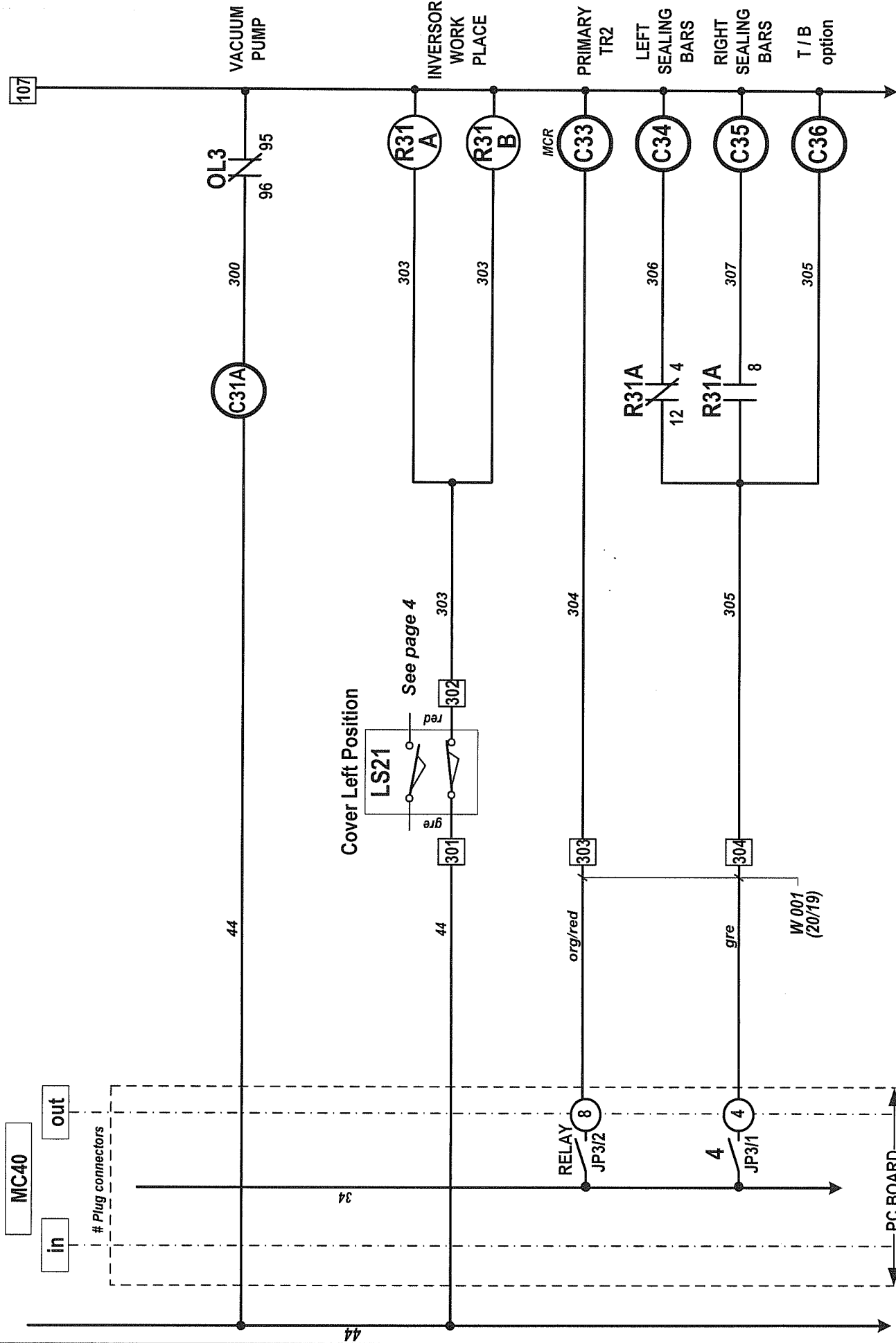




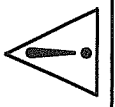
category		VACUUM PACK		model	680A		SIPROMAC	
system		SECURITY				St-Germain de Grantham		
usual functions				year	month	day	block	QUEBEC, CANADA
options				05	03	03		
		concept	draw	app	DL			
		PP	PP	PP	DL			
				006-1637		PAGE 2 de 8		

- The left or right sides are based on operator position facing the control panel  
 - RC filters must be connected on each coil AC (not shown on diagram)



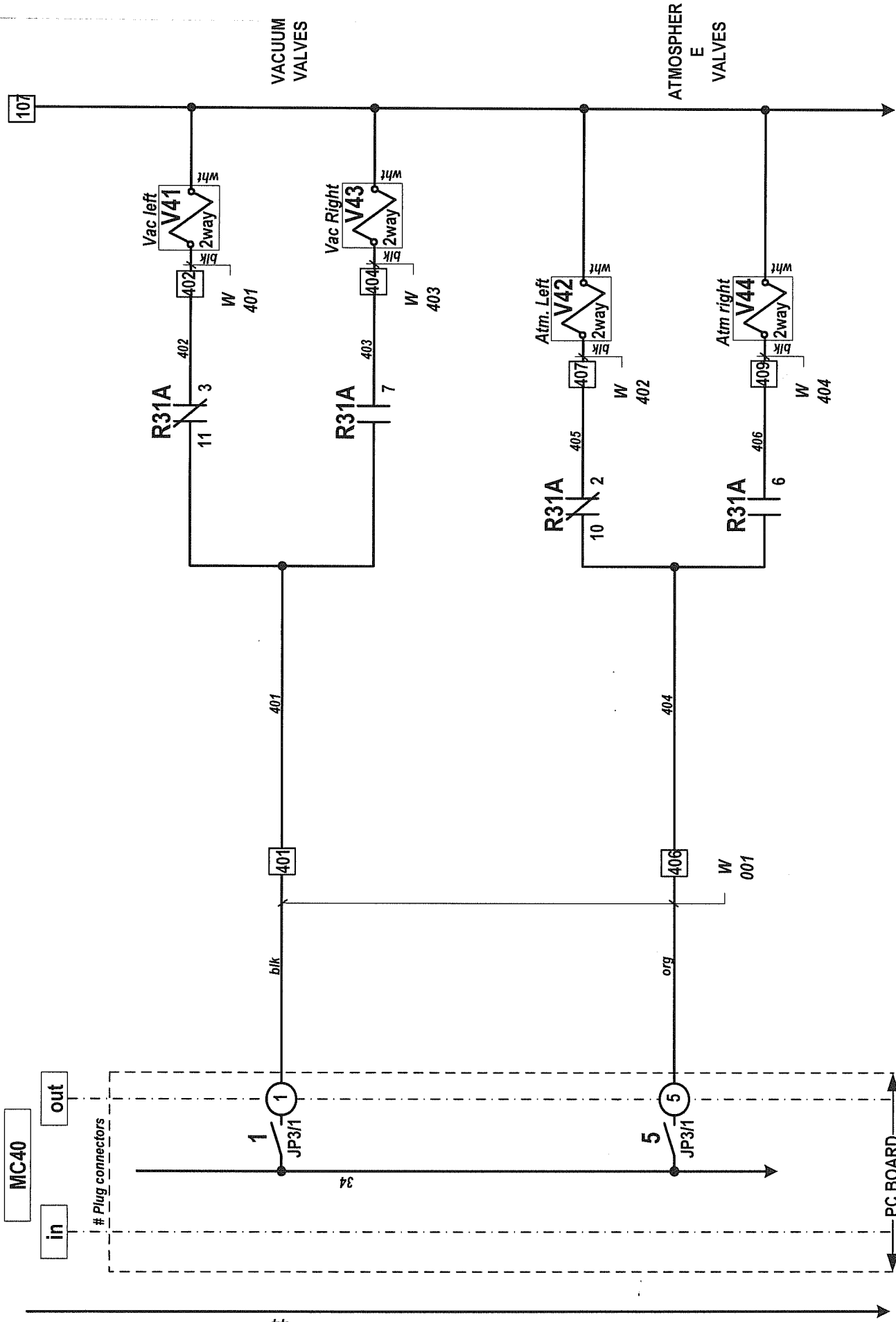


- The left or right sides are based on operator position facing the control panel  
 - RC filters must be connected on each coil AC (not shown on diagram)



category	VACUUM PACK		model	680A	volt.	ALL			
system	POWER COMMAND				circuit	year	month	day	block
usual functions						05	03	03	
options						concept	draw	app	DL
						PP	PP	PP	DL
						006-1637			PAGE 3 de 8

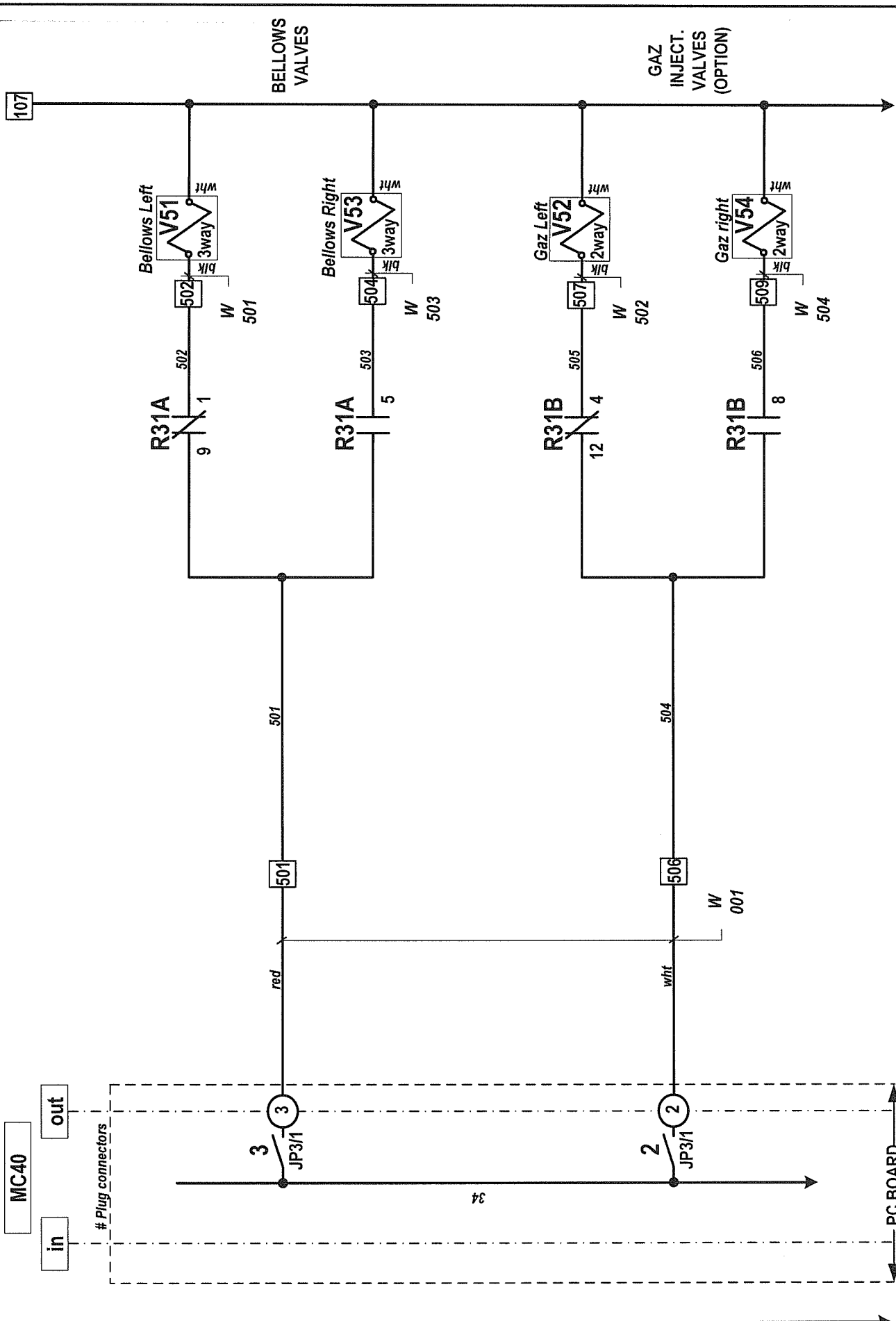
**SIPROMAC**  
 St-Germain de Grantham  
 QUEBEC, CANADA



category		VOL	
VACUUM PACK		680A	
system		VACUUM AND ATMOSPHERE	
usual	functions	year	month
options		05	03
		day	block
		03	
concept	draw	app	DL
PP	PP	DL	DL
		006-1637	
		PAGE 4 de 8	
		SIPROMAC	
		St-Germain de Grantham	
		QUEBEC, CANADA	

- The left or right sides are based on operator position facing the control panel  
 - RC filters must be connected on each coil AC (not shown on diagram)



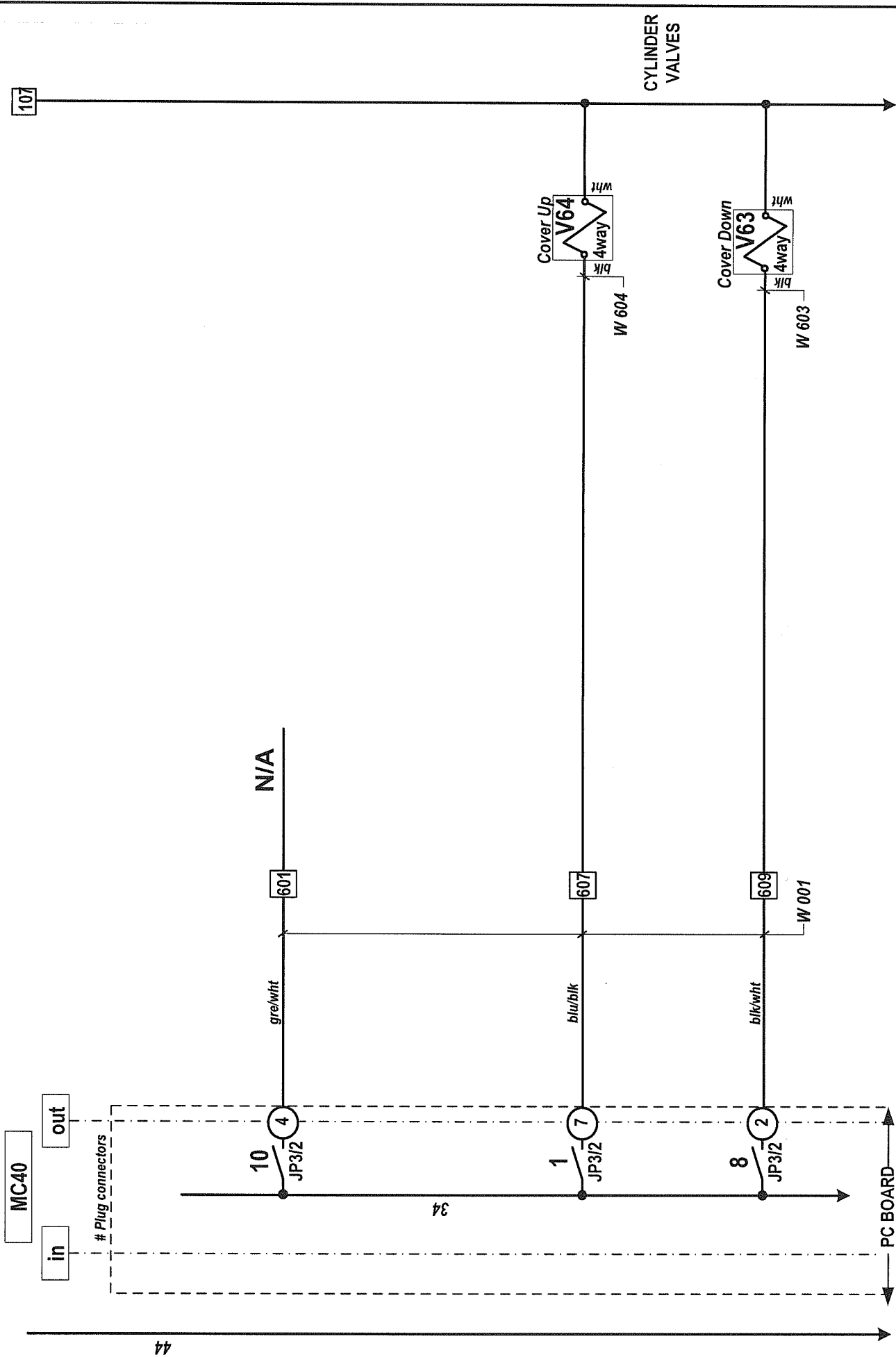


category		vol.	
VACUUM PACK		680A	
system		model	
BELLOWS		680A	
usual		circuit	
functions		ALL	
options		year	
		month	day
		05	03
		03	03
		block	5
		concept	
PP	PP	DL	DL
		006-1637	
		PAGE 5 de 8	

- The left or right sides are based on operator position facing the control panel

- RC filters must be connected on each coil AC (not shown on diagram)

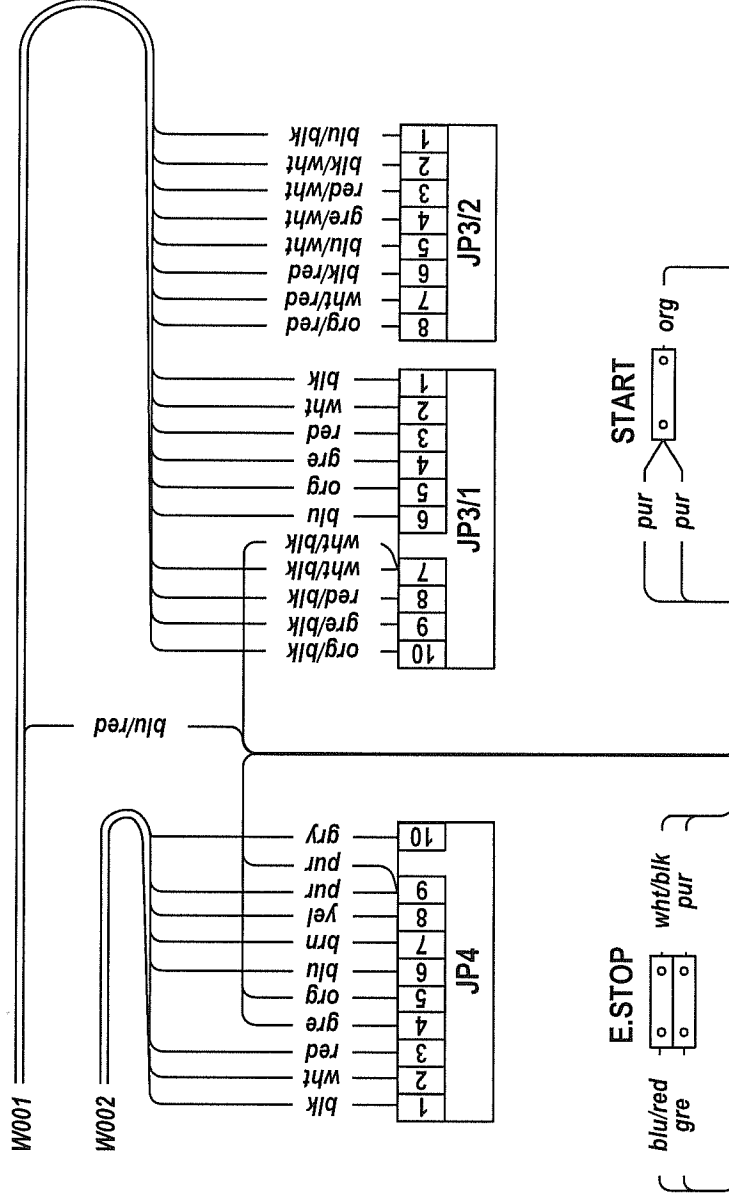




- The left or right sides are based on operator position facing the control panel  
 - RC filters must be connected on each coil AC (not shown on diagram)

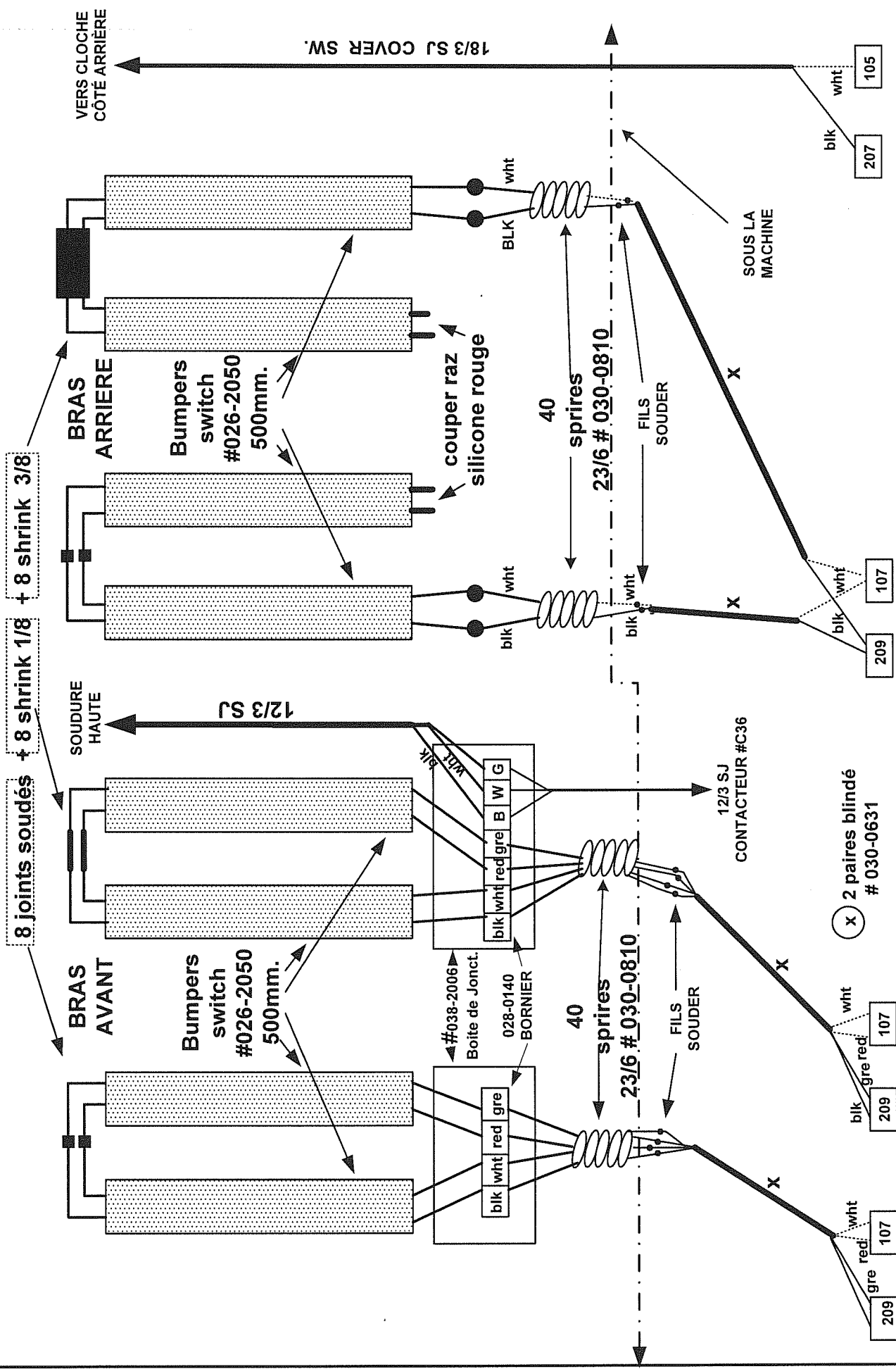


category		model		vol.	
VACUUM PACK		680A		ALL	
system		COVER MOVEMENT		circuit	
year	month	day	block	year	month
05	03	03	6	05	03
concept	draw	app	DL	concept	draw
PP	PP	PP	DL	PP	DL
SIPROMAC		St-Germain de Grantham		006-1637	
QUEBEC, CANADA		PAGE		6 de 8	

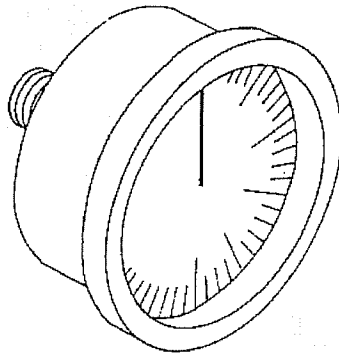


category	VACUUM PACK	model	680A	voit.					
system	PLAN DE CABLAGE P.C. BOARD		year	05	month	03	day	03	block
usual									
fonctions									
options									
				concept	draw	app	DL	PP	PP
				006-1637		PAGE		7 de 8	
				SIPROMAC		St-Germain de Grantham QUEBEC ,CANADA			

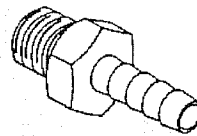
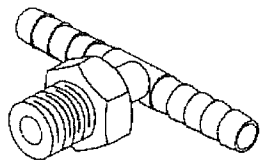




category		VOL.	
VACUUM PACK		680 A	
system		circuit	
SÉCURITÉ BRAS ET COUVERCLE			
usual			
functions			
options			
year	month	day	block
05	03	03	
concept	draw	app	DL
PP	PP	PP	DL



# PNEUMATIC DRAWING

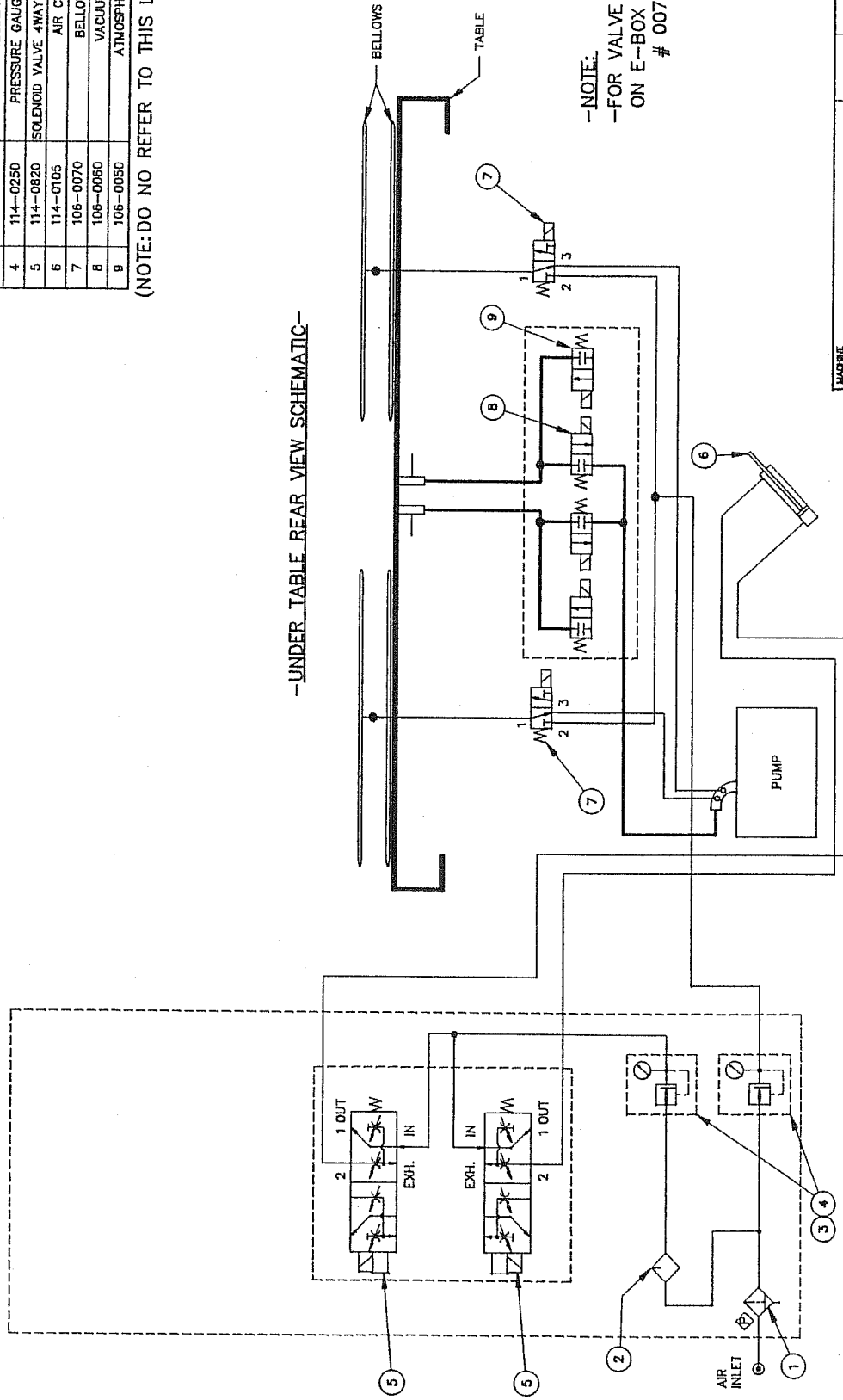


ITEM	PART #	DESCRIPTION	QTY.
1	114-0430	AIR FILTER 1/4"NPT	1
2	114-0200	AIR OILER 1/4"NPT	1
3	114-0150	PRESSURE REGULATOR 0-12PSI 1/4"NPT	2
4	114-0250	PRESSURE GAUGE 0-160PSI 1/8"NPT	2
5	114-0820	SOLENOID VALVE 4WAY 1/8"NPT W/FLOW CONTROL	2
6	114-0105	AIR CYLINDER	1
7	106-0070	BELLOWS VALVE	1
8	106-0060	VACUUM VALVE	2
9	106-0050	ATMOSPHERE VALVE	2

(NOTE: DO NOT REFER TO THIS LIST FOR ASSEMBLY)

-E-BOX-

-UNDER TABLE REAR VIEW SCHEMATIC-

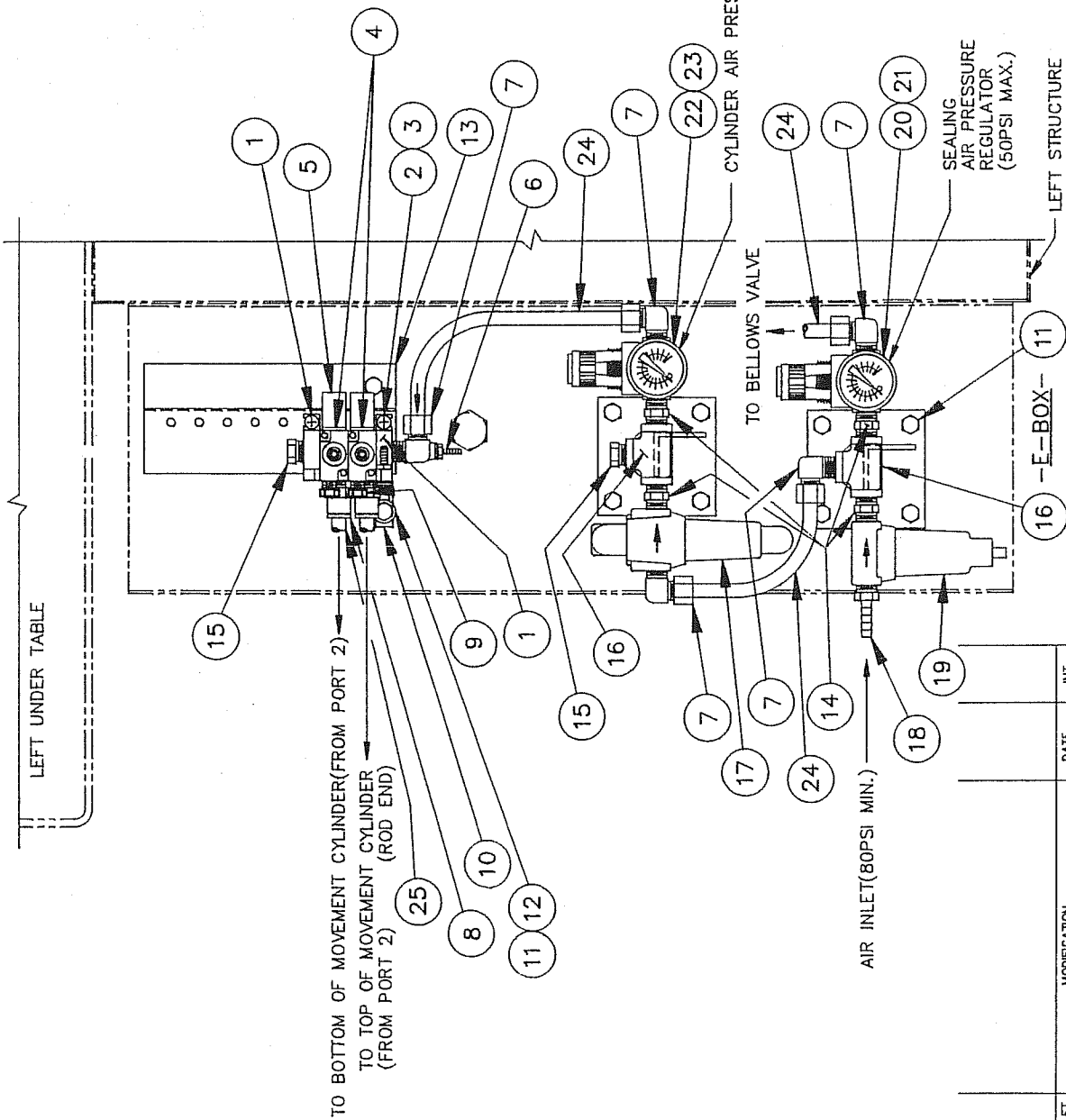


-NOTE-  
-FOR VALVE INSTALLATION  
ON E-BOX SEE DRAWING  
# 007-0041

MODEL: 650A AUTOMATIC	SIPROMAC	
PART: PNEUMATIC	SI-GERMAIN DE GRANTHAM QUEBEC CANADA	
ITEM: _____	SCALE: _____	QTY: 1
DWG. APP: _____	DATE: 97-03-11	REV: _____
007-0037		

LET.	RE-DRAWN	DATE	INT.
A.	97-03-11		

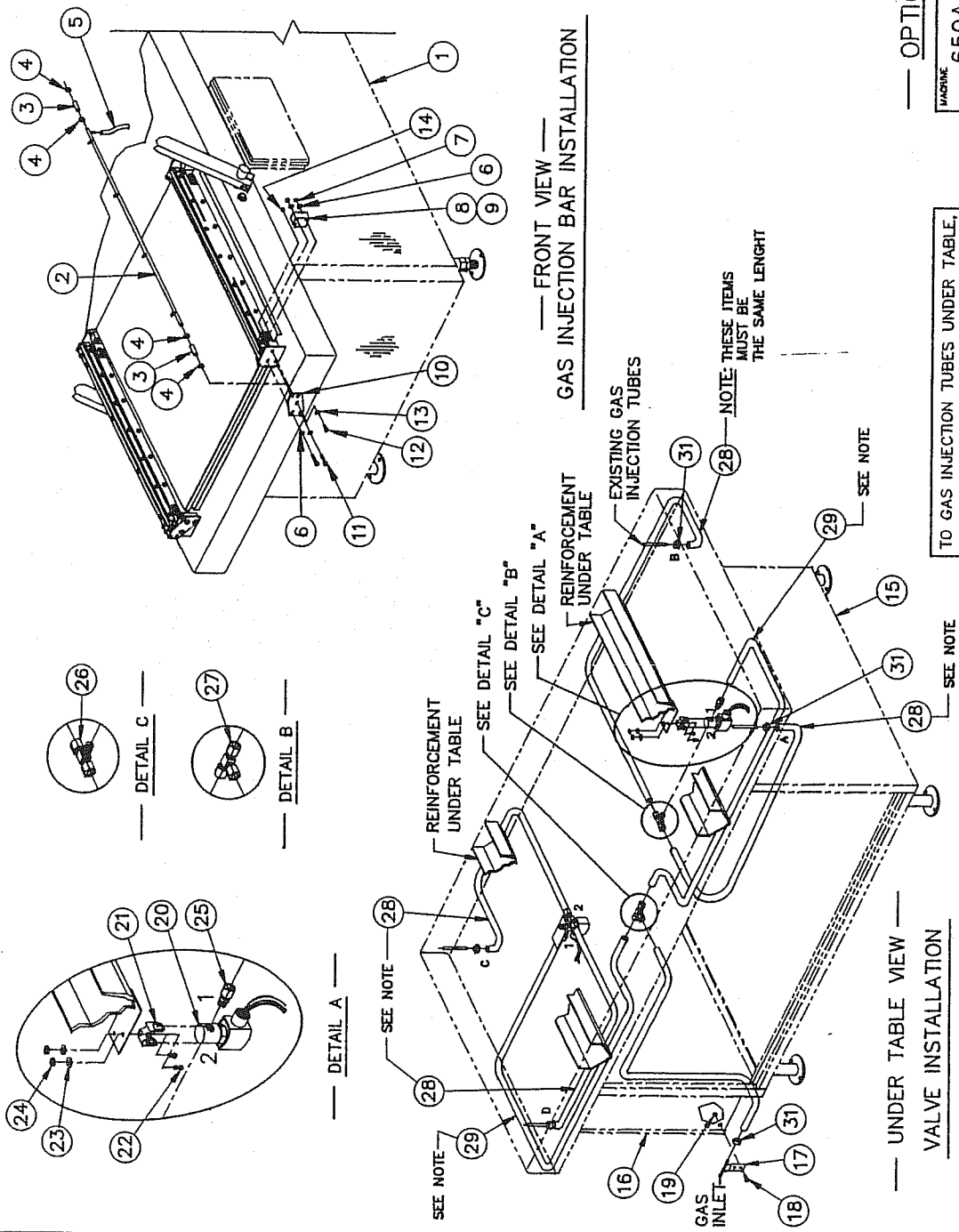
ITEM	PART #	DESCRIPTION	QT.
1	114-0860	2 END PLATES KIT 1/4"NPT	1
2	051-0146	SCREW #10-24 x 1" PAN PHIL S/S	3
3	051-0571	NUT #10-24 S/S	3
4	114-0820	VALVE 4 WAY 24VAC 1/8"NPT W/FLOW CONT.	2
5	114-0850	DIN CONNECTOR	2
6	114-1055	ADJ.FLOW CONTROL 1/4"NPT MUFFLER BR.	1
7	101-0058	ELBOW 1/4"MNPT x 3/8" T.P. COMP. BR.	5
8	102-0380	MALE CONN. 1/8"MNPT x 3/8" T.P. QUICK	2
9	101-1020	HEX PLUG 1/8"NPT BR.	2
10	001-1839	AIR VALVE SUPPORT	1
11	051-0180	BOLT 1/4" - 20 x 3/4" S/S	11
12	051-0740	WASHER 1/4" FLAT S/S	1
13	001-1840	VALVE MTG. BRACKET	1
14	101-0315	HEXAGON NIPPLE 1/4"NPT BR.	4
15	101-1030	HEX PLUG 1/4"NPT BRASS	3
16	005-0524	PNEUMATIC SUPPORT ASSY	2
17	114-0200	LUBRICATOR 1/4"NPT	1
18	101-0200	STRAIGHT 1/4"MNPT x 1/4"HOSE BARB BR.	1
19	114-0430	AIR FILTER 1/4"NPT	1
20	114-0147	PRESSURE REGULATOR 0-60PSI 1/4"NPT	1
21	114-0245	PRESSURE GAUGE 0-60PSI 1/8"NPT	1
22	114-0150	PRESSURE REGULATOR 0-125PSI 1/4"NPT	1
23	114-0250	PRESSURE GAUGE 0-180PSI 1/8"NPT	1
24	104-0060	POLYETHYLENE TUBING 3/8"OD LPDE	—
25	104-0077	POLYURETHANE TUBING 3/8"OD SMC BLUE	—



MACHINE		650A AUTOMATIC		SIPROMAC	
PART		E-BOX VALVE INSTALLATION		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
ITEM:	QTY:	N.T.S.	SCALE:	QTY:	1
MAT:	DATE:	DATE:	DATE:	JUL	007-0041
M.LAVIGNE		DATE: 97-03-18		DATE:	

LET.	MODIFICATION	DATE	INT.
------	--------------	------	------

ITEM	PART #	DESCRIPTION	QTY.
1	005-0438	MACHINE ASSEMBLY FRONT VIEW	1
2	005-0360	GAS INJECTION BAR (OPTION)	4
3	008-0295	GAS INJECTION CONN. TUBE (OPTION)	8
4	105-0220	COLLARS 1/2" φ (OPTION)	16
5	179-0030	GAS INJECTION TUBE (OPTION)	4
6	051-0740	FLAT WASHER 1/4" S.S.	32
7	051-0581	LOCK NUT 1/4"-20 S.S./NYLON	16
8	002-0326	LEFT/SEAL BAR GUIDE BLOCK	4
9	002-0327	RIGHT/SEAL BAR GUIDE BLOCK	4
10	005-0326	GAS INJ.BAR SUPPORT ASSY (OPTION)	8
11	051-0255	HEX.BOLT 1/4"-20 x 1 3/4" S.S.(OPT.)	16
12	051-0190	HEX.BOLT 1/4"-20 x 3/4" S.S.(OPT.)	8
13	051-0740	FLAT WASHER 1/4" S.S. (OPTION)	8
14	051-0580	HEX. NUT 1/4"-20 S.S. (OPTION)	8
15	005-0439	MACHINE ASSEMBLY REAR VIEW	1
16	005-0479	ELECTRICAL BOX ASSEMBLY	1
17	005-0323	GAS INLET ASSEMBLY	1
18	051-0180	HEX BOLT 1/4"-20 x 1/2" S.S.(OPT.)	1
19	051-0580	HEX.NUT 1/4"-20 S.S. (OPTION)	1
20	106-0010	SELENOID VALVE 2 WAY 1/4" NPT	2
21	106-0345	VALVE SUPPORT FOR 1/4" NPT	2
22	051-0100	R.H.SCREW #8-32 x 3/8 S.S.	4
23	051-0720	FLAT WASHER #8 S.S.	4
24	051-0550	HEX. NUT #8-32 S.S.	4
25	101-0036	STRAIGHT 1/4" MNPT x 3/8" T.P. COMP.	2
26	101-0062	T 3/8" T.P. COMP.	1
27	101-0065	T 3/8" T.P. COMP. x 1/4" MNPT x 3/8" T.P. COMP.	2
28	104-0060	TUBE 3/8" OD x 1/4" ID (POLY.) x mm LG.	4
29	104-0060	TUBE 3/8" OD x 1/4" ID (POLY.) x mm LG.	2
30	104-0060	TUBE 3/8" OD x 1/4" ID (POLY.) x mm LG.	1
31	105-0200	COLLARS 3/8" φ	5

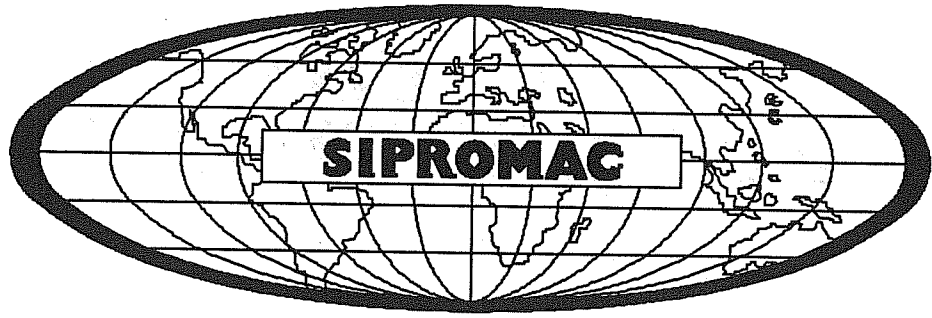


OPTION GAS INJECTION

MACHINE	650A AUTOMATIC		STANDARD	SIPROMAC	
PART	GAS INJECTION KIT INSTALLATION		DATE	98-09-10	
ITEM	QTY.	SCALE	1		
DATE	98-09-10		010-0022		
DRAWN BY			DATE		
CHECKED BY			DATE		
MODIFICATION			DATE		
DATE			DATE		
DATE			DATE		
DATE			DATE		

TO GAS INJECTION TUBES UNDER TABLE, REMOVE THE FOUR EXISTING CAPS & CONNECT HOSES A, B, C & D

A	RE-DRAWN	DATE	98-09-10	M.L.	
		DATE		INT.	



# **MANUEL D'UTILISATEUR**

## **MICROPROCESSEUR MC-40**

### **AVEC OU SANS DÉTECTEUR DE VIDE**

#### **EMBALLEUSE SOUS VIDE**

#### **TABLE DES MATIÈRES**

#### **I INSTRUCTIONS POUR LES OPÉRATIONS**

#### **II MÉCANIQUE**

- A- Vue de face
- B- Vue de l'arrière
- C- Procédure d'ajustement du couvercle
- 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 PNEUMATIQUE**

- 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 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. CONNEXION ÉLECTRIQUE:

Les connexions 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 sur le moteur de la pompe.

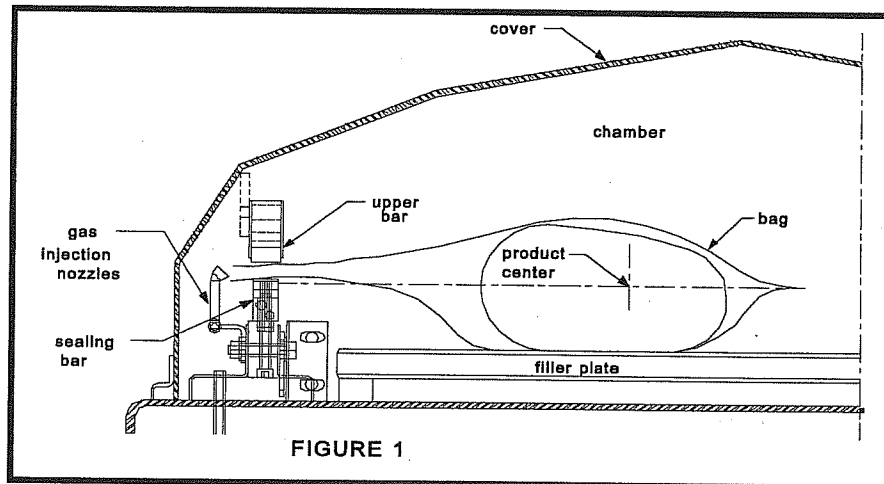
### 3. OPÉRATION:

#### 3.1 Principes de travail:

Un emballage 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 emballages, 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 Emballage 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 emballés 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 adaptateur 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'emballage 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 Bases:

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 Créer un programme:

Quand vous exécutez 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 fonction et retourner au menu des programmes.

### 3.3.3 Menu des Programmes:

#### 3.3.3.1 Identification des Programmes:

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 utiliser la touche "ESC" pour revenir en arrière dans le cas où vous vous êtes trompé et que vous voulez effacer le caractère.

Exemple: EXAMPLE 1 → Touche 2, 2, ENTER → E  
(9 caractères) 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 L'ajustement du niveau de Vide (capteur de vide désactivé):

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 L'ajustement du niveau de Vide (capteur de vide en activé):

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.

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

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).

Exemples: 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 nécessaire, 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:

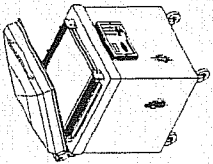
- niveau de vide de la chambre pendant la séquence,
- vide additionné du temps pendant le vide plus la séquence,
- niveau de vide de la chambre pendant la séquence d'injection de gaz,
- statut de temps de cachetage pendant la séquence de cachetage,
- niveau de vide de la chambre pendant La séquence d'atmosphère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

Pendant l'exécution du cycle, utilisez la clef "1" pour interrompre la séquence de vide et pour exécuter la séquence suivante, soit 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.

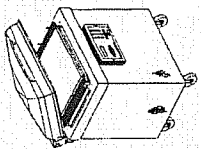
### 3.3.5 System monitor:

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 initialisation.

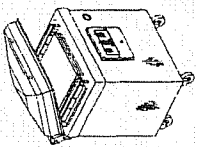




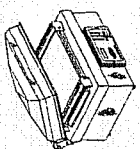
550A



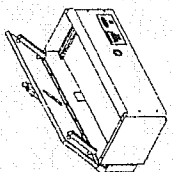
450A



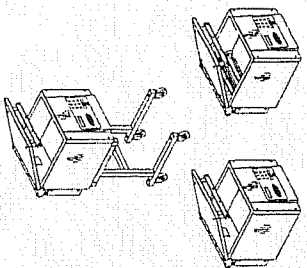
400A



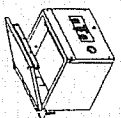
450T



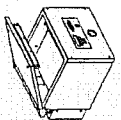
380A



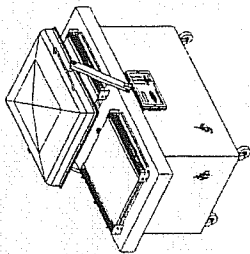
350/350D



300



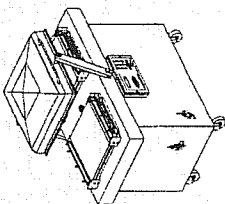
250



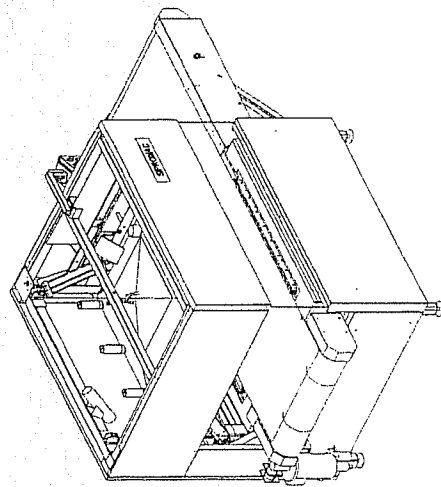
600A



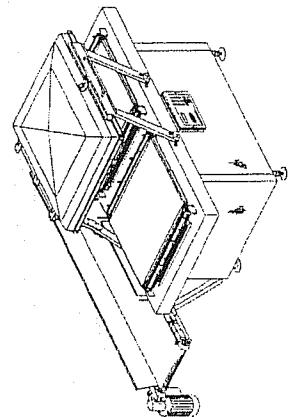
VACUUM PACKAGING MACHINES



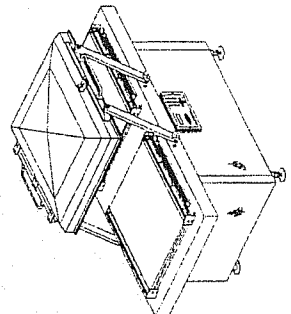
420A



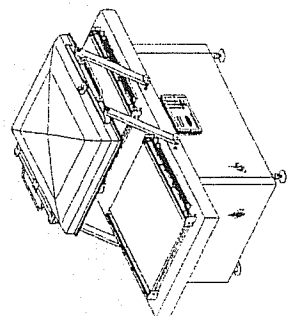
750A



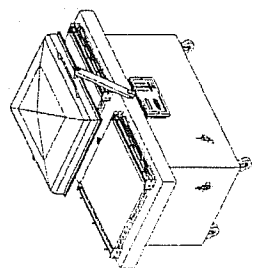
700A



680A



650A



620A