



**OWNER'S MANUAL**

***VACCUM MACHINE***

**550A**



# 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 550A

### (MC-40 SIPROMAC)

#### GENERAL TABLE OF CONTENTS

#### I OPERATION INSTRUCTIONS

#### II MECHANICAL

- A- 550A Front view assembly drawing
- B- 550A Rear view assembly drawing
- C- P.C. board support drawing
- D- 550A Structure 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- Cover assembly drawings
- J- 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 Electrical bag cut (optional)
  - 3.3 Vacuum packaging operation
    - 3.3.1 Basics
    - 3.3.2 Functions menu
      - 3.3.2.1 Create a program
      - 3.3.2.2 Delete a program
      - 3.3.2.3 Select operating mode
    - 3.3.3 Programs menu
      - 3.3.3.1 Program identification
      - 3.3.3.2 Vacuum time setting (sensor disabled)
      - 3.3.3.3 Vacuum level setting (sensor enabled)
      - 3.3.3.4 Vacuum plus time setting (sensor enabled)
      - 3.3.3.5 Gas time setting (sensor disabled)
      - 3.3.3.6 Gas flush level setting (sensor enabled)
      - 3.3.3.7 Sealing time setting
    - 3.3.4 Vacuum cycle execution
    - 3.3.5 System monitor
  - 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:

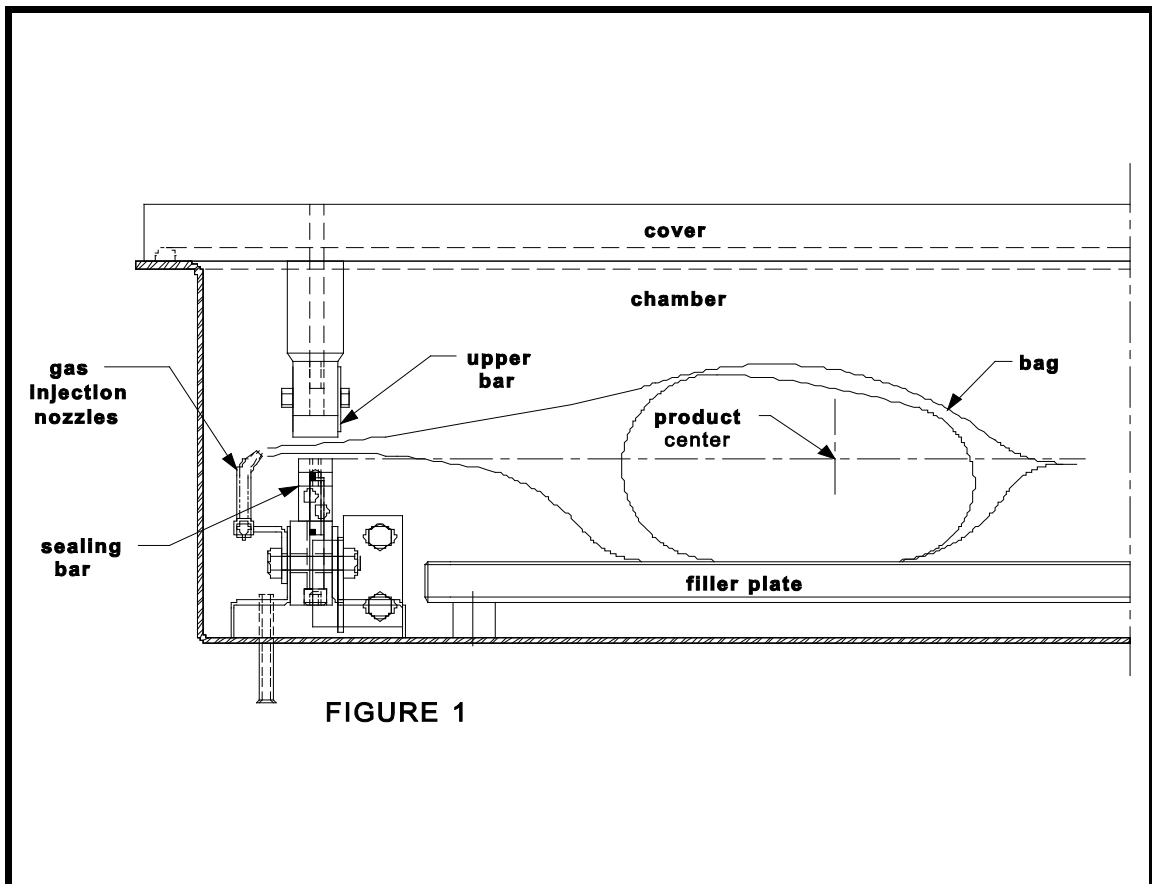
#### 3.1 Working principles:

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.



### 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 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:**

Note: Refer to the menus structure on page 13 and the keyboard detail on page 14.

### **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. To disconnect, use the "POWER" key to turn off the machine , then remove plug from outlet. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord. Unplug from outlet when not in use and before servicing or cleaning.

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 menu:**

#### **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 accessed 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 access 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 ceases 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 time setting (sensor disabled):**

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

**Examples:** 1s → keys 0, 1 or 1, ENTER

15s → keys 1, 5

### **3.3.3.3 Vacuum level setting (sensor enabled)**

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

### **3.3.3.4 Vacuum plus time setting (sensor enabled)**

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

### **3.3.3.5 Gas time setting (sensor disabled)**

For a selected program set the gas time setting following the same procedure as for the vacuum time. Keep in mind that increasing gas time decrease sealing pressure. Some vacuum must be kept inside to assure proper functioning.

### **3.3.3.6 Gas flush level setting: (sensor enabled)**

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.

### **3.3.3.7 Sealing time setting:**

For a selected program set the sealing, 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:

- Vacuum time or vacuum % status during vacuum sequence,
- Gas time or gas % status during gas flush sequence,
- Sealing time status during sealing sequence,
- ATM message 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:**

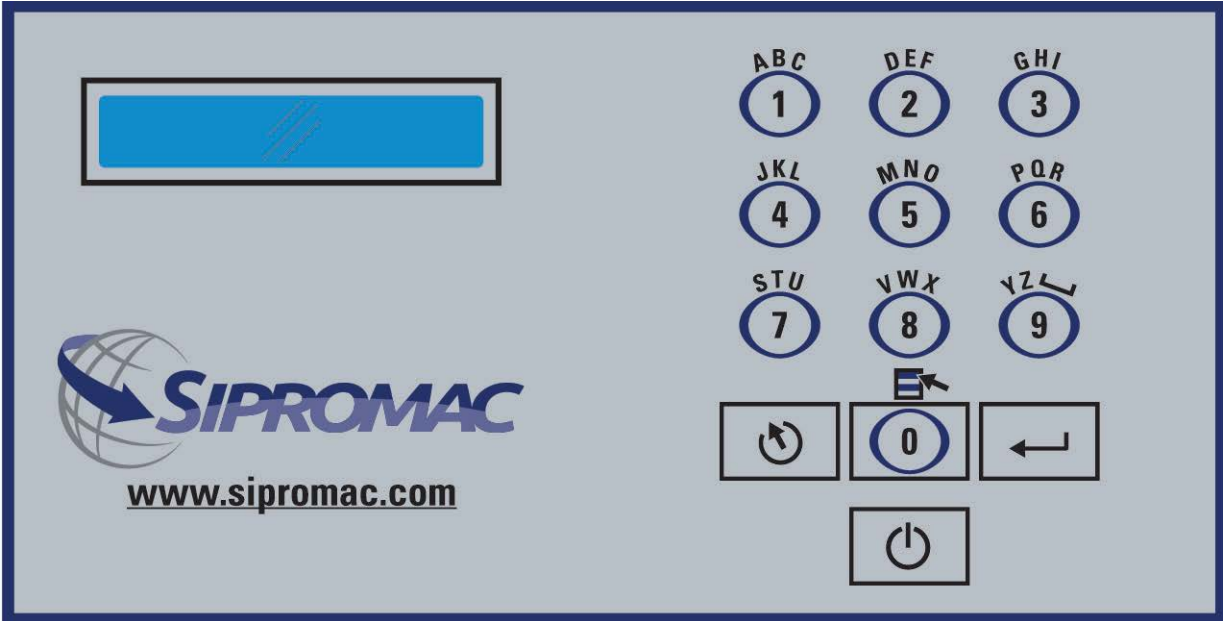
To accede the diagnostics menu, power up the vacuum packaging machine while keeping pushed in the "ESC"key. Use key "SELECT" to select the system monitor function and key "ENTER" to accede and visualize the monitored parameters. Use key "SELECT" to change over from the software revision, the amount of 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: xxxxxxx"

# -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 accessing 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.

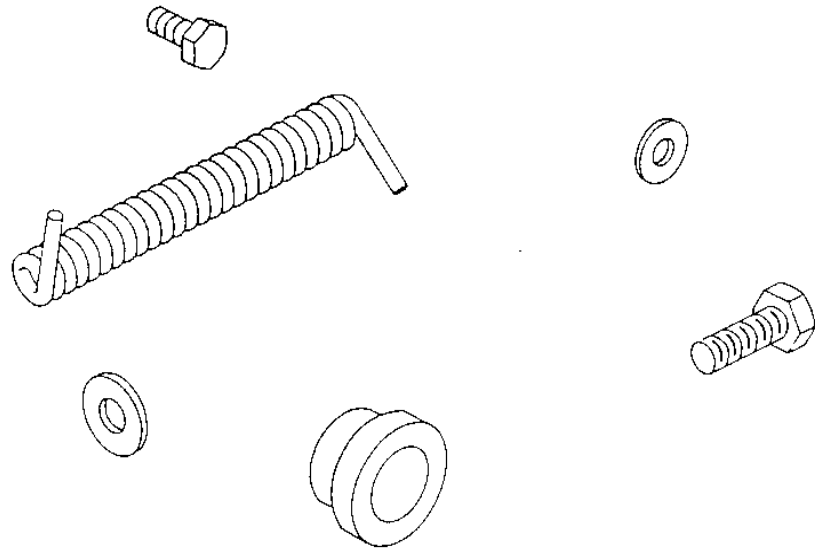
Check evacuation hose for damage (contraction of diameter, or abrasions).

Check vacuum connections for tightness.

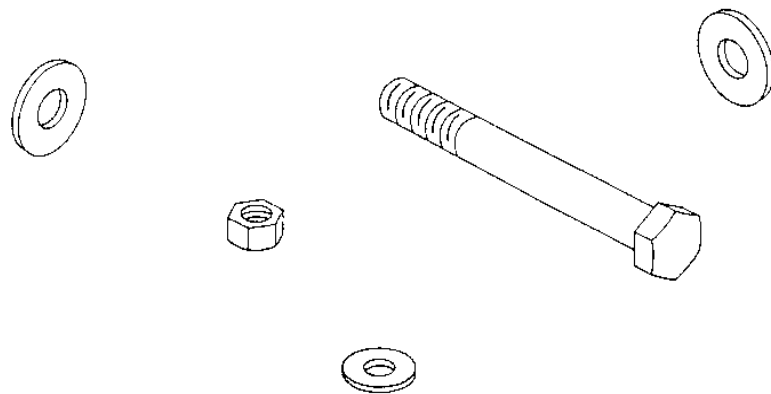
Check oil in pump (oil level in view glass; add if necessary. Regular change of oil - necessity indicated by change of color).

Check vacuum in chamber with precision vacuumeter.

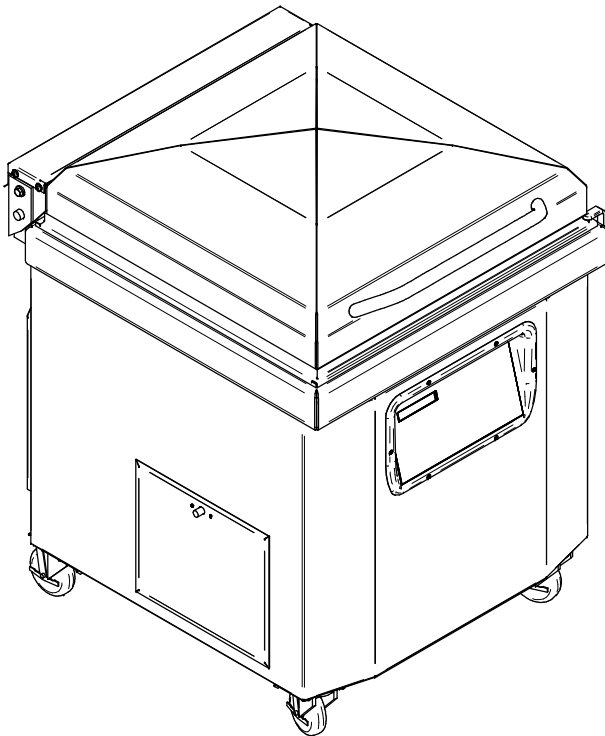
Check function of cycle with various settings of timers.



# MECHANICAL DRAWING

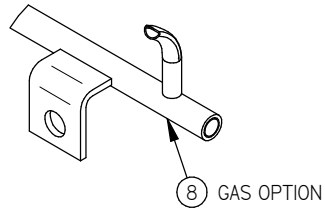


ITEM	PART #	DESCRIPTION	QTY.	ITEM	PART #	DESCRIPTION	QTY.
32	033-0018	MC-40 KEYBOARD "BERKEL"	1	1	001-1334	SPRING COVER	1
33	033-0019	MC-40 KEYBOARD "BSA"	1	2	001-1335	COVER STOPPER	1
34	033-0021	MC-40 KEYBOARD "SUPPLY ONE"	1	3	004-0129	COVER AXIS PRE-ASS'Y	1
35	036-0409	PRESSE-ETOUPE CD13	1	4	004B1117	UPPER SEAL BAR ASSEMBLY (E.C.O.) & (TWIN)	2
36	038-0350	SLIT CORRUG. LOOM 2" ID x 370mm (1.27')	1	5	004B4113	GAS VALVE ASSEMBLY (OPTION)	1
37	039-0191	THERMOSTAT HAMMOND	1	6	005-0346	SPRING TENSION SUPPORT PRE-ASS'Y	1
38	039-0192	HEATER 100W HAMMOND	1	7	005-0348	MICRO SWITCH COLLAR ASS'Y	1
39	051-0192	SCREW 1/4-20NC X 3/4" PAN PHILL S/S	4	8	005A0423	FRONT GAS 3 INJECTION BAR ASSEMBLY	1
40	051-0255	BOLT 1/4-20 x 1-3/4" HEX SS	6	9	005A0424	FRONT GAS 4 INJECTION BAR ASSEMBLY	1
41	051-0300	BOLT 5/16"-18 x 3/4" S/S	16	10	005A0560	SEAL BAR ASS'Y W/SUPPORT	2
42	051-0360	BOLT 3/8"-16nc. X 1" S/S	2	11	005A0812	REAR GAS 3 INJECTION BAR ASSEMBLY	1
43	051-0581	NUT 1/4"-20 NYLON LOCK S/S	6	12	005A0813	REAR GAS 4 INJECTION BAR ASSEMBLY	1
44	051-0620	NUT 3/8"-16 NC S/S	2	13	005A1394	SLANTED FILLER PLATE ASS'Y	1
45	051-0740	WASHER 1/4" FLAT S/S	16	14	005A1504	ELECTRONIC SOFT AIR (KB-0020)	1
46	051-0760	WASHER 5/16" FLAT S/S	16	15	005A1507	BELLOW VALVE ASSEMBLY	1
47	051-0780	WASHER 3/8" FLAT S/S	3	16	005A1508	AIR REGULATOR ASSY	1
48	051-0783	WASHER 3/8" FLAT THICK S/S	1	17	005B0461	8" COVER ASSEMBLY	1
49	057-0006	PLUG 7/8" ROUNDED BLACK	1	18	005B0462	12" COVER ASSEMBLY	1
50	057-0330	CABLE TIES 14" LONG BLACK	3	19	005B0562	SEAL BAR ASS'Y W/SUPPORT (T&B)	2
51	100-0555	RED.BUSH.1-1/2" x 1-1/4" NPT S/S	1	20	005B0583	MC-40 CONTROL BOARD	1
52	102-0410	MALE CONN.1/4"MNPTx3/8"T.QUICK	1	21	005B0608	BASE MACHINE ASSEMBLY	1
53	104-0064	SILICONE TUBING 3/8" OD x 3/16" ID x 80mm	1	22	005B1440	KB-0020 PUMP ASSEMBLY	1
54	104-0064	SILICONE TUBING 3/8" OD x 3/16" ID x 80mm	1	23	005D0371	UPPER SEAL BAR ASS'Y W/SUPPORT	2
55	114-2030	VACUUM MUFFLER 1-1/4"NPT	1	24	005F0561	SEAL BAR ASS'Y W/SUPPORT (ECO)	2
56	114-2050	EXHAUST MUFFLER 1/2 NPT S/S	1	25	008-0322	COVER SPRING	1
57	127-0040	STICKER "AIR" BLUE/WHITE 1" X 2"	1	26	010B0062	RA-0063 PUMP ASSEMBLY	1
58	127-0041	STICKER "GAS" YELLOW/BLACK 1" X 2"	1	27	010B0063	RA-0100 PUMP ASSEMBLY	1
59	130-4PHB	4" PL.CASTER SWIVEL W/BRAKE	4	28	033-0013	MC-40 KEYBOARD "CPI/GUARDIAN"	1
				29	033-0014	MC-40 KEYBOARD "FOODPAK"	1
				30	033-0015	MC-40 KEYBOARD "SIPROMAC"	1
				31	033-0016	MC-40 KEYBOARD "HOLLYMATIC"	1



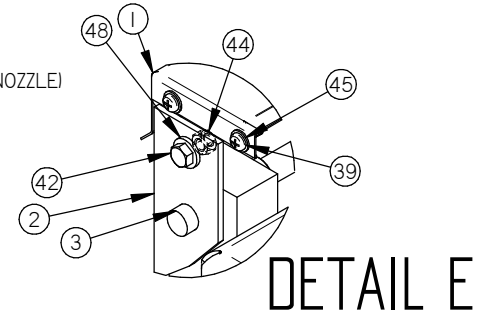
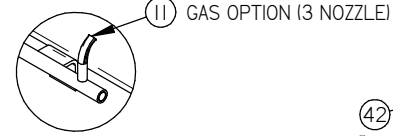
MACHINE		<b>550A</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		MACHINE ASSEMBLY		USINAGE	± 0.1	± 0.004"	
ITEM		CNC		TOLERIE	± 0.5	± 0.020"	
MAT.		3D DWG BY <b>SBU</b>		DATE	14-06-27		NO. <b>005B0605</b>
		2D DWG BY <b>AG</b>		DATE	14-07-08		
LET.		MODIFICATION		DEPT.		M-I	QTY. 1

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

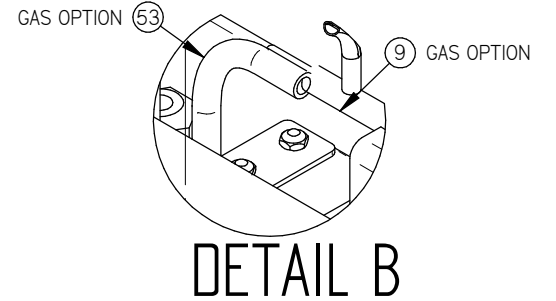
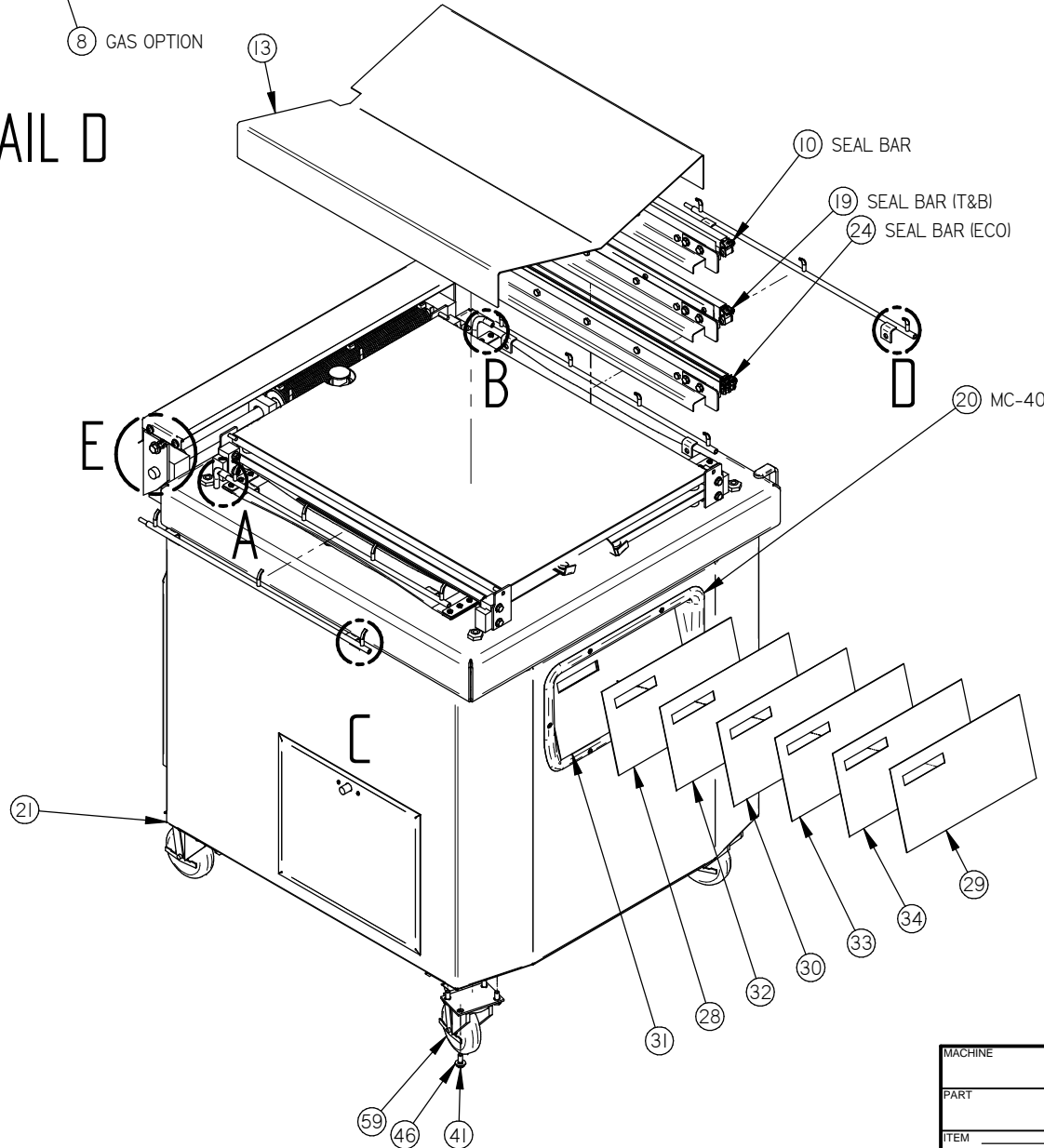


DETAIL D

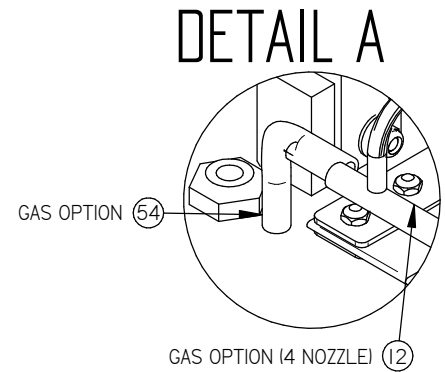
DETAIL C



DETAIL E



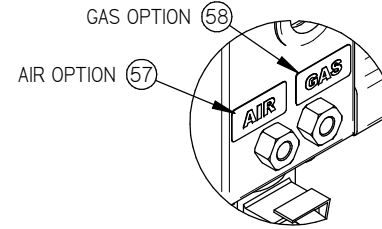
DETAIL B



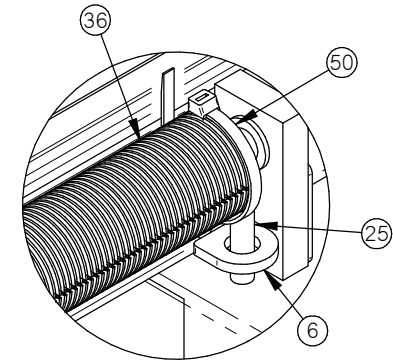
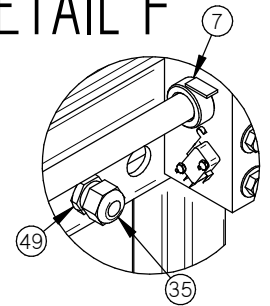
DETAIL A

MACHINE	<b>550A</b>		DEPT. TOL. METRIC	INCH	<b>SIPROMAC</b> ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>MACHINE ASSEMBLY</b>		USINAGE ± 0.1	± 0.004"	
			TOLERIE ± 0.5	± 0.020"	
			SOUDAGE ± 0.5	± 0.020"	
ITEM	CNC	DEPT.	<b>N.T.S.</b>		QTY. <b>1</b>
MAT.	3D DWG BY <b>SBU</b>	DATE <b>14-06-27</b>	NO. <b>005B0605</b>		
	2D DWG BY	DATE			

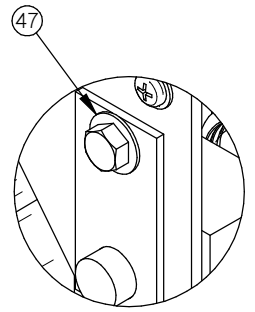
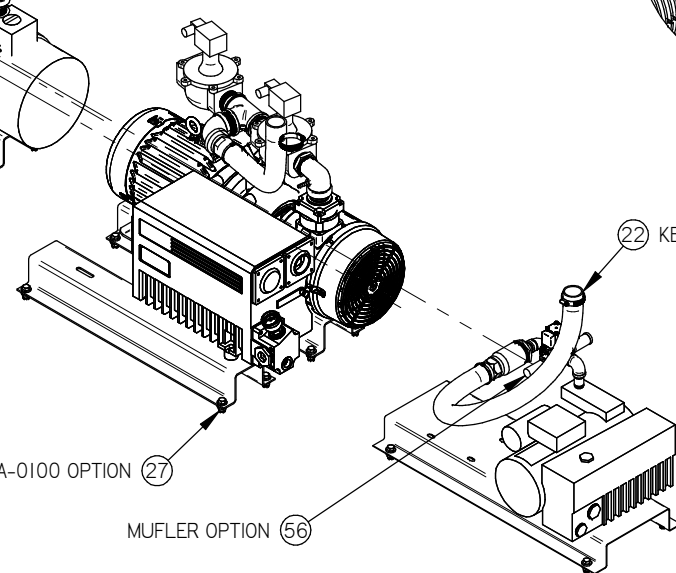
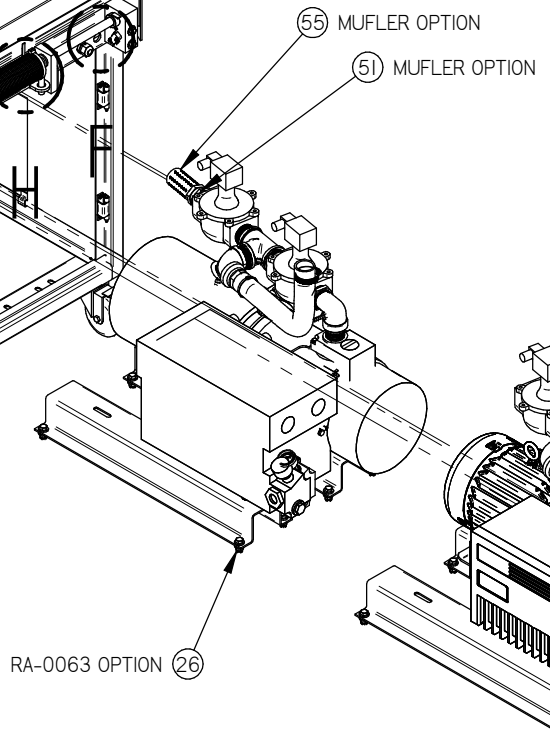
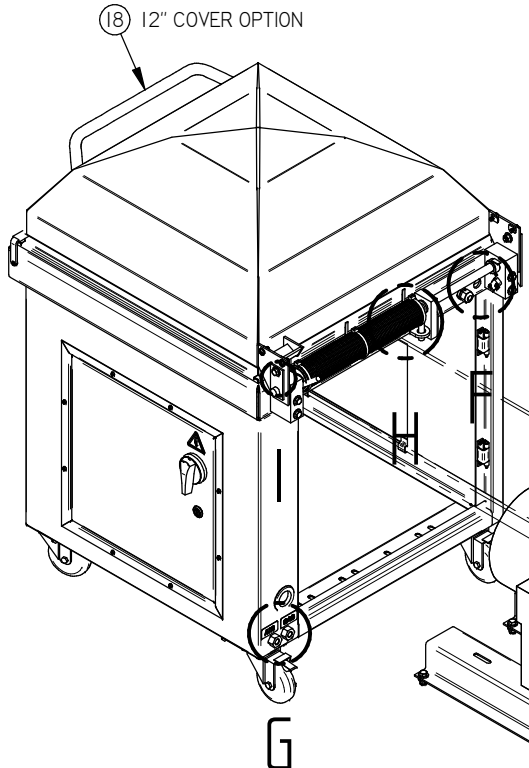
DETAIL G



DETAIL F

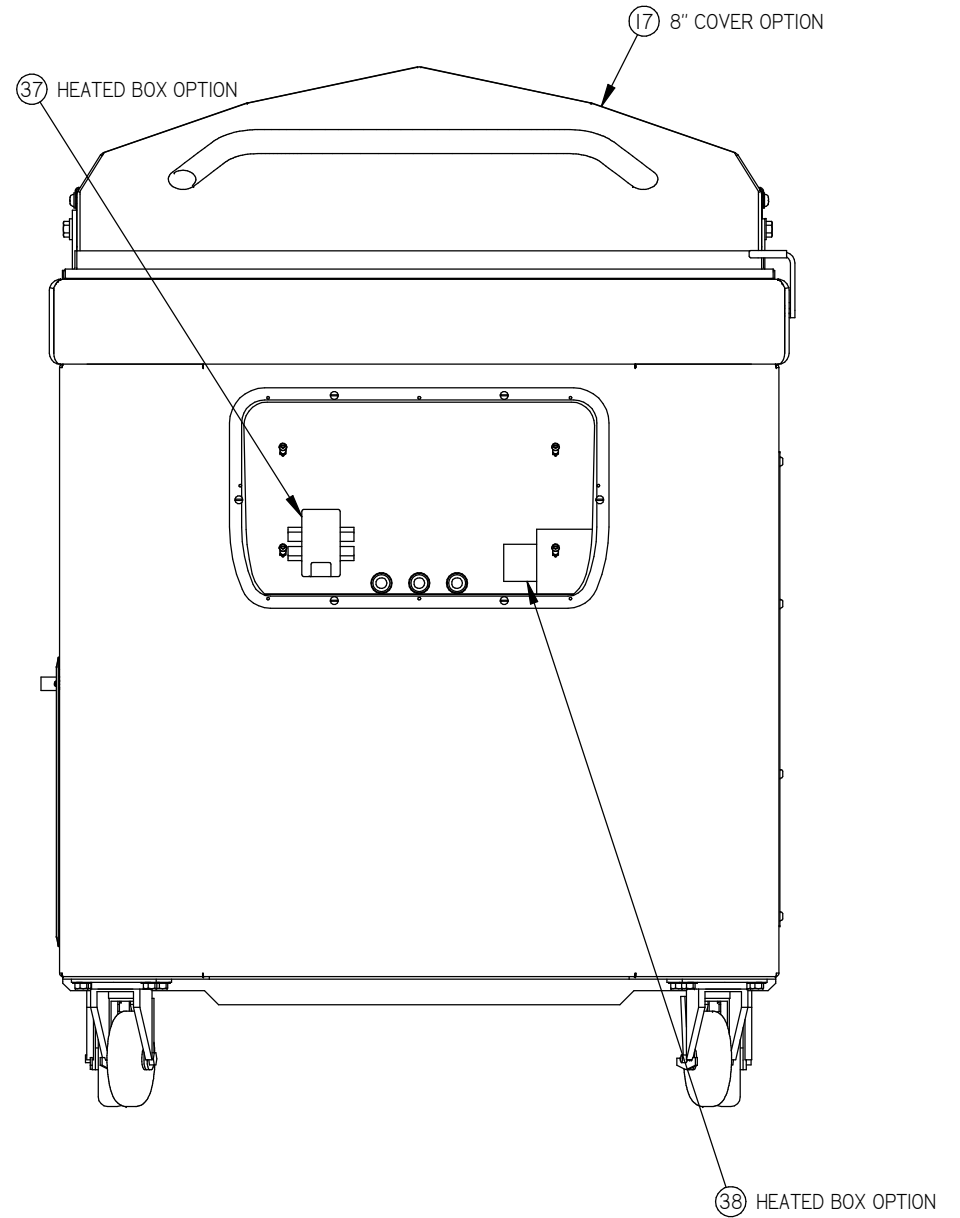
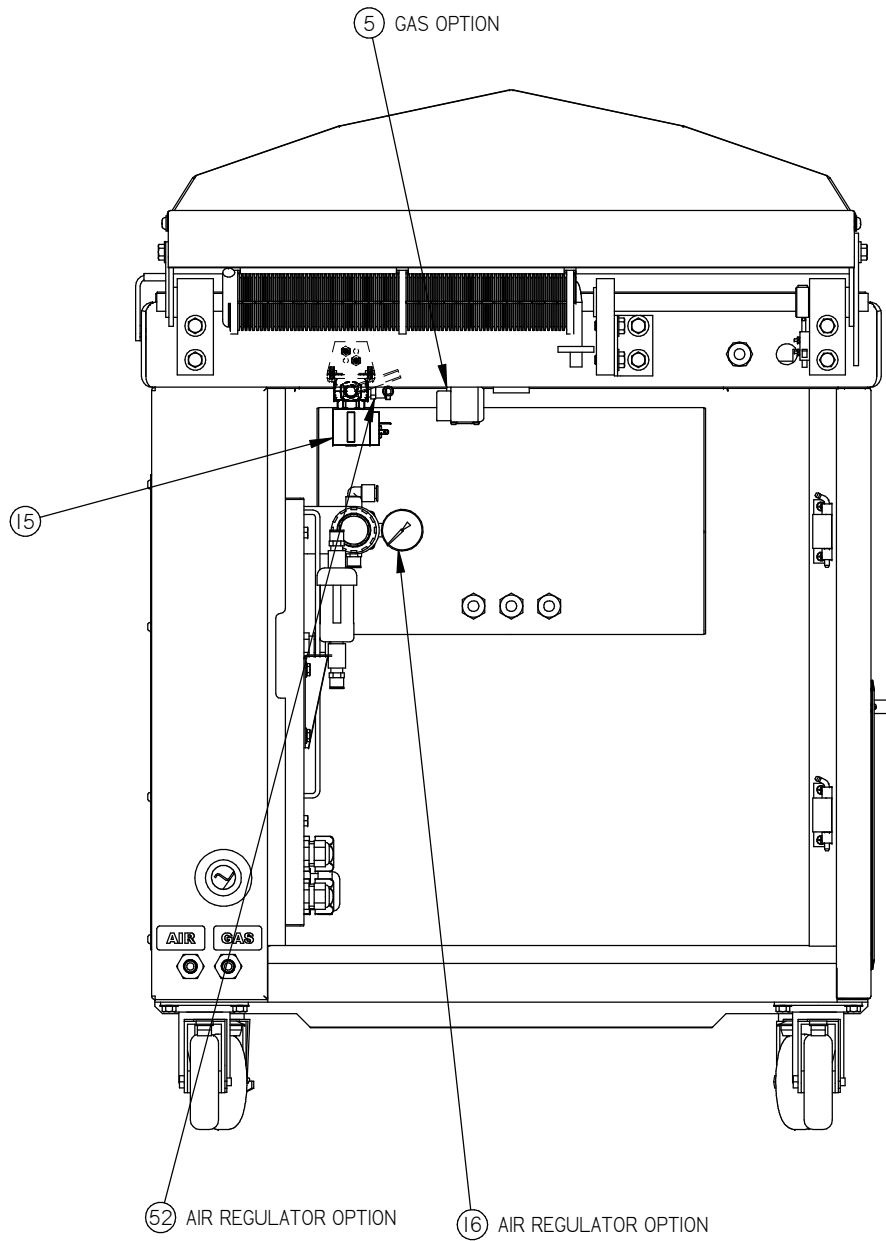


DETAIL H

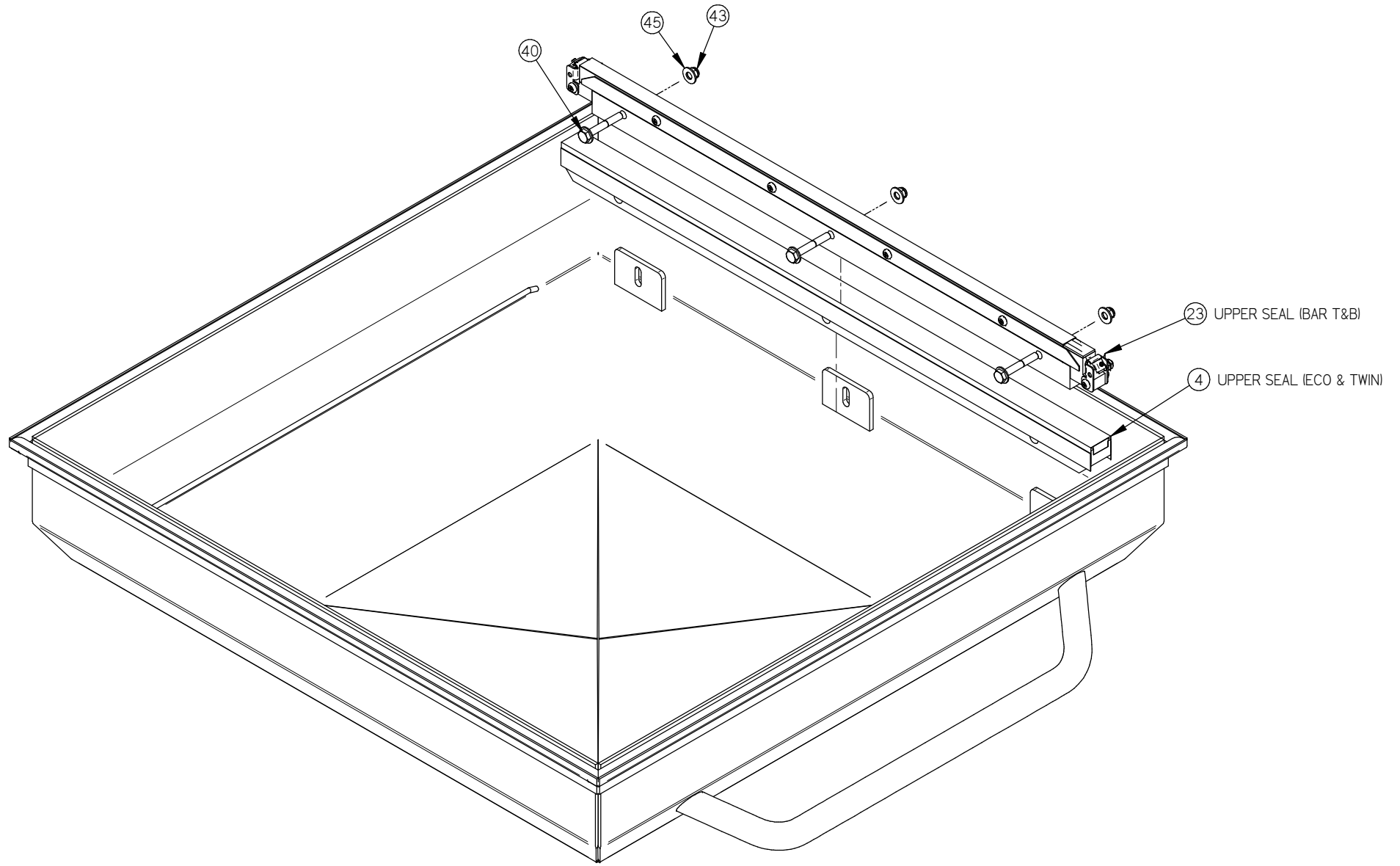


DETAIL I

MACHINE		<b>550A</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>MACHINE ASSEMBLY</b>		USINAGE	± 0.1	± 0.004"	
				TOLERIE	± 0.5	± 0.020"	
ITEM		CNC		SOUDEGE	± 0.5	± 0.020"	N.T.S.
MAT.		3D DWG BY <b>SBU</b>		DATE <b>14-06-27</b>		NO.	<b>005B0605</b>
		2D DWG BY		DATE		DEPT. <b>M-I</b> QTY. <b>1</b>	



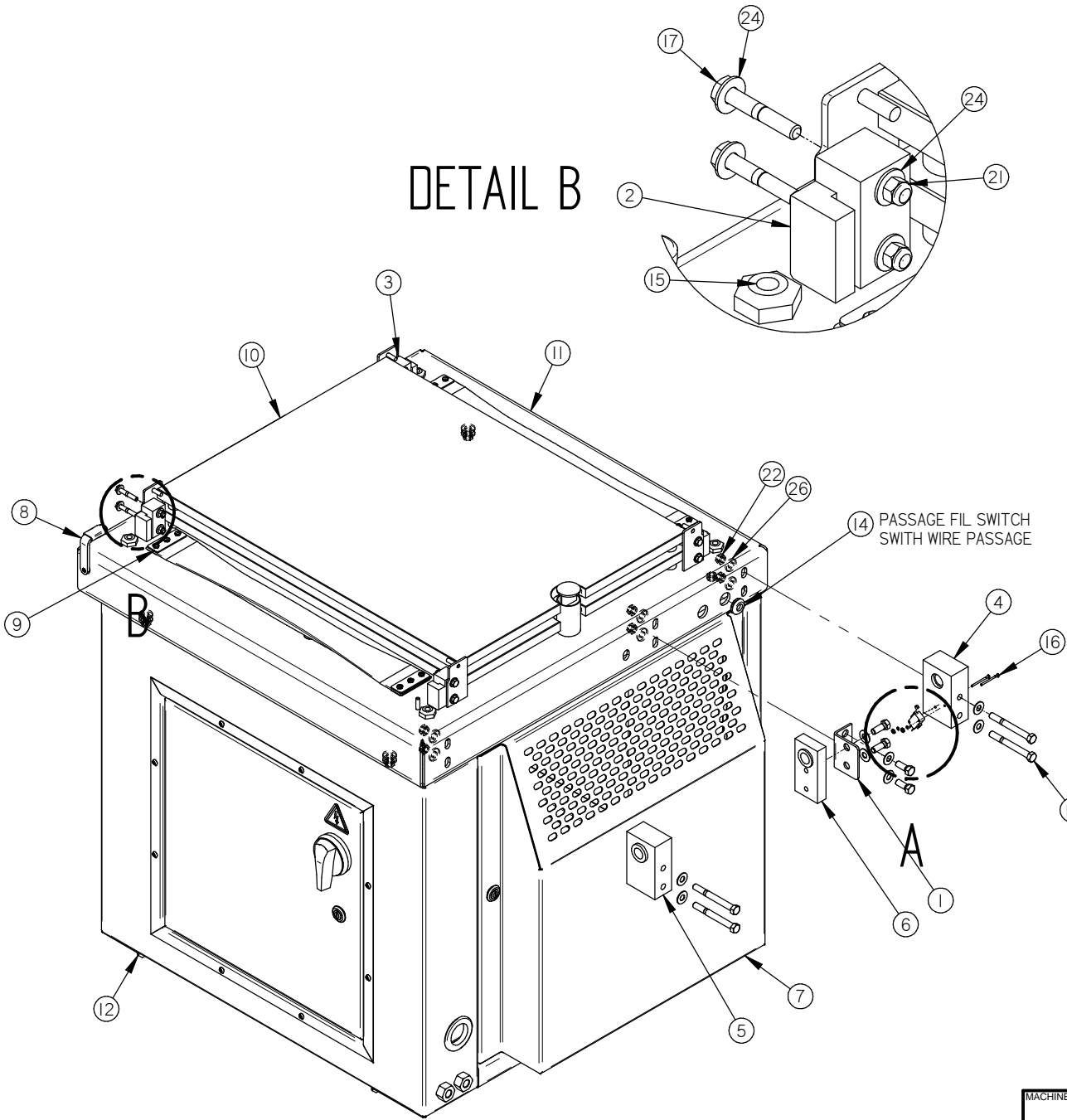
MACHINE		<b>550A</b>		DEPT. TOL.	METRIC	INCH.	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>MACHINE ASSEMBLY</b>		USINAGE	± 0.1	± 0.004"	
ITEM		CNC		TOLERIE	± 0.5	± 0.020"	
MAT.		3D DWG BY <b>SBU</b>		DATE	14-06-27		N.T.S.
		2D DWG BY		DATE			DEPT. <b>M-I</b> QTY. <b>1</b>
						<b>005B0605</b>	



MACHINE		<b>550A</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>MACHINE ASSEMBLY</b>		USINAGE	± 0.1	± 0.004"	
ITEM		CNC		TOLERIE	± 0.5	± 0.020"	
MAT.		3D DWG BY <b>SBU</b>		DATE	14-06-27		NO. <b>005B0605</b>
		2D DWG BY		DATE			
				N.T.S.		DEPT. <b>M-I</b> QTY. <b>1</b>	

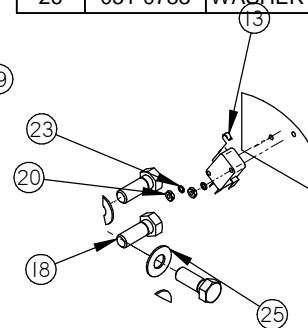
# 005B0608

## DETAIL B



ITEM	PART #	DESCRIPTION	QT.
1	001-1540	CENTRAL COVER AXIS SUPPORT FIXATION	1
2	002-0326	LEFT SEAL BAR GUIDE BLOCK	2
3	002-0327	RIGHT SEAL BAR GUIDE BLOCK	2
4	004-0274	LEFT COVER AXIS SUPPORT	1
5	004-0275	RIGHT COVER AXIS SUPPORT	1
6	004-0276	CENTRAL COVR AXIS SUPPORT	1
7	004A4230	REAR ACCESS DOOR ASSY (KB-0020)	1
8	004B1651	COVER HOLD DOWN ASS'Y	1
9	005A1436	BELLOWS ASSEMBLY	2
10	005B0340	FILLER PLATE ASSEMBLY	2
11	005C0341	TABLE ASEMBLY	1
12	005C0606	STRUCTURE ASSEMBLY	1
13	026-0610	LIMIT SWITCH LONG ROLLER	1
14	036-0280	PLUG GROMMET 1-1/16" X 1/2" X 13/16" HOLE	1
15	036-0400	WIRE CONNECT. 3/8" NPT CD09/O-RING/NUT	4
16	051-0094	SCREW 4-40 X 1 1/2" FLAT SLOT SS	2
17	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	8
18	051-0360	BOLT 3/8"-16nc. X 1" S/S	8
19	051-0424	BOLT 3/8"-16 x 3-1/2" SS	4
20	051-0540	NUT #4-40 HEX S/S	2
21	051-0581	NUT 1/4"-20 NYLON LOCK S/S	8
22	051-0620	NUT 3/8"-16 NC S/S	10
23	051-0715	WASHER #4 LOCK SS	2
24	051-0740	WASHER 1/4" FLAT S/S	16
25	051-0780	WASHER 3/8" FLAT S/S	8
26	051-0783	WASHER 3/8" FLAT THICK S/S	14

## DETAIL A

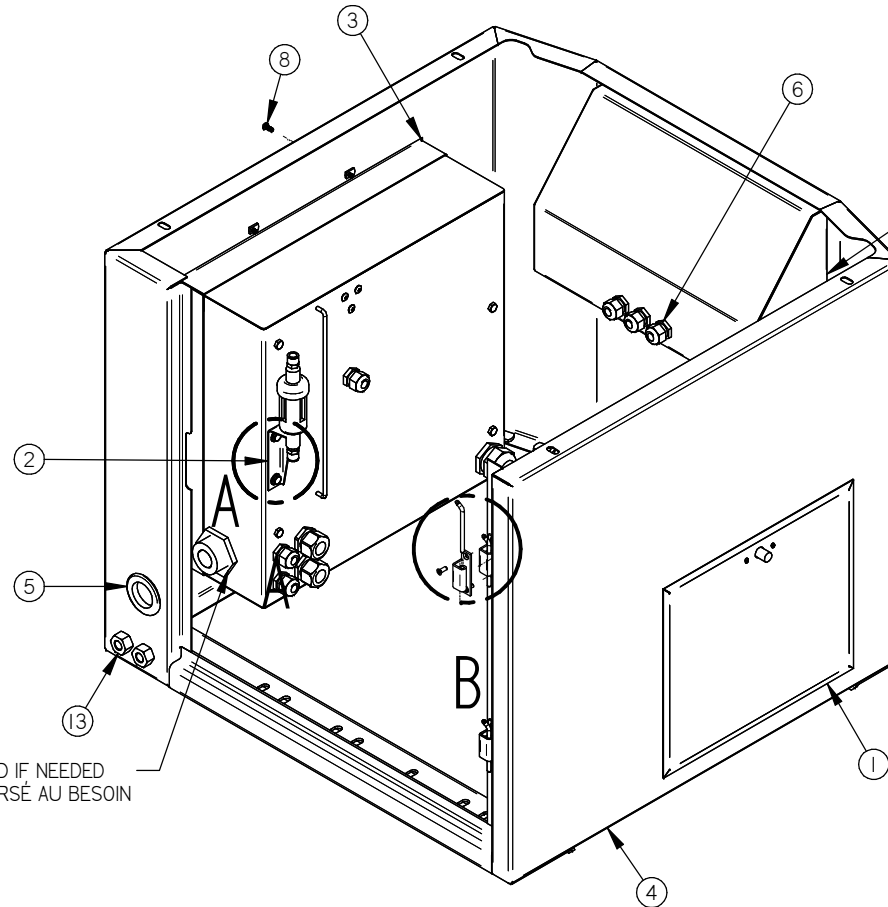


LET.	MODIFICATION	DATE	INT.
------	--------------	------	------

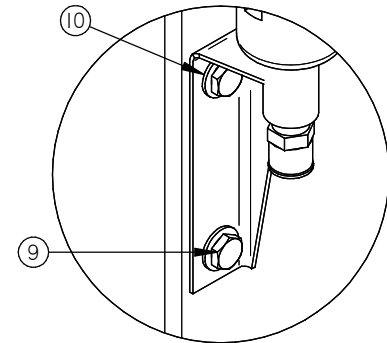
MACHINE	<b>550A</b>			DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>BASE MACHINE ASSEMBLY</b>			USINAGE	± 0.1	± 0.004"	
				TOLERIE	± 0.5	± 0.020"	
				SOUDEAGE	± 0.5	± 0.020"	
ITEM	CNC	DEPT.	M-I	QTY.	1		
MAT.	3D DWG BY <b>SBU</b>	DATE	<b>14-06-26</b>	NO.	<b>005B0608</b>		
	2D DWG BY <b>AG</b>	DATE	<b>14-07-07</b>				

# 005C0606

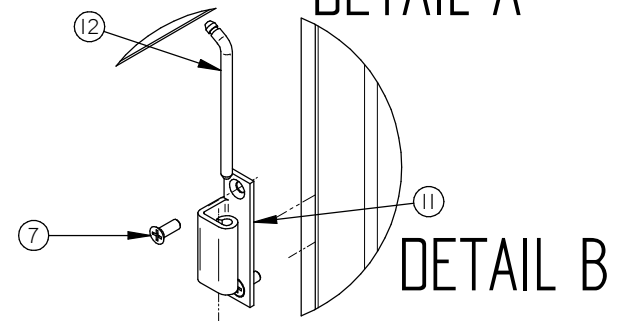
ITEM	PART #	DESCRIPTION	QT.
1	004A4090	ACCESS DOOR ASSEMBLY	1
2	004A4138	VACUUM SENSOR FILTER	1
3	004A4155	ELECTRIC BOX ASS'Y	1
4	004C0438	STRUCTURE WELD ASSY	1
5	036-0265	GROMMET 1-1/2" ID X 2-3/8" OD RUBBER	1
6	036-0409	PRESSE-ETOUPE CD13	3
7	051-01385	SCREW 10-24 x 1/2" FLAT-UND. PHIL S/S	4
8	051-0144	SCREW #10-24 N.C 1/2" PAN PHIL. S/S	8
9	051-0180	BOLT. HEX. 1/4"-20 NC. x 1/2" S/S	2
10	051-0740	WASHER 1/4" FLAT S/S	2
11	056-3010-1	HINGE CONCEALED SS304 - BASE	2
12	056-3010-3	HINGE CONCEALED SS304 - PIN	2
13	102-0551	BULKHEAD 1/4"NPT X 3/8 TUBE QUICK	2



SEAL WITH SILICONE  
SELLER AVEC DU SILICONE



DETAIL A



DETAIL B

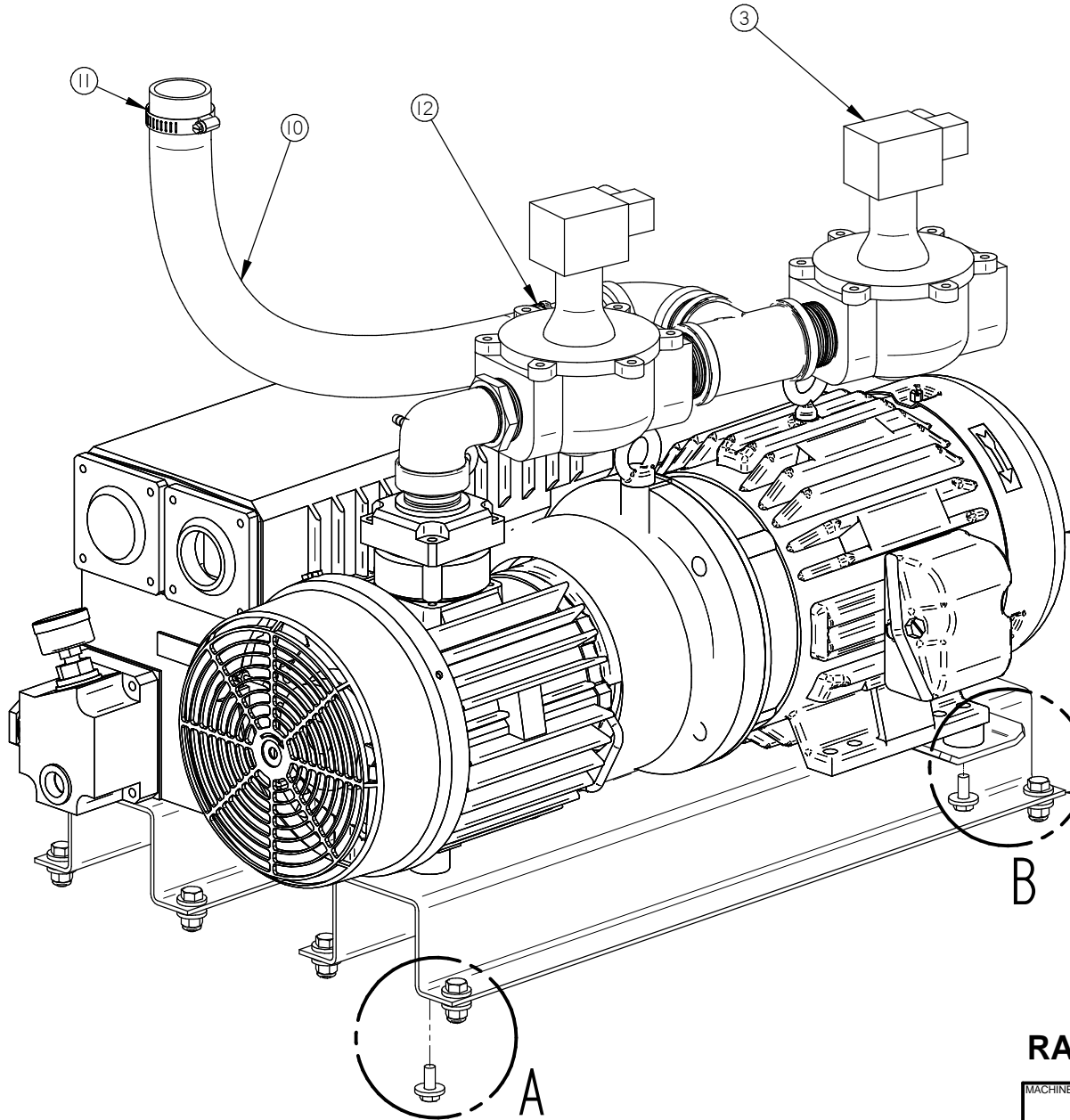
CAN BE INVERTED IF NEEDED  
PEUT ÊTRE INVERSÉ AU BESOIN

MACHINE		<b>550A</b>		DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>STRUCTURE ASSEMBLY</b>		USINAGE ± 0.1 ± 0.004"	TOLERIE ± 0.5 ± 0.020"	
ITEM		CNC		SOUDEAGE ± 0.5 ± 0.020"	N.T.S.	
MAT.	3D DWG BY	DATE	NO.	DEPT.	QTY.	
	SBU	14-06-26	005C0606	M	1	
	AG	14-07-07				

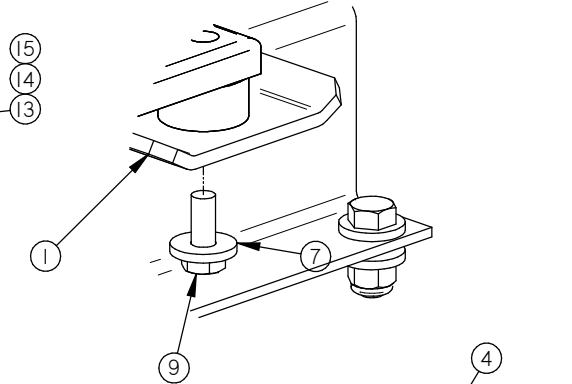
LET.	MODIFICATION	DATE	INT.
------	--------------	------	------

# 010B0063

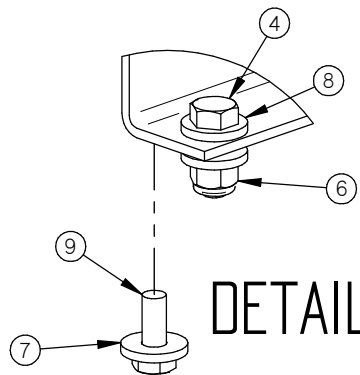
ITEM	PART #	DESCRIPTION	QT.
1	001-1318	PUMPS SUPPORT 63m³ & 100m³	1
2	001A6817	PUMP SUPPORT (RA0063 & RA0040)	2
3	004B1404	VACUUM / ATMOSPHERE VALVE ASSY.	1
4	051-0360	BOLT 3/8"-16nc. X 1" S/S	8
5	051-0372	BOLT 3/8"-16 x 1-1/4" S/S	1
6	051-0622	NUT 3/8"-16nc. NYLON LOCK S/S	9
7	051-0762	WASHER 5/16" THICK FLAT S/S	4
8	051-0783	WASHER 3/8" FLAT THICK S/S	18
9	051-0980	BOLT M8 x 20 S/S	4
10	104-0130	HOSE 1-1/2" ID VACUUM TIGERFLEX 900 MM	1
11	105-0110	SCREW CLAMPS 1-1/16" TO 2" ALL S/S	1
12	105-0250	EAR CLAMP 1-1/2" S/S	1
13	125-0060	BUSCH RA-0100 230-460V/3PH/60HZ	1
14	125-0062	BUSCH RA-0100 575V/3PH/60HZ	1
15	125-0064	BUSCH RA-0100 220V/1PH/60HZ	1



## DETAIL B



## DETAIL A



## RA-0100 OPTION

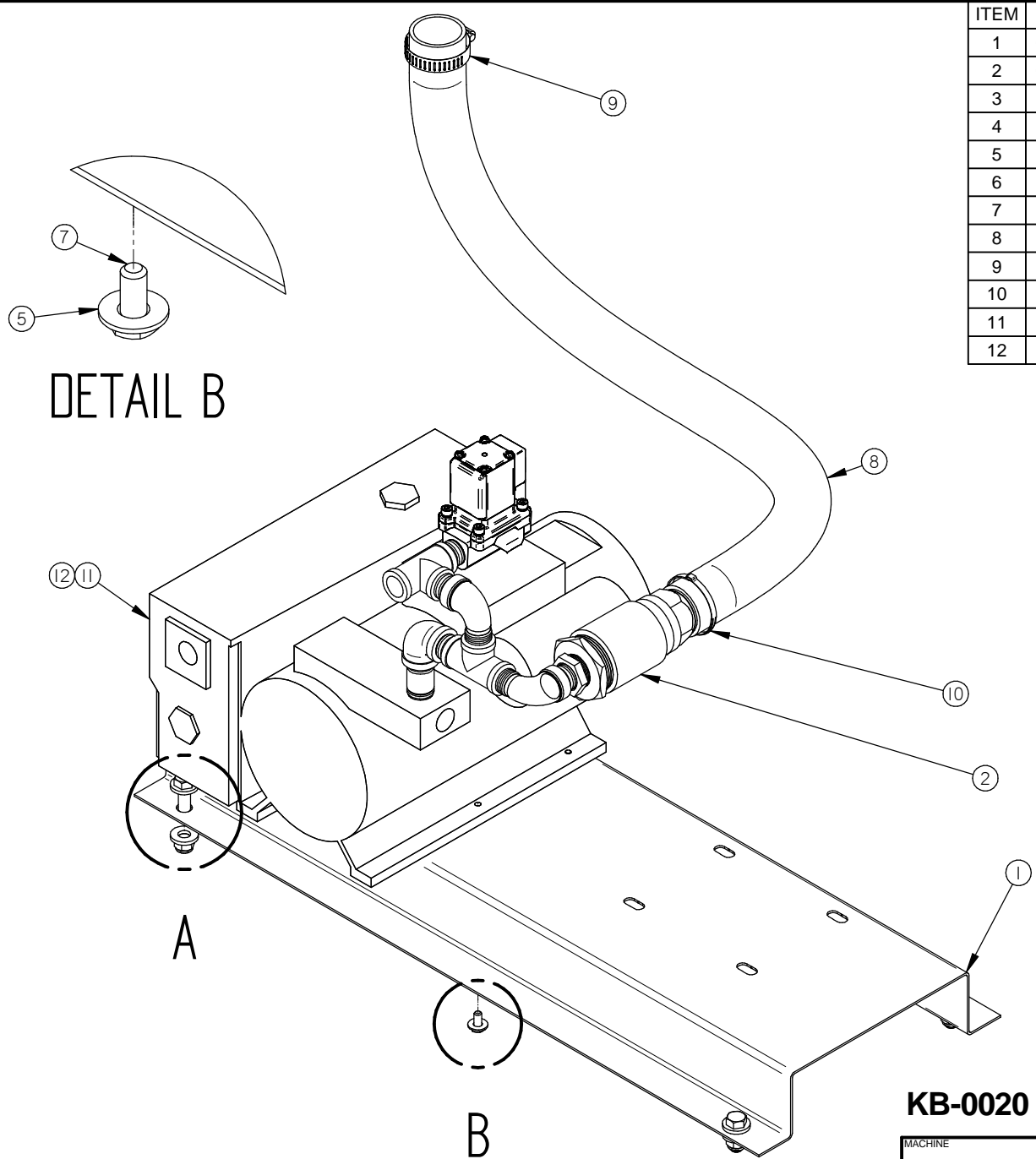
MACHINE	<b>550A</b>	DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>RA-0100 PUMP ASSEMBLY</b>	USINAGE ± 0.1	± 0.004"	
		TOLERIE ± 0.5	± 0.020"	
		SOUDEGE ± 0.5	± 0.020"	
ITEM	CNC	DEPT.	M	QTY. 1
MAT.	3D DWG BY SBU	DATE 14-07-01	NO.	<b>010B0063</b>
	2D DWG BY AG	DATE 14-07-03		

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



# 005B1440

ITEM	PART #	DESCRIPTION	QT.
1	001A6831	KB-0020 PUMP SUPPORT	1
2	005A1506	VACUUM/ATM VALVE ASSY (KB-0020)	1
3	051-0360	BOLT 3/8"-16nc. X 1" S/S	4
4	051-0622	NUT 3/8"-16nc. NYLON LOCK S/S	4
5	051-0740	WASHER 1/4" FLAT S/S	4
6	051-0783	WASHER 3/8" FLAT THICK S/S	8
7	051-0948	BOLT M6 x 12 SS	4
8	104-0130	HOSE 1-1/2" ID VACUUM TIGERFLEX 737MM	1
9	105-0110	SCREW CLAMPS 1-1/16" TO 2" ALL S/S	1
10	105-0250	EAR CLAMP 1-1/2" S/S	1
11	125-1020	BUSCH KB-0020 115V/1PH/60HZ	1
12	125-1021	BUSCH KB-0020 220-240V/1PH/50-60HZ	1



DETAIL B

DETAIL A

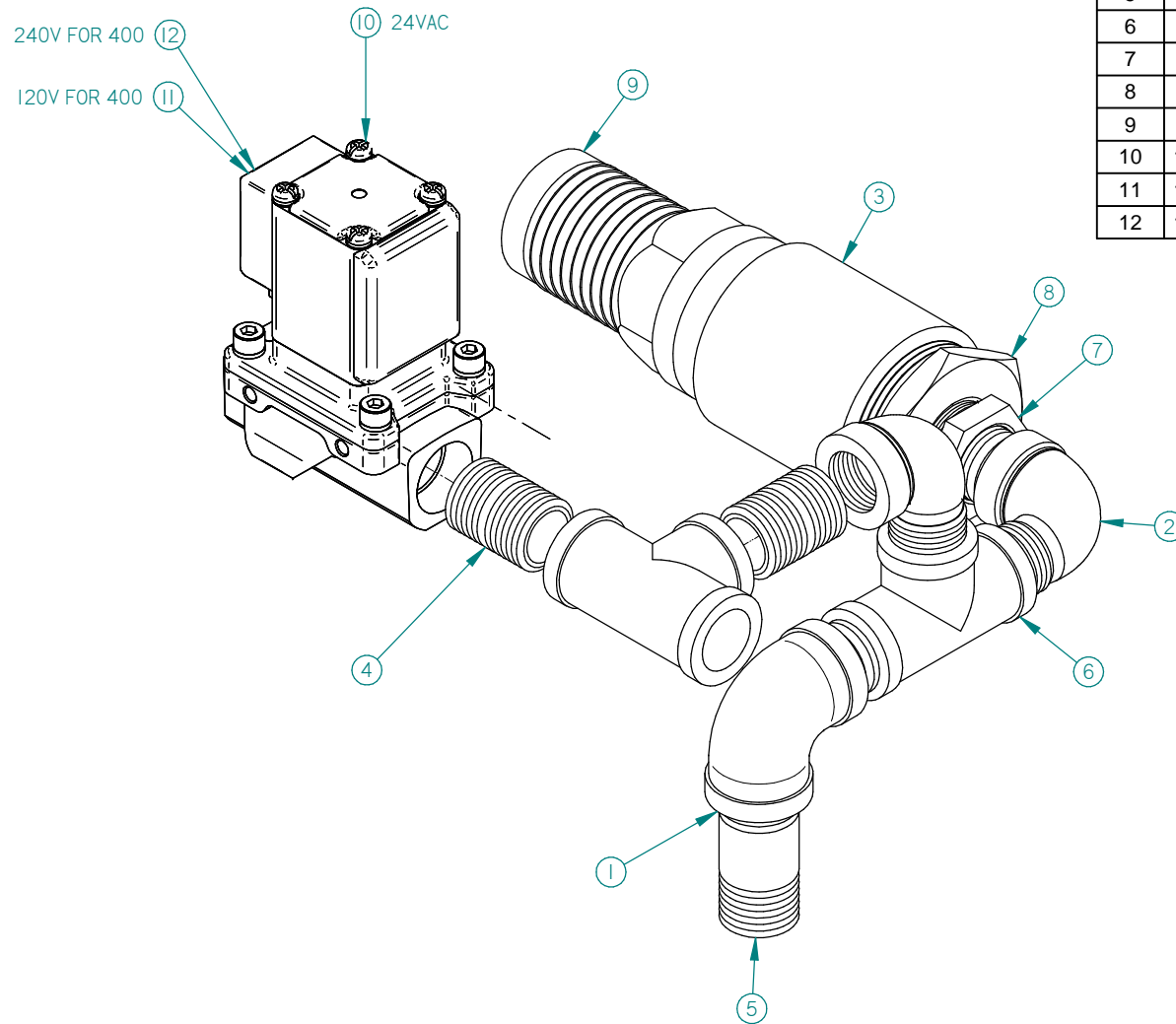
## KB-0020 OPTION

MACHINE		<b>550A</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>KB-0020 PUMP ASSEMBLY</b>		USINAGE	± 0.1	± 0.004"	
ITEM		CNC		TOLERIE	± 0.5	± 0.020"	
MAT.		3D DWG BY <b>SBU</b>		DATE	<b>14-07-03</b>		NO. <b>005B1440</b>
MODIFICATION		2D DWG BY <b>AG</b>		DATE	<b>14-07-03</b>		
LET.	DATE	INT.	DEPT.	M	QTY.	1	

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

# 005A1506

ITEM	PART #	DESCRIPTION	QT.
1	100-0025	ELBOW 90° X 1/2" NPT S/S	1
2	100-0075	STREET ELBOW 1/2" NPT SS	2
3	100-0144	COUPLING 1-1/2" NPT S/S	1
4	100-0230	CLOSE NIPPLE 1/2" npt, S/S	4
5	100-0325	NIPPLE 1/2"npt. X 2" S/S	1
6	100-0465	TEE 1/2"npt. S/S	2
7	100-0520	RED.BUSH.3/4"NPT x 1/2"NPT S/S	1
8	100-0553	REDUCING BUSH. 1-1/2" NPT X 3/4" NPT SS	1
9	100-1230	STRAIGHT 1-1/2"MNPT x1-1/2" HOSE BARB	1
10	106-00201	VALVE 2WAY 24V 1/2" NPT	1
11	106-00621	VALVE 2WAY 120V 1/2" NPT	1
12	106-00631	VALVE 2WAY 240V 1/2" NPT	1



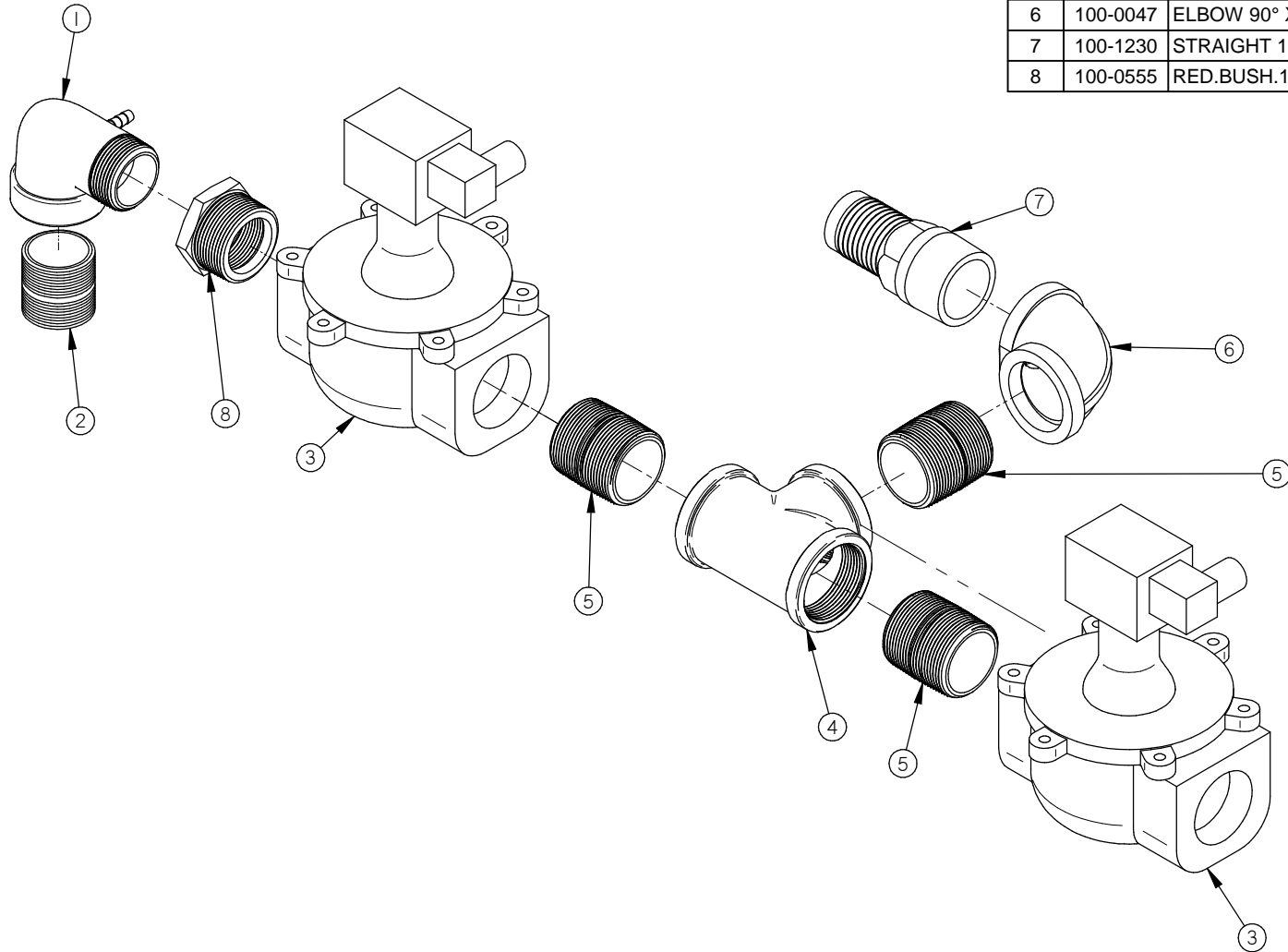
## KB-0020 OPTION

MACHINE		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
<b>SINGLE CHAMBER VACUUM</b>		USINAGE	± 0.1	± 0.004"	
PART		TOLERIE	± 0.5	± 0.020"	
VACUUM/ATM VALVE ASSY (KB-0020)		SOUDEAGE	± 0.5	± 0.020"	N.T.S.
ITEM	CNC	DEPT.	M	QTY.	1
MAT.	3D DWG BY SBU	DATE 14-06-12	NO.	005A1506	
	2D DWG BY AG	DATE 14-06-16			

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

# 004B1404

ITEM	PART #	DESCRIPTION	QT.
1	004A4081	BELLOWS ELBOW CONNECTOR ASSY	1
2	100-0245	CLOSE NIPPLE 1 1/4"npt. S/S	1
3	106-0051	VALVE 2WAY 24V 1-1/2"NPT60Hz	2
4	100-0485	TEE 1-1/2" NPT S/S	1
5	100-0440	NIPPLE 1-1/2" NPT X 2" SS	3
6	100-0047	ELBOW 90° X 1-1/2" NPT S/S	1
7	100-1230	STRAIGHT 1-1/2"MNPT x1-1/2" HOSE BARB	1
8	100-0555	RED.BUSH.1-1/2" x 1-1/4" NPT S/S	1



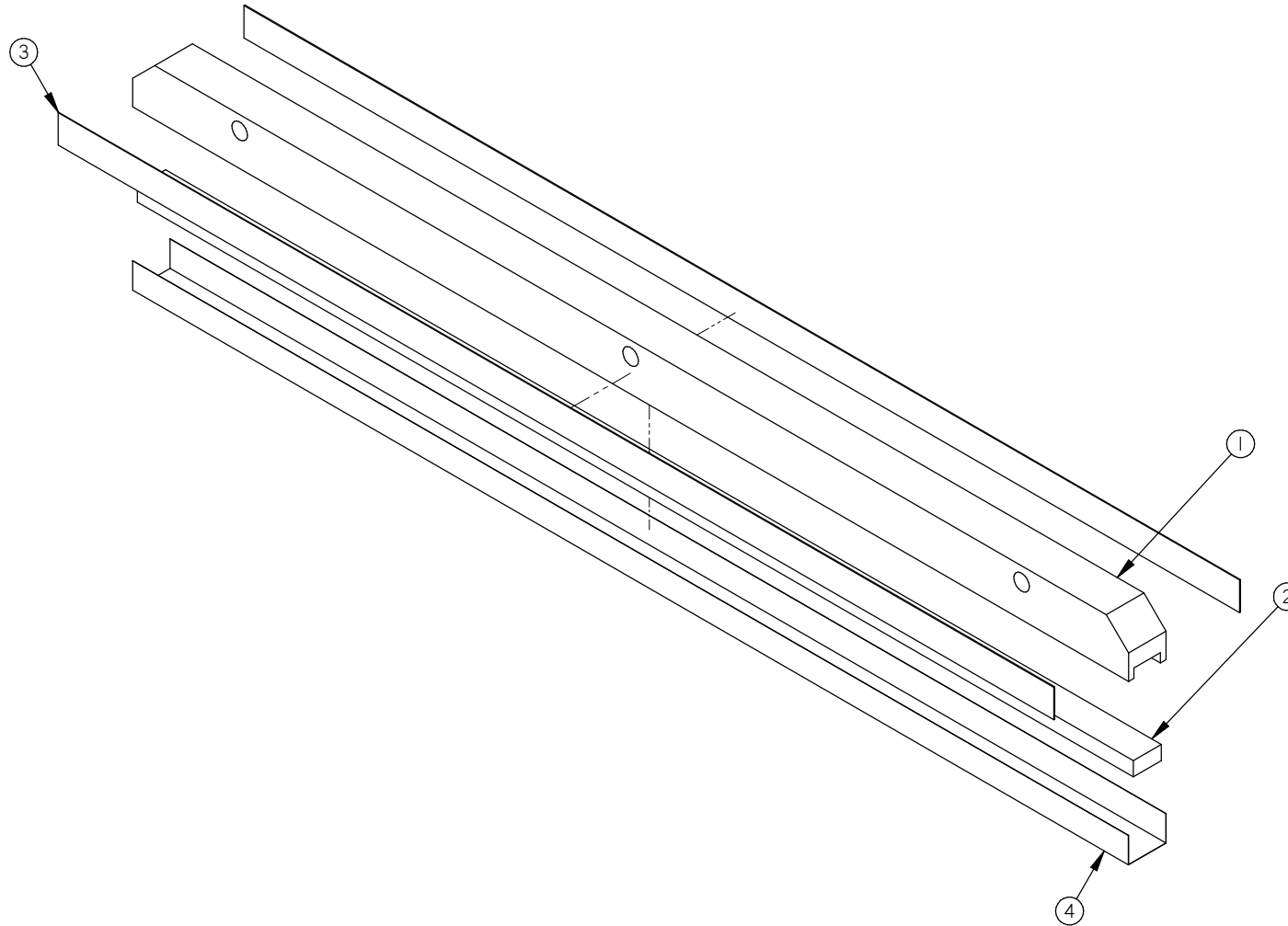
## -OPTION - 40M<sup>3</sup>, 63M<sup>3</sup> & 100M<sup>3</sup> PUMP

MACHINE		DEPT. TOL. METRIC		INCH		SIPROMAC	
VACUUM		USINAGE	± 0.1	± 0.004"	ST-GERMAIN DE GRANTHAM		
PART		TOLERIE	± 0.5	± 0.020"	QUEBEC CANADA		
VACUUM / ATMOSPHERE VALVE ASSY.		SOUDEAGE	± 0.5	± 0.020"	N.T.S.		
ITEM	CNC	DEPT.	M-I	QTY.	1		
MAT.	DWG BY SBU	DATE 13-09-19	NO.		004B1404		
	APP. BY	DATE					

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

# 004B1117

ITEM	PART #	DESCRIPTION	QT.
1	002C2063	UPPER SEAL BAR SUPPORT	1
2	008A0320	UPPER SEAL BAR RUBBER	1
3	171-0180	TAPE CLEAR SUPER BOND 3/4" (0.024) 675MM	2
4	176-0200	TEFLON TAPE,PRESS.SENSITIVE 2" 675mm (0.08)	1



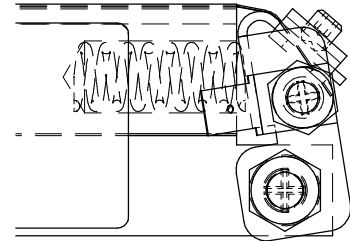
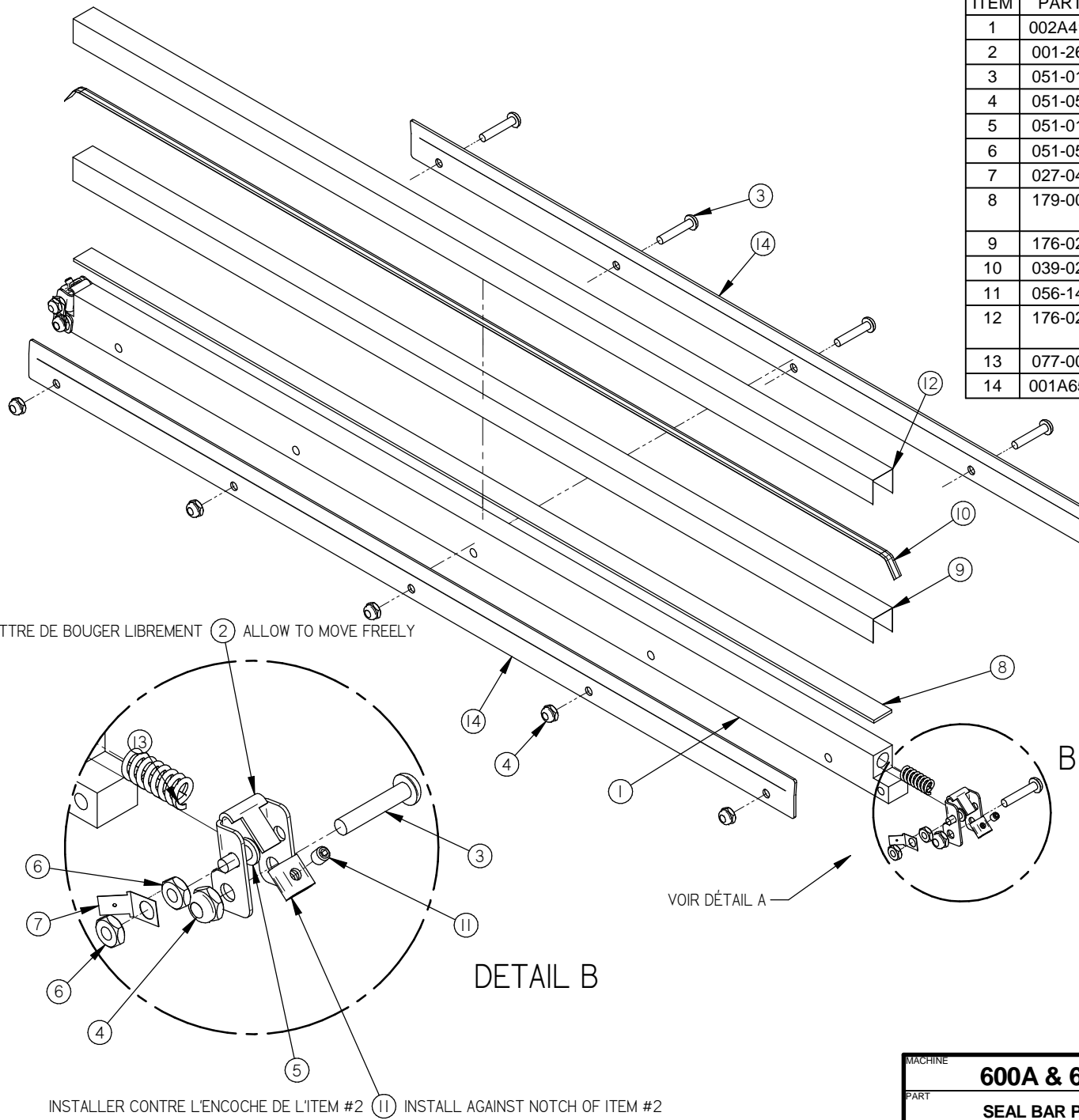
**-BAG CUT OPTION & TWIN-**

MACHINE		550A		DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		UPPER SEAL BAR ASSEMBLY (E.C.O.) & (TWIN)		USINAGE ± 0.1 ± 0.004	TOLERIE ± 0.5 ± 0.020	
ITEM		CNC		SOUDEAGE ± 0.5 ± 0.020	N.T.S.	
MAT.	DWG BY	APP. BY	SBU	DATE	14-07-03	NO. 004B1117
LET.		MODIFICATION		DATE	INT.	DEPT. M-I
						QTY. 2

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

# | 005B0420

ITEM	PART #	DESCRIPTION	QT.
1	002A4147	SEAL BAR	1
2	001-2666	ELEMENT BINDER	2
3	051-0146	SCREW 10-24 X 1" PAN PHIL S/S	7
4	051-0572	NUT #10-24 NYLON LOCK S/S	7
5	051-0100	SCREW 8-32 X 3/8" PAN PHIL S/S	2
6	051-0550	NUT #8-32 SS	4
7	027-0400	CONNECTOR ADAPTOR	2
8	179-0003	SILICONE 2mm x 15mm ADHESIVE 664mm (0.664)	1
9	176-0220	TEFLON TAPE, PRESS SENSITIVE 2" (0.081)	1
10	039-0220	BI-ACTIVE SEALING ELEMENT 700mm (0.07)	1
11	056-1400	1/4" SET SCREW BANDING BUCKLE S/S	2
12	176-0203	TEFLON TAPE, 5MIL UNCOATED ZONE 663.5mm (0.066)	1
13	077-0095	SPRING C 0360-059-1250 S/S	2
14	001A6582	TEFLON HOLD DOWN PLATE	2



-DÉTAIL A-

PERMETTRE DE BOUGER LIBREMENT (2) ALLOW TO MOVE FREELY

VOIR DÉTAIL A

DETAIL B

INSTALLER CONTRE L'ENCOCHE DE L'ITEM #2 (11) INSTALL AGAINST NOTCH OF ITEM #2

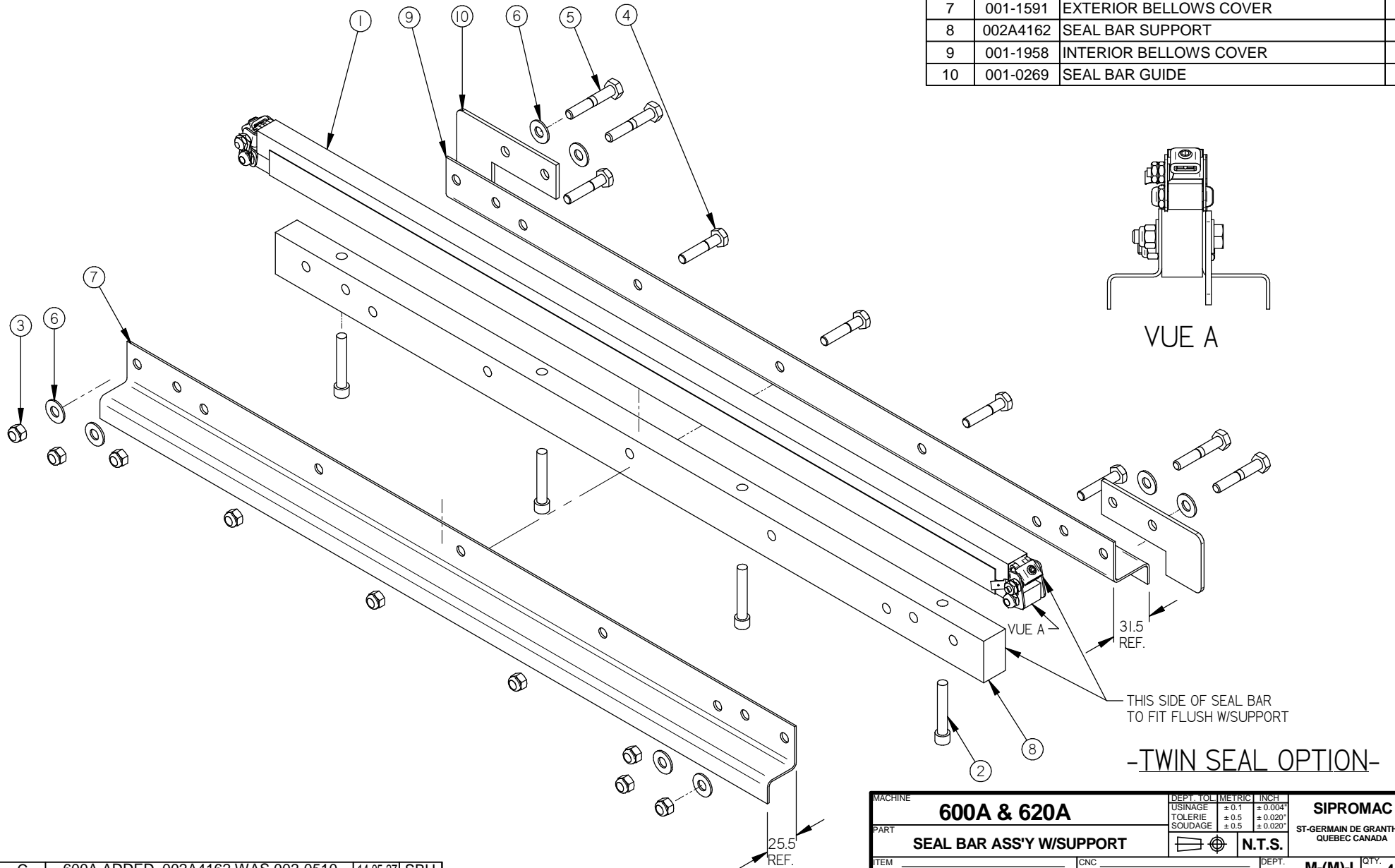
-TOP & BOTTOM SEALING OPTION-

H	600A ADDED	14-05-27	SBU
G	AJOUT TEFLON HOLDER	13-09-25	SBU
LET.	MODIFICATION	DATE	INT.

MACHINE	<b>600A &amp; 620A</b>		DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>SEAL BAR PRE-ASS'Y</b>		USINAGE ± 0.1 ± 0.004	TOLERIE ± 0.5 ± 0.020	
ITEM	CNC	DATE	SOUDAGE ± 0.5 ± 0.020	N.T.S.	
MAT.	DWG BY <b>SBU</b>	DATE <b>13-09-25</b>	APP. BY	DATE	DEPT. <b>M-I</b> QTY. <b>4</b>
					<b>005B0420</b>

# 005A0560

ITEM	PART #	DESCRIPTION	QT.
1	005A0418	SEAL BAR PRE-ASS'Y	1
2	051-0251	CAP. HEX. SKT BOLT 1/4"-20 NC. x 1 1/2"	4
3	051-0581	NUT 1/4"-20 NYLON LOCK S/S	9
4	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	5
5	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	4
6	051-0740	WASHER 1/4" FLAT S/S	8
7	001-1591	EXTERIOR BELLOWS COVER	1
8	002A4162	SEAL BAR SUPPORT	1
9	001-1958	INTERIOR BELLOWS COVER	1
10	001-0269	SEAL BAR GUIDE	2

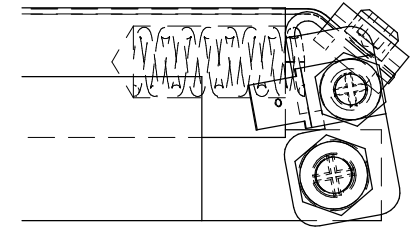
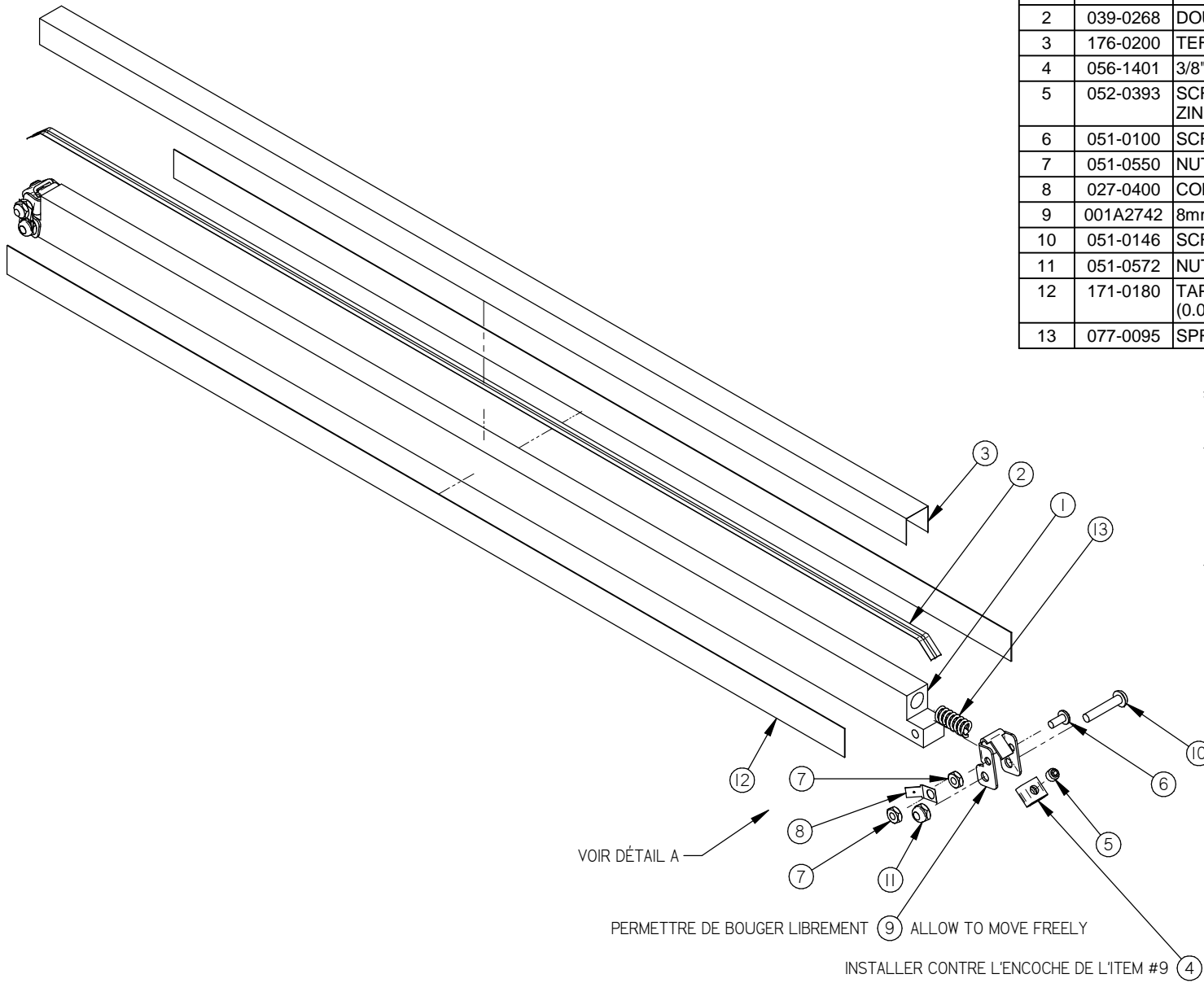


C	600A ADDED, 002A4162 WAS 002-0510	14-05-27	SBU
B	REDRAWN	05-09-12	M.A.
LET.	MODIFICATION	DATE	INT.

MACHINE		DEPT. TOL. METRIC		INCH		SIPROMAC	
600A & 620A		USINAGE	± 0.1	± 0.004"	ST-GERMAIN DE GRANTHAM		
PART		TOLERIE	± 0.5	± 0.020"	QUEBEC CANADA		
SEAL BAR ASS'Y W/SUPPORT		SOUDAGE	± 0.5	± 0.020"	N.T.S.		
ITEM	CNC	DEPT.	M-(M)-I		QTY.		4
MAT.	DWG BY M.A.L.	DATE	05-09-12		NO.		005A0560
	APP. BY	DATE					

# 005A0418

ITEM	PART #	DESCRIPTION	QT.
1	002A0400	SEAL BAR	1
2	039-0268	DOUBLE SEAM BAND (8MM) (2.4)	1
3	176-0200	TEFLON TAPE 5MIL (0.81)	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	NUT #10-24 NYLON LOCK S/S	2
12	171-0180	TAPE CLEAR SUPER BOND 3/4" 641.5mm (0.019)	2
13	077-0095	SPRING C 0360-059-1250 S/S	2



-DÉTAIL A-

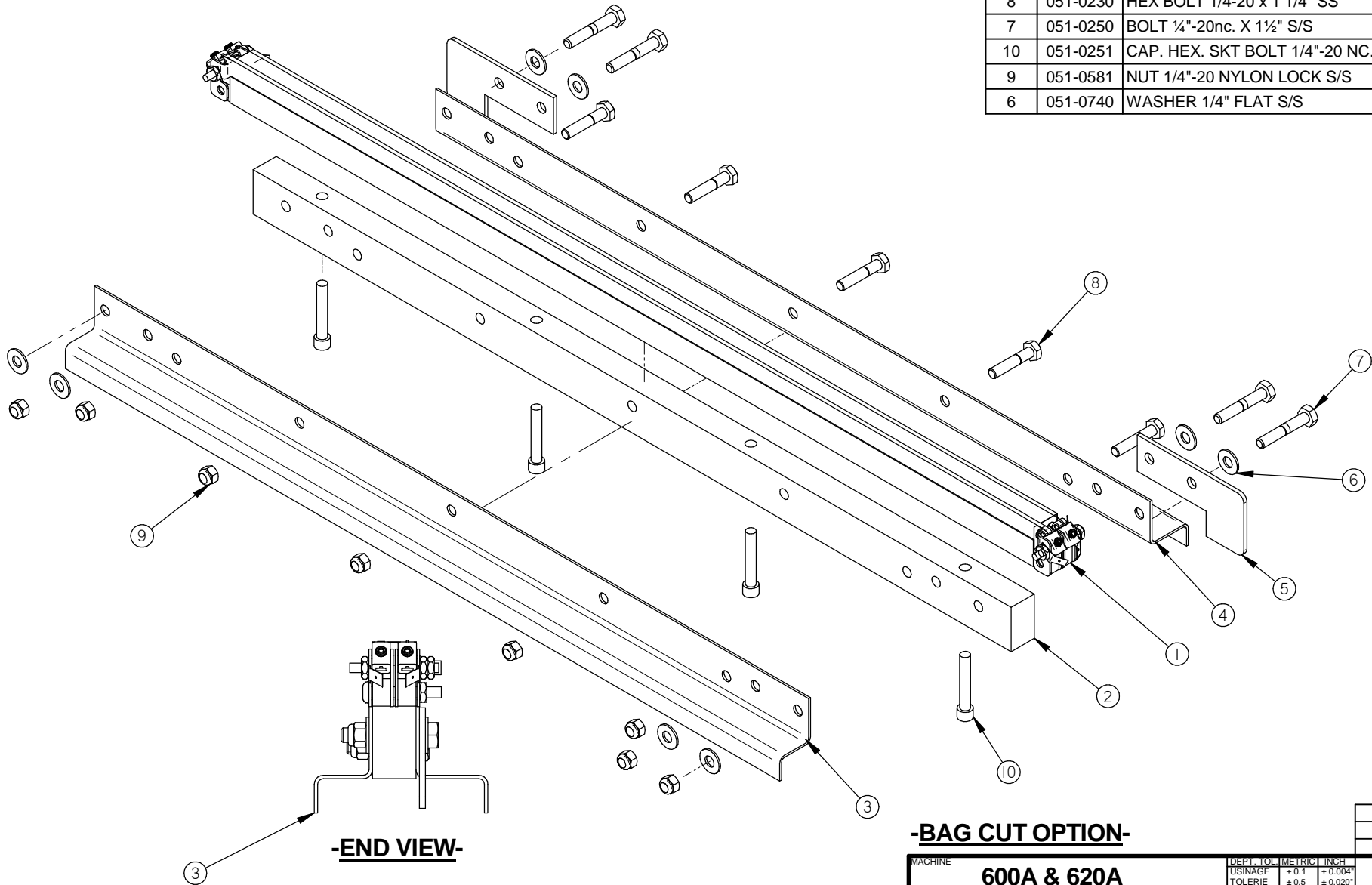
## -TWIN SEAL OPTION-

H	600A ADDED	14-05-27	SBU
G	MODIF. A-453 AJOUTER 077-0095	10-06-01	J.G.
F	ADDED 052-0393	06-04-19	M.A.
E	REDRAWN	05-09-12	M.A.
LET.	MODIFICATION	DATE	INT.

MACHINE	<b>600A &amp; 620A</b>		DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>SEAL BAR PRE-ASS'Y</b>		USINAGE ± 0.1 ± 0.004	TOLERIE ± 0.5 ± 0.020	
ITEM	CNC	DEPT.	N.T.S.		M-(M)-I QTY. 4
MAT.	DWG BY <b>M.A.L.</b>	DATE <b>05-09-12</b>	NO.	<b>005A0418</b>	
	APP. BY	DATE			

# 005F0561

ITEM	PART #	DESCRIPTION	QT.
5	001-0269	SEAL BAR GUIDE	2
3	001-1591	EXTERIOR BELLOWS COVER	1
4	001-1958	INTERIOR BELLOWS COVER	1
2	002A4191	SEAL BAR SUPPORT (ECO)	1
1	005F0419	SEAL BAR PRE-ASS'Y	1
8	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	5
7	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	4
10	051-0251	CAP. HEX. SKT BOLT 1/4"-20 NC. x 1 1/2"	4
9	051-0581	NUT 1/4"-20 NYLON LOCK S/S	9
6	051-0740	WASHER 1/4" FLAT S/S	8



**-END VIEW-**

**-BAG CUT OPTION-**

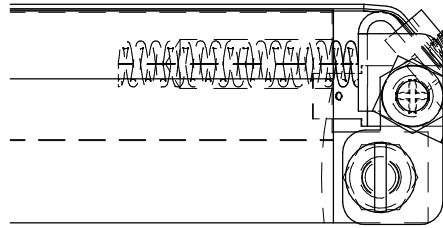
620A	4
600A	4
MACHINE	QTY

MACHINE		DEPT. TOL. METRIC		INCH		SIPROMAC	
600A & 620A		USINAGE	± 0.1	± 0.004"	ST-GERMAIN DE GRANTHAM QUEBEC CANADA		
PART		TOLERIE	± 0.5	± 0.020"			
SEAL BAR ASS'Y W/SUPPORT (ECO)		SOUDAGE	± 0.5	± 0.020"			
ITEM		CNC	N.T.S.		M-I		QTY. 4
MAT.		DWG BY Y.F.	DATE 14-02-19	NO. 005F0561			
		APP. BY	DATE				

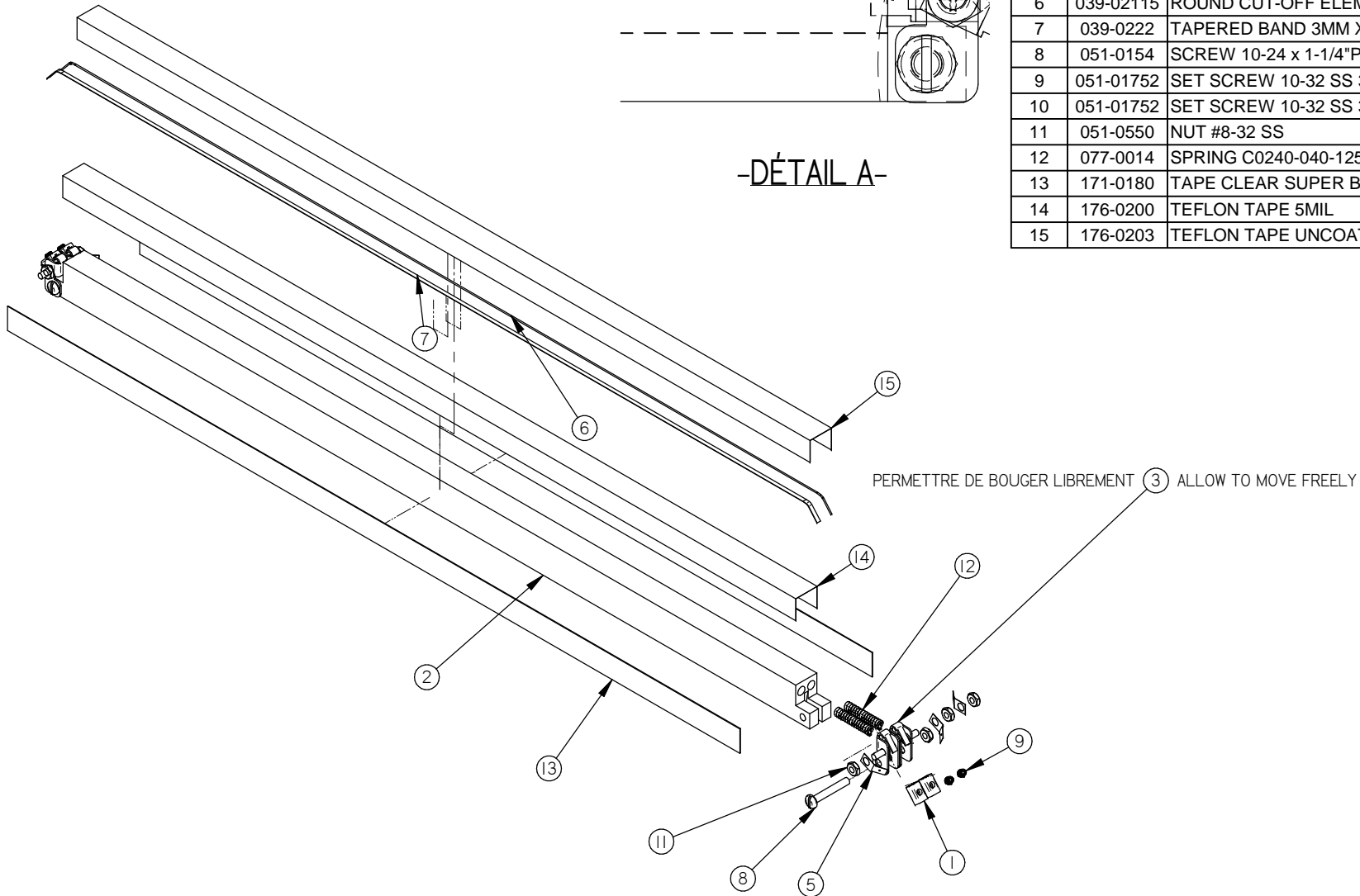
H	600A ADDED	14-05-27	SBU
G	005D0153 WAS 005C0153	13-11-06	SBU
LET.	MODIFICATION	DATE	INT.

# 005F0419

ITEM	PART #	DESCRIPTION	QT.
1	002A4172	BANDING BUCKLE	4
2	002A4190	SEAL BAR (ECO)	1
3	005A1443	ELEMENT BINDER RIGHT ECO	2
4	005A1444	ELEMENT BINDER LEFT ECO	2
5	027-0400	CONNECTOR ADAPTOR	6
6	039-02115	ROUND CUT-OFF ELEMENT 0.9MM	1
7	039-0222	TAPERED BAND 3MM X 0.3MM	1
8	051-0154	SCREW 10-24 x 1-1/4" PAN SLOT S/S	2
9	051-01752	SET SCREW 10-32 SS 3/16"	2
10	051-01752	SET SCREW 10-32 SS 3/16"	2
11	051-0550	NUT #8-32 SS	8
12	077-0014	SPRING C0240-040-1250 SS COMP.	4
13	171-0180	TAPE CLEAR SUPER BOND 3/4" 663.5mm (0.021)	2
14	176-0200	TEFLON TAPE 5MIL	1
15	176-0203	TEFLON TAPE UNCOATED ZONE 5MIL	1



-DÉTAIL A-



## -BAG CUT (ECO) -

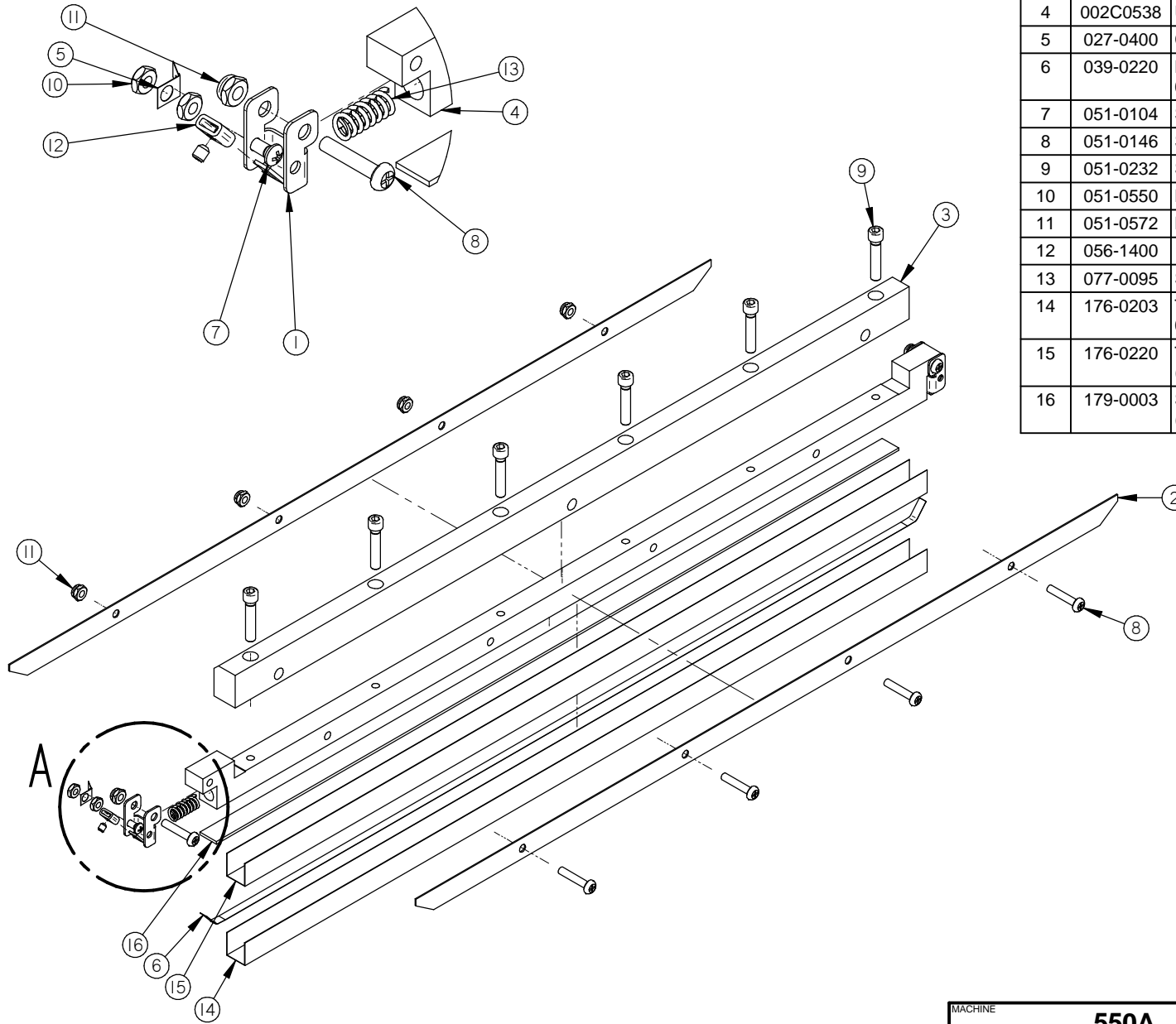
620A	4
600A	4
MACHINE	QTY

MACHINE	<b>600A &amp; 620A</b>		DEPT. TOL. METRIC	INCH	<b>SIPROMAC</b> ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>SEAL BAR PRE-ASS'Y</b>		USINAGE ± 0.1 ± 0.004"	TOLERIE ± 0.5 ± 0.020"	
			SOUDAGE ± 0.5 ± 0.020"	N.T.S.	
ITEM	CNC	DEPT.	M-I	QTY	LISTE
MAT.	DWG BY <b>Y.F.</b>	DATE <b>14-02-19</b>	<b>005F0419</b>		
	APP. BY	DATE			

A	600A ADDED	14-05-27	SBU
LET.	MODIFICATION	DATE	INT.

005D0371

DETAIL A



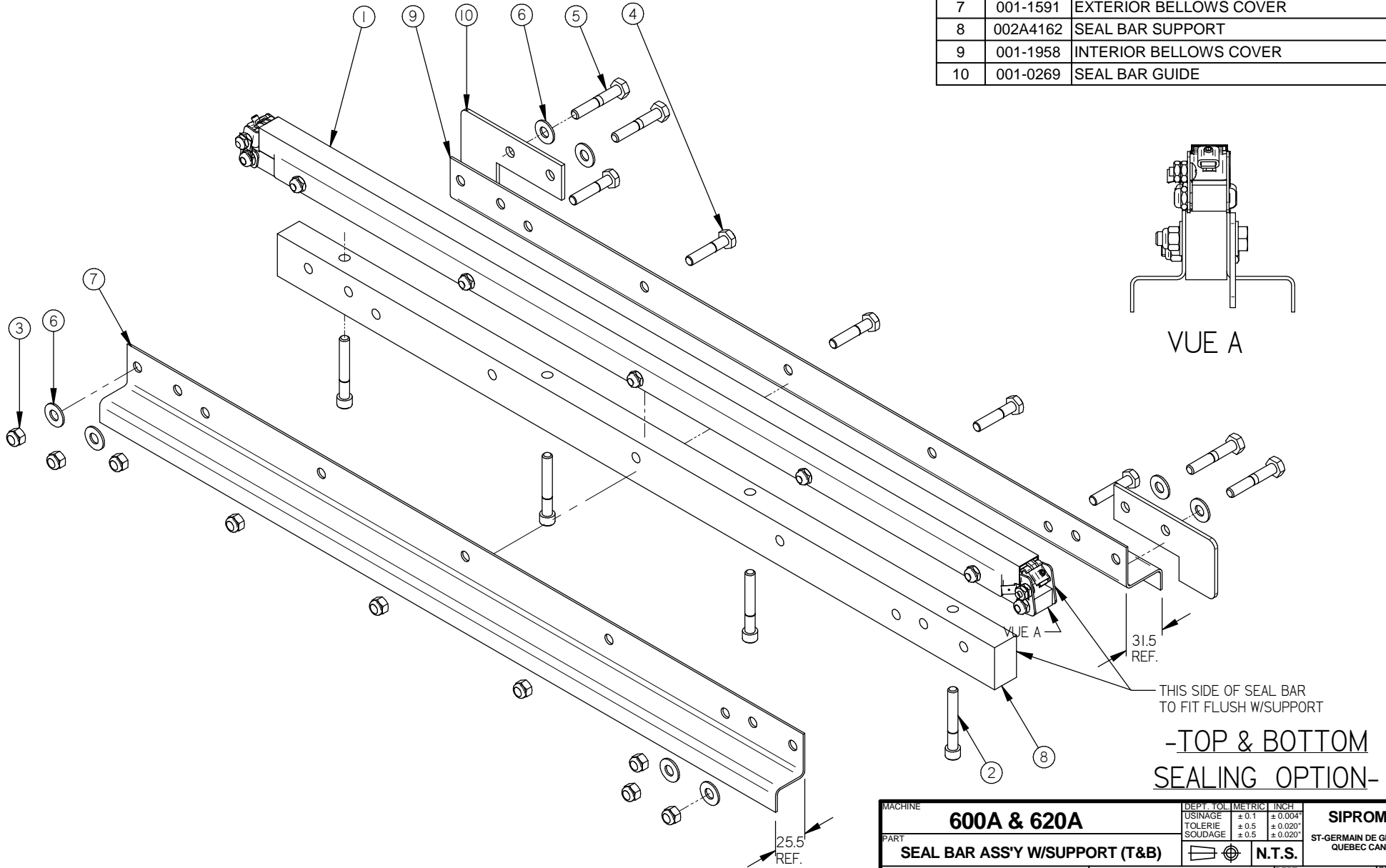
ITEM	PART #	DESCRIPTION	QT.
1	001-2666	ELEMENT BINDER	2
2	001B6584	UPPER TEFLON HOLDER	2
3	002B0537	UPPER SEAL BAR SUPPORT	1
4	002C0538	UPPER SEAL BAR	1
5	027-0400	CONNECTOR ADAPTOR	2
6	039-0220	BI-ACTIVE SEALING ELEMENT (6mm) 660mm (0.066)	1
7	051-0104	SCREW 8-32 x 3/8" RND PHIL S/S	2
8	051-0146	SCREW 10-24 X 1" PAN PHIL S/S	6
9	051-0232	SCREW 1/4-20x 1-1/4"SKT CAP SS	6
10	051-0550	NUT #8-32 SS	4
11	051-0572	NUT #10-24 NYLON LOCK S/S	6
12	056-1400	1/4"SET SCREW BANDING BUCKLE S/S	2
13	077-0095	SPRING C 0360-059-1250 S/S	2
14	176-0203	TEFLON TAPE, UNCOATED ZONE 5 MIL 617mm (0.07)	1
15	176-0220	TEFLON TAPE,PRESS.SENSITIVE 2" 617mm (0.07)	1
16	179-0003	SILICONE 2mm x 15mm ADHESIVE 617mm (0.62)	1

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

MACHINE	<b>550A</b>			DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	UPPER SEAL BAR ASS'Y W/SUPPORT			USINAGE	± 0.1	± 0.004"	
ITEM	CNC	DATE	14-07-03	TOLERIE	± 0.5	± 0.020"	
MAT.	3D DWG BY	DATE	14-07-03	SOUDEAGE	± 0.5	± 0.020"	N.T.S.
				DEPT.	M-(M)-I		QTY. 2
				NO.	<b>005D0371</b>		

# 005B0562

ITEM	PART #	DESCRIPTION	QT.
1	005B0420	SEAL BAR PRE-ASS'Y	1
2	051-0256	BOLT 1/4"-20nc. X 1 3/4" CAP SKT S/S	4
3	051-0581	NUT 1/4"-20 NYLON LOCK S/S	9
4	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	5
5	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	4
6	051-0740	WASHER 1/4" FLAT S/S	8
7	001-1591	EXTERIOR BELLOWS COVER	1
8	002A4162	SEAL BAR SUPPORT	1
9	001-1958	INTERIOR BELLOWS COVER	1
10	001-0269	SEAL BAR GUIDE	2



-TOP & BOTTOM  
SEALING OPTION-

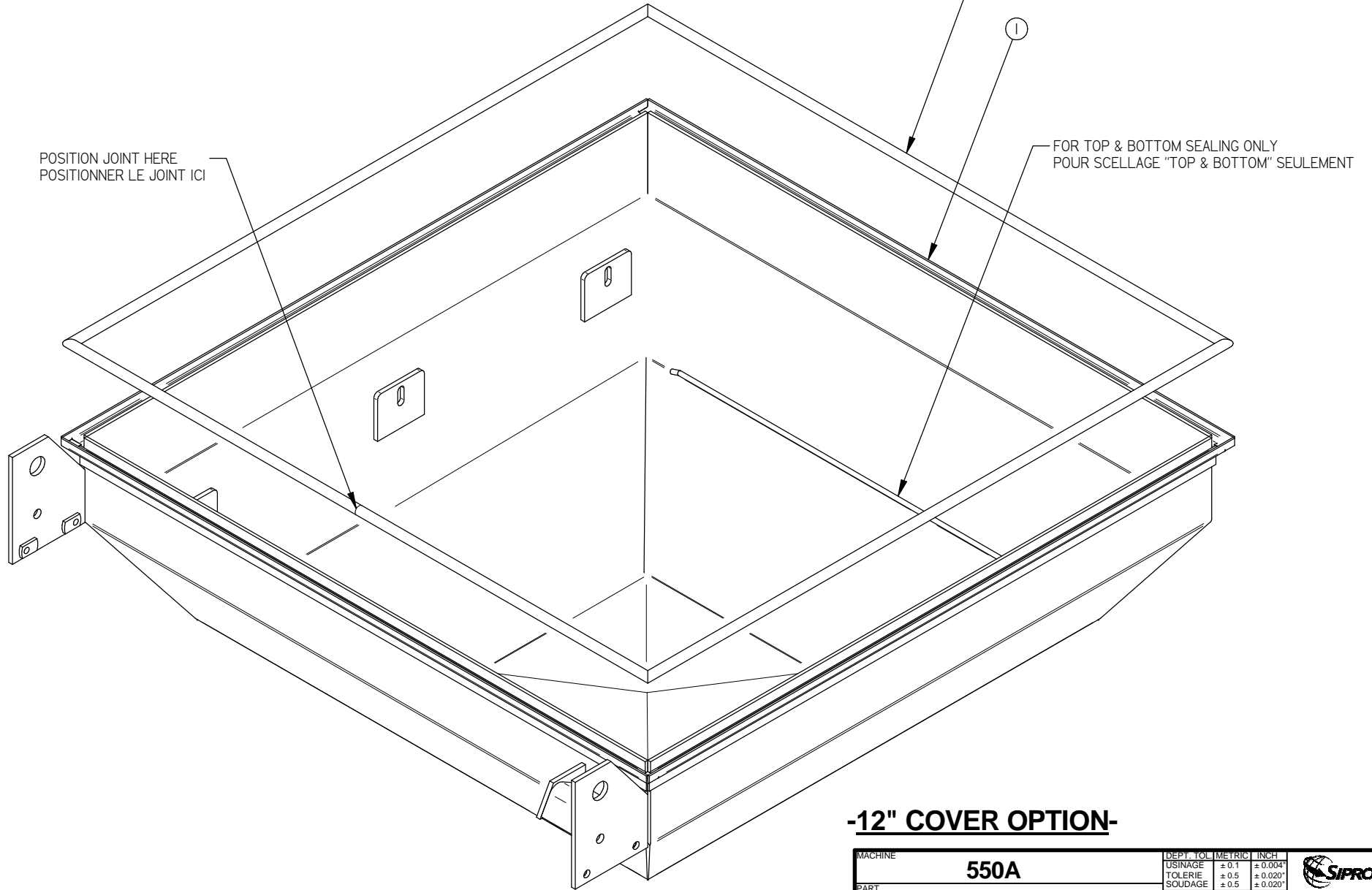
C	600A ADDED, 002A4162 WAS 002-0510	14-05-27	SBU
B	005B0420 WAS 005A0420	13-09-25	SBU
LET.	MODIFICATION	DATE	INT.

MACHINE		600A & 620A		DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		SEAL BAR ASS'Y W/SUPPORT (T&B)		USINAGE ± 0.1 ± 0.004"	TOLERIE ± 0.5 ± 0.020"	
ITEM		CNC		SOUDAGE ± 0.5 ± 0.020"	N.T.S.	
MAT.		DWG BY SBU		DATE 13-09-25	NO.	M-I
		APP. BY		DATE	QTY. 4	
						<b>005B0562</b>

# 005B0462

ITEM	PART #	DESCRIPTION	QT.
1	004B0135	12" COVER PRE-ASSEMBLY	1
2	179-0020	NEOPRENE SPONGE 1/2" x 10.2'	1

USE PERMATEX RUBBER ADHESIVE 169-0010 TO GLUE (2) UTILISER PERMATEX RUBBER ADHESIVE 169-0010 POUR COLLER



## -12" COVER OPTION-

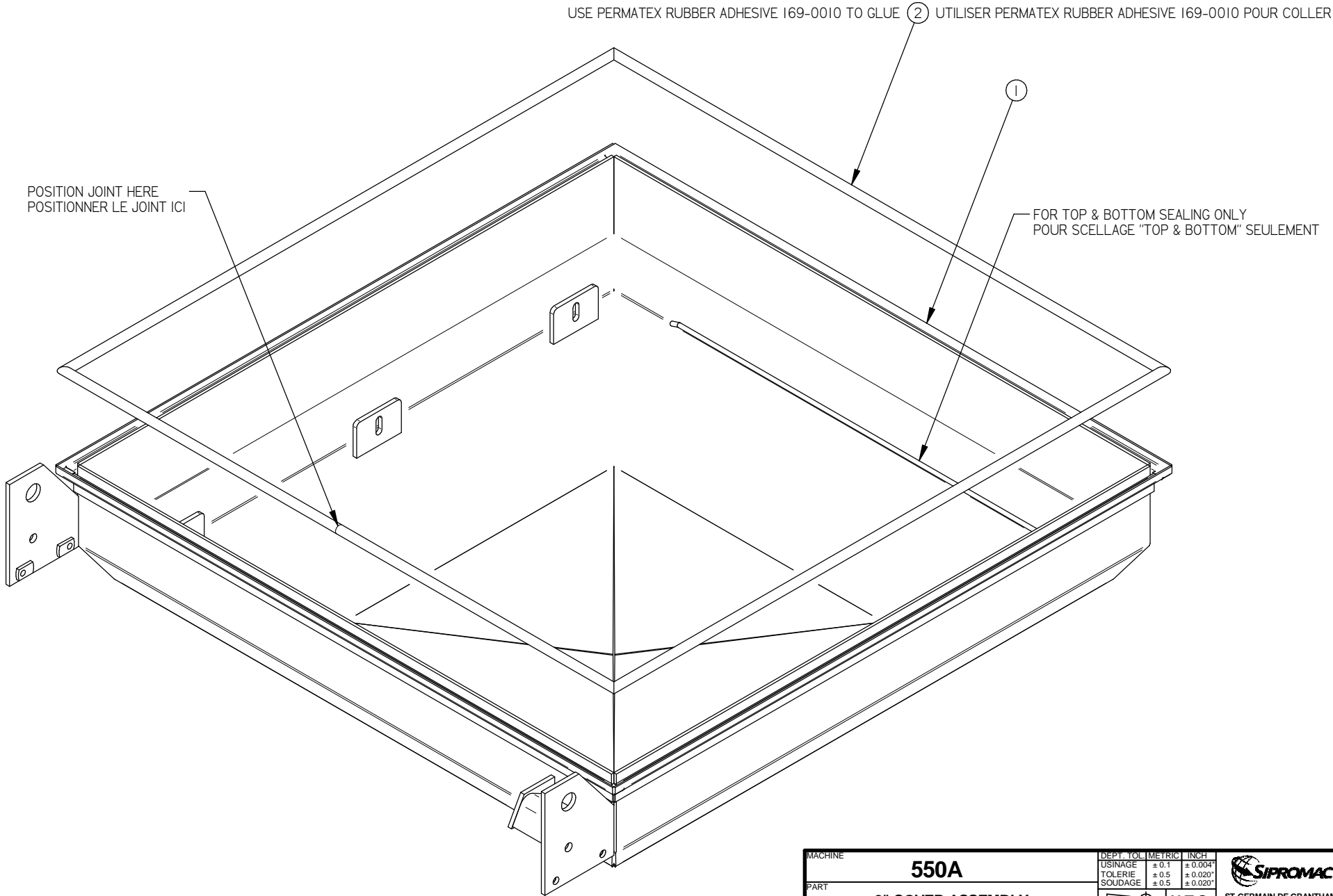
MACHINE	<b>550A</b>		DEPT. TOL. METRIC	INCH	 ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>12" COVER ASSEMBLY</b>		USINAGE ± 0.1 ± 0.004		
ITEM			TOLERIE ± 0.5 ± 0.020		
MAT.			SOUDEAGE ± 0.5 ± 0.020		
PROGRAM			N.T.S.		
DEPT.			M-I		QTY. 1
3D BY <b>SBU</b> DATE <b>14-07-03</b>			NO. <b>005B0462</b>		
2D BY <b>AG</b> DATE <b>14-07-03</b>					

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

# 005B0461

ITEM	PART #	DESCRIPTION	QT.
1	004B0134	8" COVER PRE-ASSEMBLY	1
2	179-0020	NEOPRENE SPONGE 1/2" x 10.2'	1

USE PERMATEX RUBBER ADHESIVE 169-0010 TO GLUE ② UTILISER PERMATEX RUBBER ADHESIVE 169-0010 POUR COLLER ②

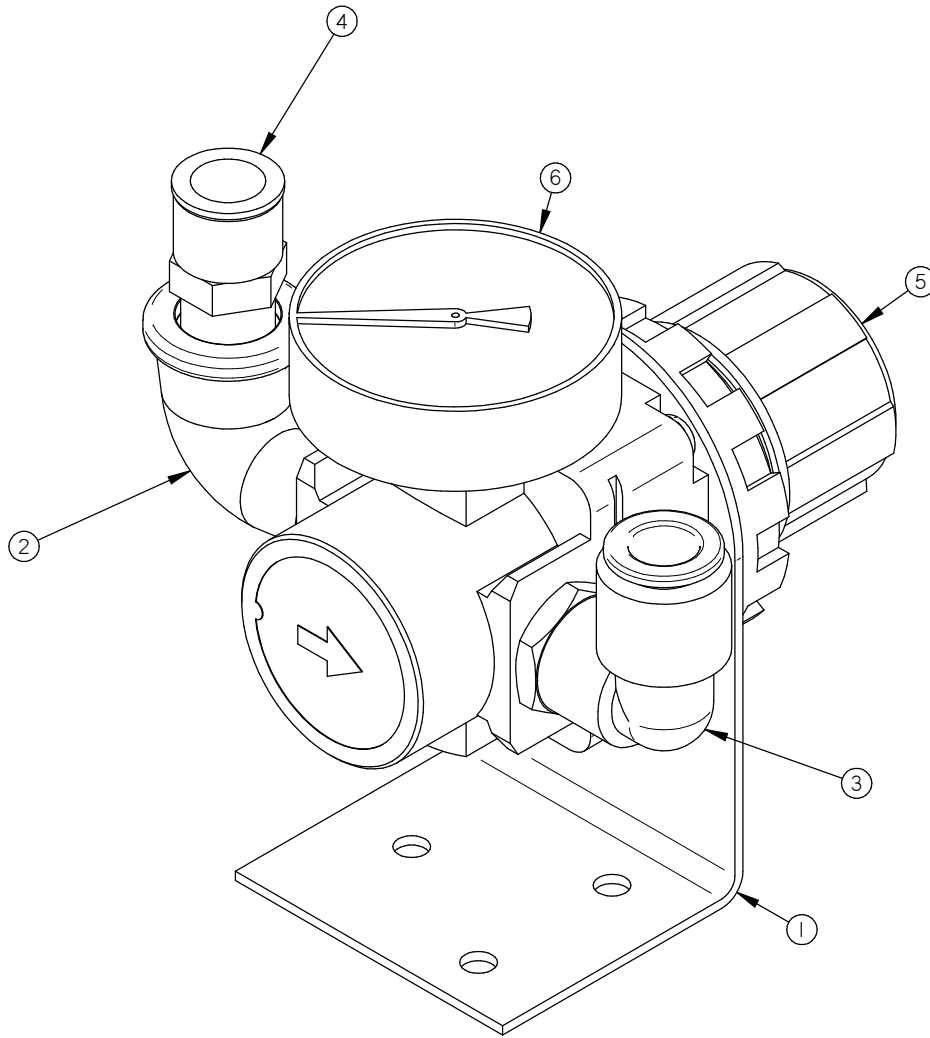


LET.	MODIFICATION	DATE	INT.
------	--------------	------	------

MACHINE	<b>550A</b>		DEPT. TOL. METRIC	INCH	 ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>8" COVER ASSEMBLY</b>		USINAGE ± 0.1	± 0.004	
ITEM	PROGRAM		TOLERIE ± 0.5	± 0.020	
MAT.	3D BY <b>SBU</b>		DATE <b>14-07-03</b>	NO. <b>005B0461</b>	DEPT. <b>M-I</b>
	2D BY <b>AG</b>		DATE <b>14-07-04</b>	QTY. <b>1</b>	

# 005A1508

ITEM	PART #	DESCRIPTION	QT.
1	001A6815	AIR REGULATOR SUPPORT	1
2	100-0065	STREET ELBOW 1/4" NPT SS	1
3	102-0330	ELBOW 1/4" NPT X 3/8" HOSE QUICK	1
4	102-0410	MALE CONN. 1/4" MNPT x 3/8" T. QUICK	1
5	114-0145	PRESSURE REGUL. 0-30 PSI 1/4" NPT	1
6	114-0235	PRESSURE GAUGE 0-30 PSI 1/8" NPT	1

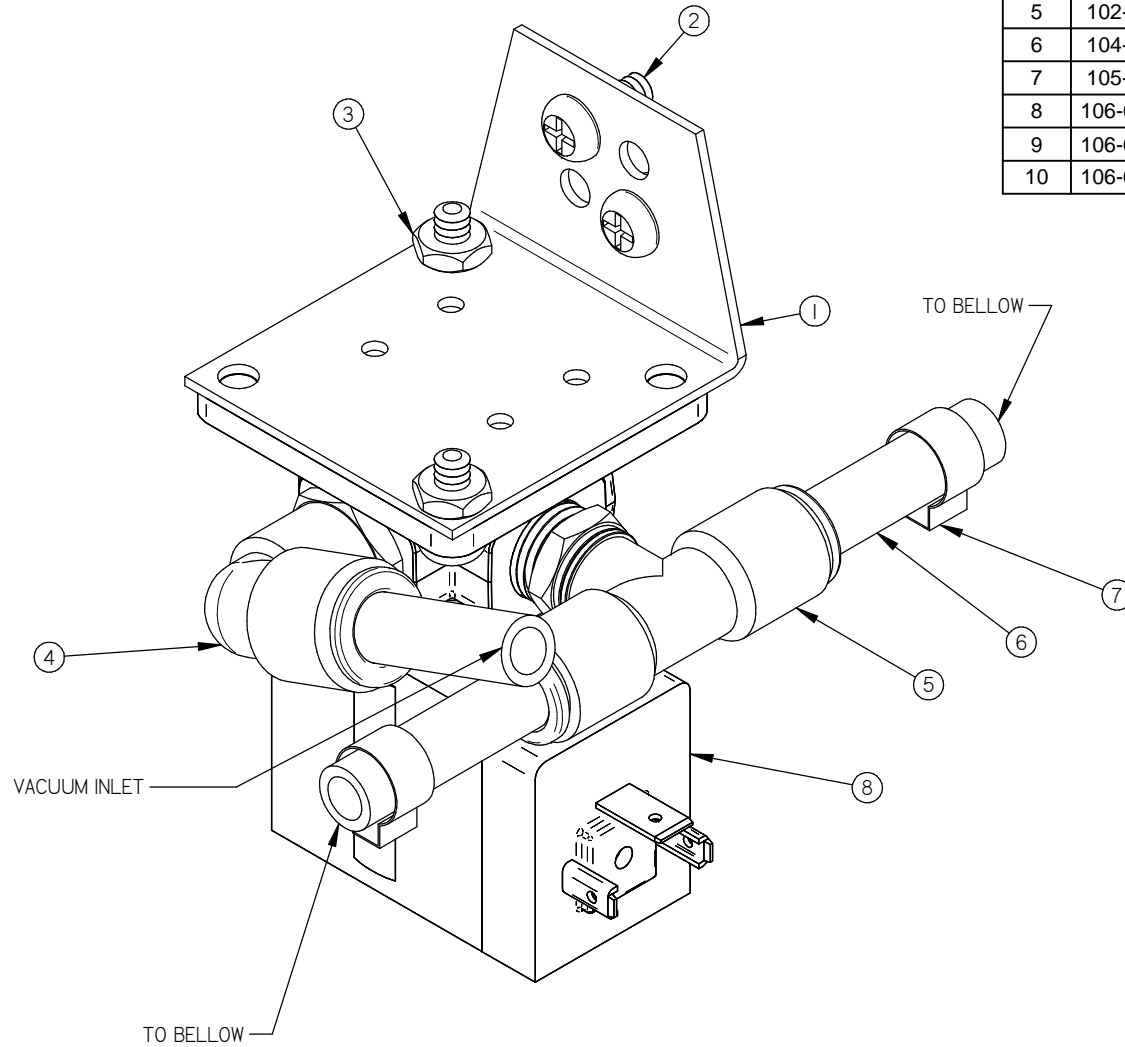


## AIR REGULATOR OPTION

MACHINE		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
<b>SINGLE CHAMBER VACUUM</b>		USINAGE	± 0.1	± 0.004"	
PART		TOLERIE	± 0.5	± 0.020"	
AIR REGULATOR ASSY		SOUDEAGE	± 0.5	± 0.020"	
				N.T.S.	
ITEM	CNC	DEPT.	M	QTY.	1
MAT.	3D DWG BY SBU	DATE	14-06-16	NO.	005A1508
	2D DWG BY AG	DATE	14-06-16		

# 005A1507

ITEM	PART #	DESCRIPTION	QT.
1	001B6779	VALVE SUPPORT BRACKET	1
2	051-0144	SCREW #10-24 N.C 1/2" PAN PHIL. S/S	4
3	051-0571	NUT #10-24 S/S	4
4	102-0330	ELBOW 1/4" NPT X 3/8" HOSE QUICK	1
5	102-0355	BRANCH TEE 1/4" MNPT X 3/8" T.QUICK	1
6	104-0060	TUBE 3/8" OD x 1/4" ID POLYETHYL.	3
7	105-0205	1 EAR CLAMPS 3/8" SS	2
8	106-00641	VALVE 3 WAY 1/4" NPT 120V	1
9	106-00661	VALVE 3 WAY 1/4" NPT 240V	1
10	106-00701	VALVE 3 WAY 1/4" NPT 24VAC	1

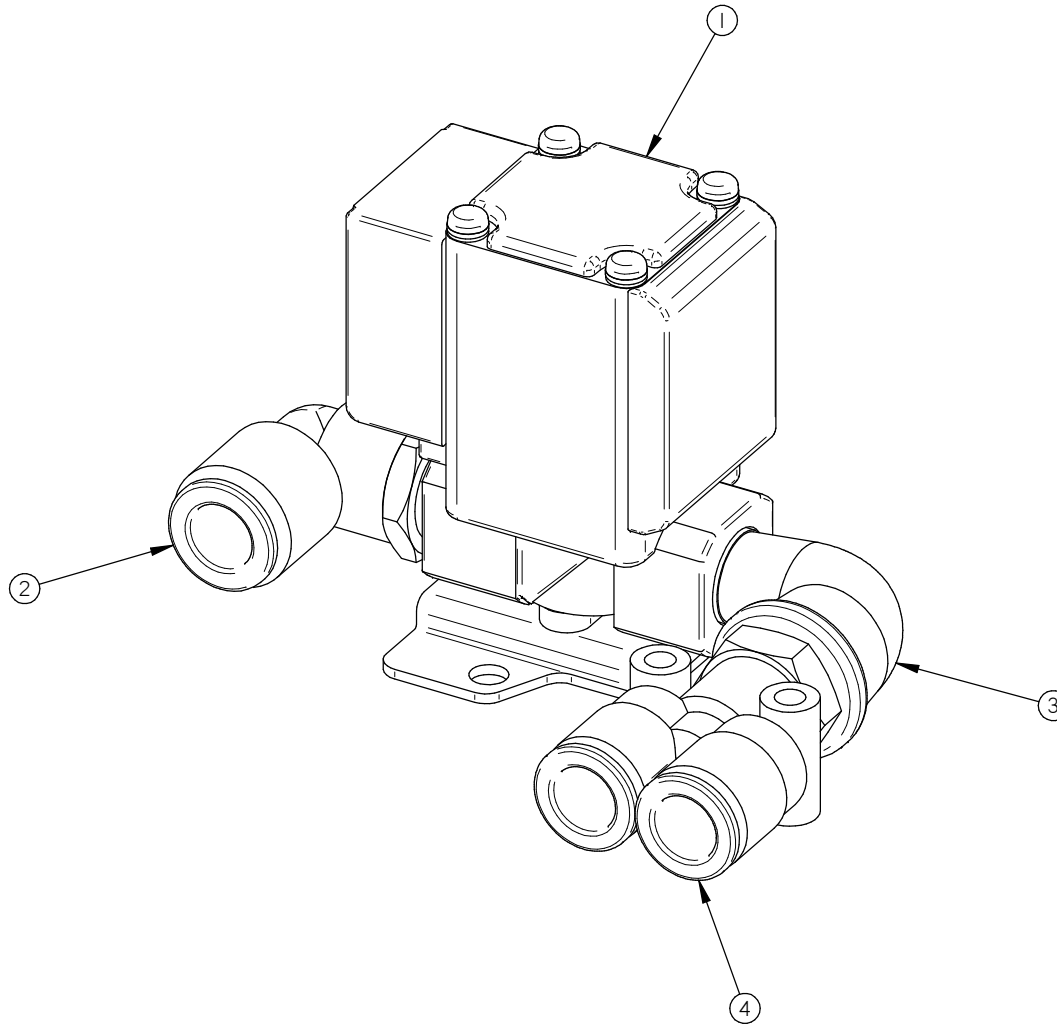


LET.	MODIFICATION	DATE	INT.

MACHINE		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
<b>SINGLE CHAMBER VACUUM</b>		USINAGE	± 0.1	± 0.004"	
PART		TOLERIE	± 0.5	± 0.020"	
<b>BELLOW VALVE ASSEMBLY</b>		SOUDEAGE	± 0.5	± 0.020"	N.T.S.
ITEM	CNC	DEPT.	M	QTY.	1
MAT.	3D DWG BY SBU	DATE 14-06-13	NO.	005A1507	
	2D DWG BY AG	DATE 14-06-16			

# 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
3	100-0065	STREET ELBOW 1/4" NPT SS	1
4	102-0361	Y BRANCH 1/4" MNPT X 3/8" T. QUICK	1



## -OPTION - GAS

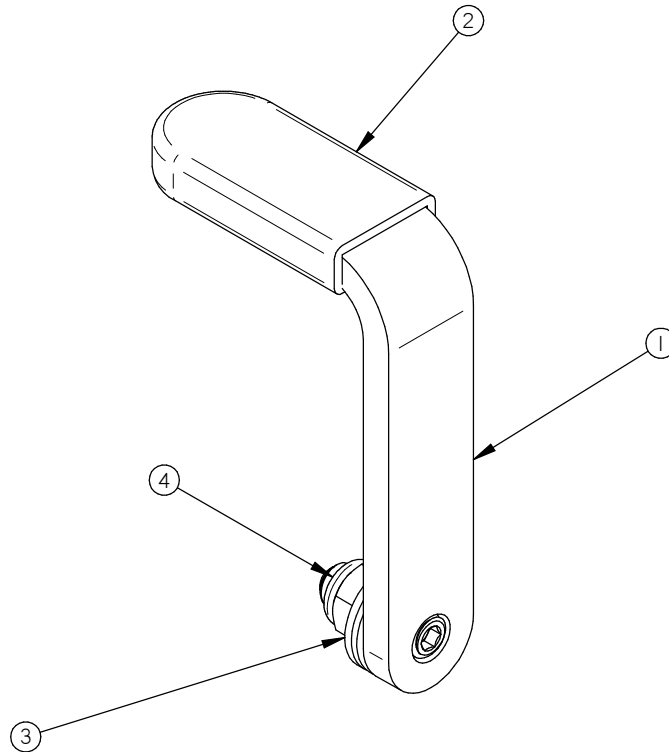
DOUBLE CHAMBER	2
SINGLE CHAMBER	1
MACHINE	QTY

MACHINE		DEPT. TOL.		METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
<b>VACUUM</b>		USINAGE	± 0.1	± 0.004"		
PART		TOLERIE	± 0.5	± 0.020"		
<b>GAS VALVE ASSEMBLY (OPTION)</b>		SOUDEGE	± 0.5	± 0.020"		N.T.S.
ITEM	CNC	DEPT.	M	QTY	LISTE	
MAT.	DWG BY <b>SBU</b>	DATE <b>14-05-27</b>	NO.	<b>004B4113</b>		
	APP. BY	DATE				

A	VALVE UPDATE	14-05-27	SBU
LET.	MODIFICATION	DATE	INT.

# 004B1651

ITEM	PART #	DESCRIPTION	QT.
1	004A4115	COVER LOCK	1
2	057-0270	RECTANGULAR PUSH ON CAP - ROUNDED END 3/16" X 5/8" X 1-1/2"	1
3	051-0740	WASHER 1/4" FLAT S/S	2
4	051-0581	NUT 1/4"-20 NYLON LOCK S/S	1

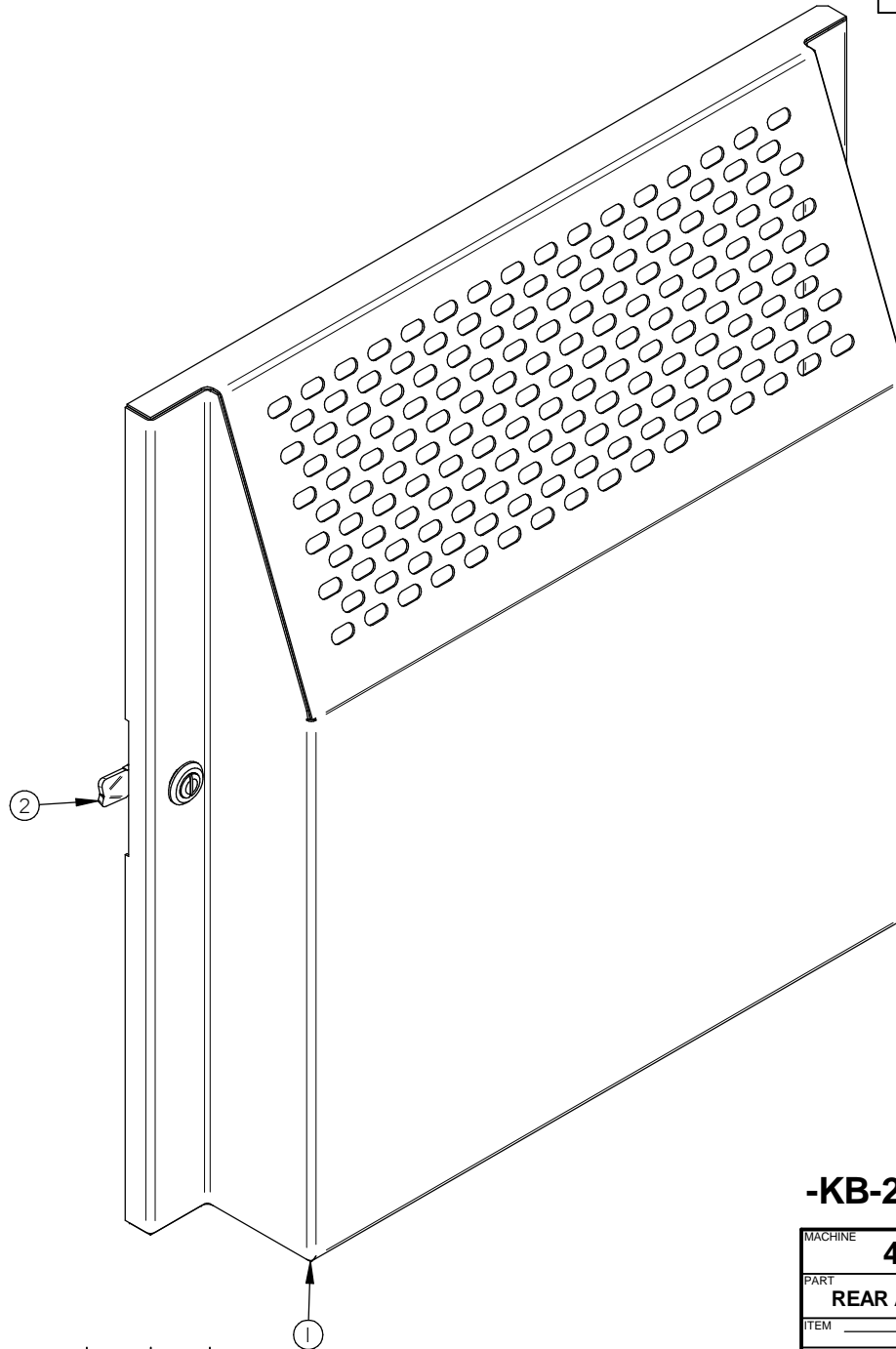


A	ADDED 300	05-08-09	M.A.
LET.	MODIFICATION	DATE	INT.

MACHINE	<b>300 @ 350D</b>		DEPT. TOL. METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	<b>450T, 550A &amp; 580A</b>		USINAGE ± 0.1 ± 0.004		
<b>COVER HOLD DOWN ASS'Y</b>			TOLERIE ± 0.5 ± 0.020		
ITEM	CNC		SOUDEAGE ± 0.5 ± 0.020		
MAT.	DWG BY <b>S.L.</b>	DATE <b>13-11-26</b>	N.T.S.		
	APP. BY	DATE			DEPT. <b>M</b> QTY. <b>1</b>
					<b>004B1651</b>

# 004A4230

ITEM	PART #	DESCRIPTION	QT.
1	004A4229	REAR ACCESS DOOR PRE-ASSY (KB-0020)	1
2	056-2612	CAM LOCK QUARTER TURN SS304	1



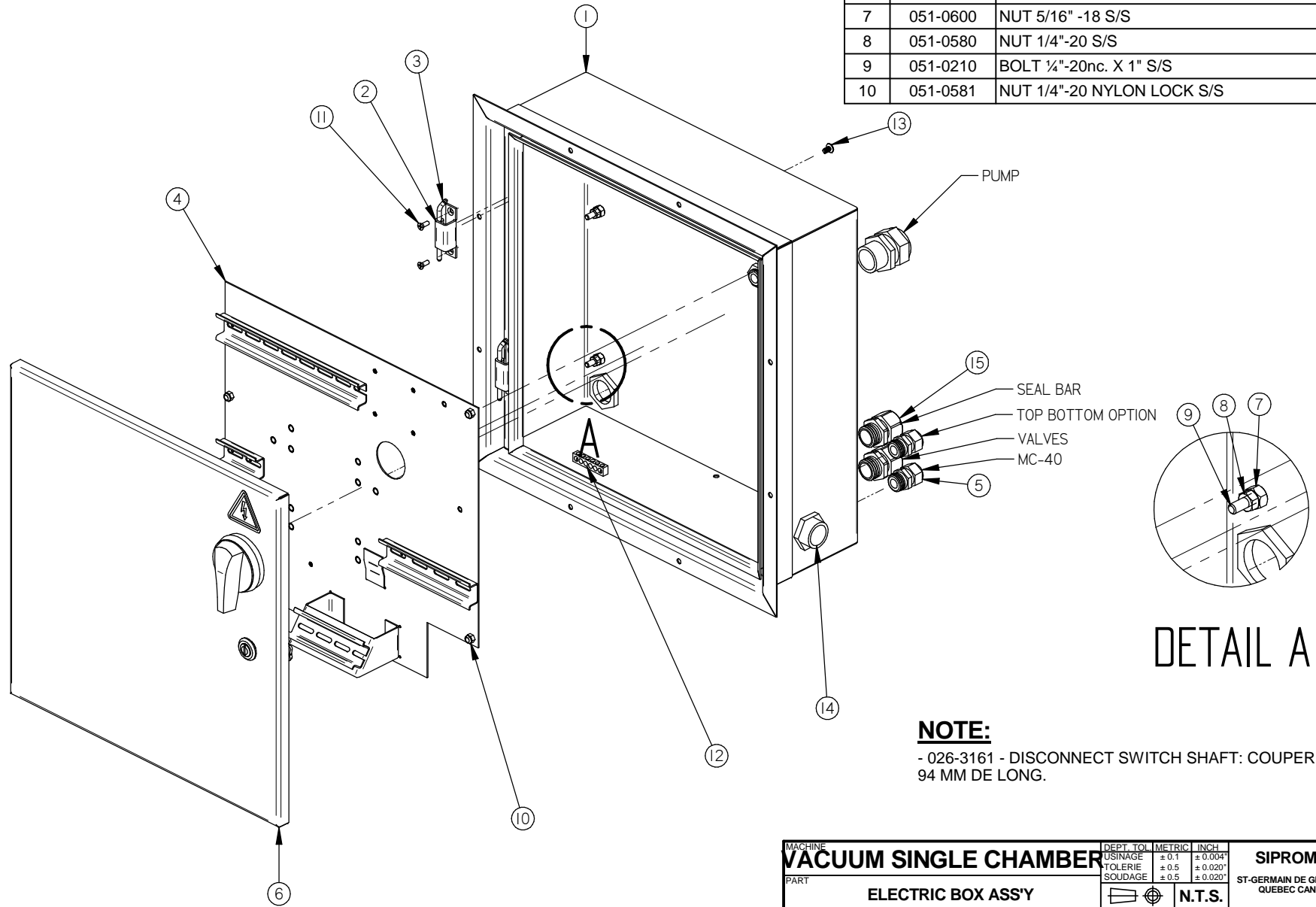
**-KB-20 OPTION (400, 450A)-**

MACHINE		400, 450A & 550A		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		REAR ACCESS DOOR ASSY (KB-0020)		USINAGE	± 0.1	± 0.004"	
ITEM		CNC		TOLERIE	± 0.5	± 0.020"	
MAT.		3D DWG BY SBU		DATE	14-06-10		N.T.S.
MODIFICATION		2D DWG BY AG		DATE	14-07-03		
LET.	DATE	INT.	DEPT.	M	QTY.	1	NO. 004A4230

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

# 004A4155

ITEM	PART #	DESCRIPTION	QT.	ITEM	PART #	DESCRIPTION	QT.
11	051-0139	SCREW 10-24 x 1/2" FLAT PHIL S/S	4	1	004A4156	E-BOX PRE-ASSY	1
12	028-0105	GROUND BARRIER (6 HOLES)	1	2	056-3010-1	HINGE CONCEALED SS304 - BASE	2
13	051-0128	SCREW 10-24 x 3/8" TRUSS PHIL S/S	3	3	056-3010-3	HINGE CONCEALED SS304 - PIN	2
14	036-0430	PRESSE-ÉTOUPE CD29	2	4	004A4102	E-BOX FALSE BOTTOM	1
15	036-0420	PRESSE-ÉTOUPE CD21	2	5	036-0409	PRESSE-ETOUPE CD13	3
				6	004A4100	E-BOX DOOR ASSEMBLY	1
				7	051-0600	NUT 5/16" -18 S/S	4
				8	051-0580	NUT 1/4"-20 S/S	4
				9	051-0210	BOLT 1/4"-20nc. X 1" S/S	4
				10	051-0581	NUT 1/4"-20 NYLON LOCK S/S	4



DETAIL A

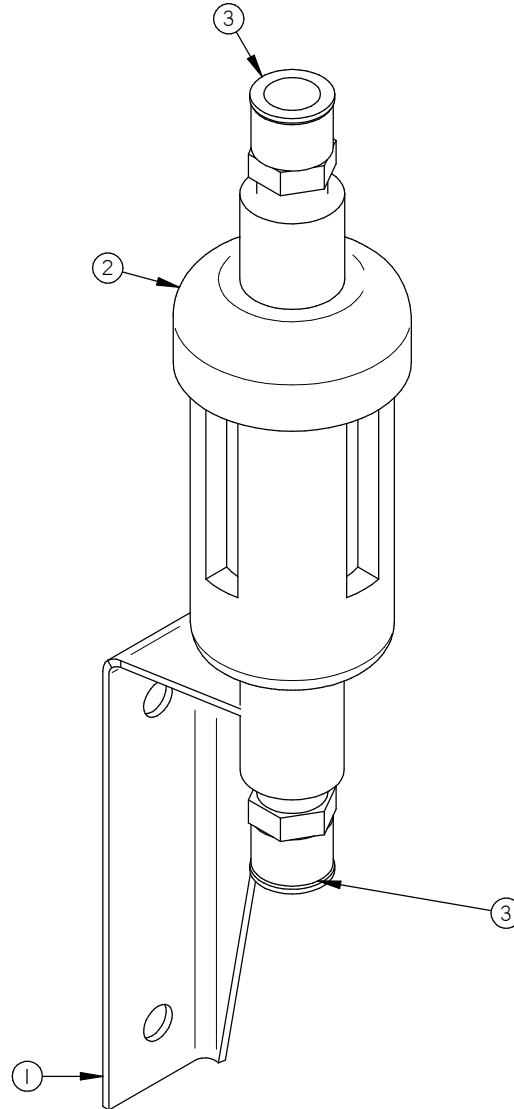
**NOTE:**  
 - 026-3161 - DISCONNECT SWITCH SHAFT: COUPER À 94 MM DE LONG.

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

MACHINE		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
<b>VACUUM SINGLE CHAMBER</b>		USINAGE	± 0.1	± 0.004"	
PART		TOLERIE	± 0.5	± 0.020"	
<b>ELECTRIC BOX ASS'Y</b>		SOUDEAGE	± 0.5	± 0.020"	N.T.S.
ITEM	CNC	DEPT.	M	QTY.	1
MAT.	DWG BY <b>SBU</b>	DATE <b>14-06-10</b>	NO.	<b>004A4155</b>	
	APP. BY	DATE			

# 004A4138

ITEM	PART #	DESCRIPTION	QT.
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

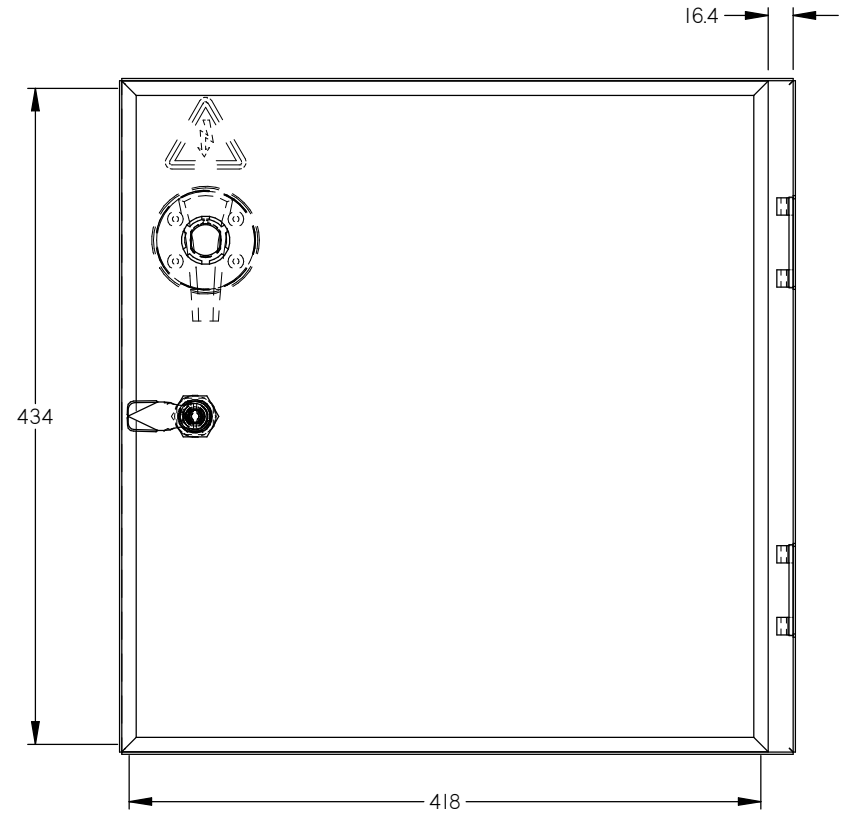
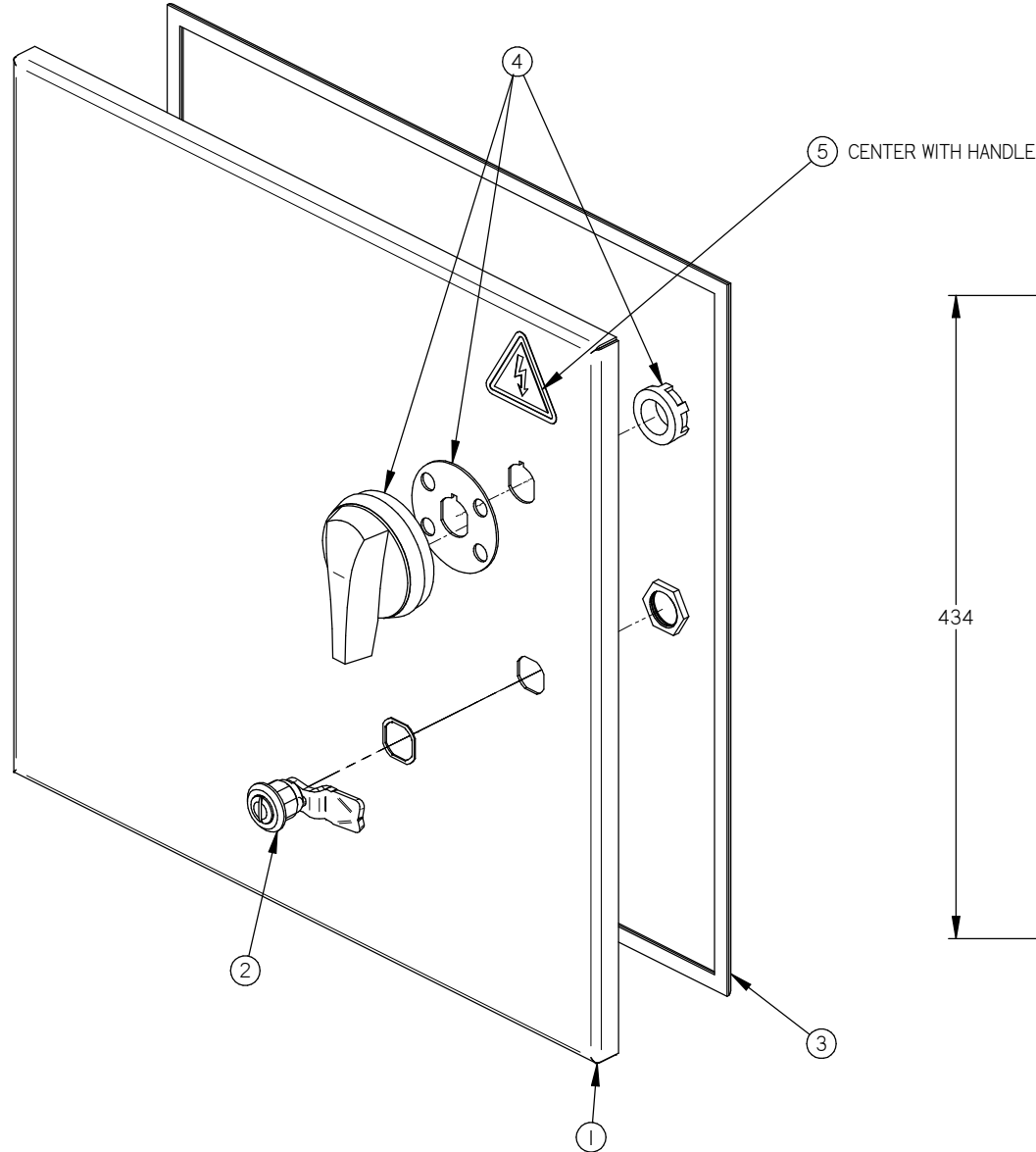


MACHINE		<b>VACUUM</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>VACUUM SENSOR FILTER</b>		USINAGE ± 0.1	± 0.004"	N.T.S.	
ITEM		CNC		TOLERIE ± 0.5	± 0.020"		
MAT.		DWG BY <b>SBU</b>		DATE <b>13-11-19</b>	NO. <b>004A4138</b>		
LET.		MODIFICATION		DATE	INT.	DEPT.	M
				APP. BY	DATE	QTY.	1

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

# 004A4100

ITEM	PART #	DESCRIPTION	QT.
1	004A4101	E-BOX DOOR PRE-ASSY	1
2	056-2612	CAM LOCK QUARTER TURN SS304	1
3	179-0026	D-SHAPED RUBBER SEAL 1683mm LONG	1
4	026-3160	HANDLE RED/YELLOW NEMA 4X, COMPACT, PADLOCKABLE	1
5	127-0100	STICKER ELEC.HAZARD ISO 2-1/2" TRIANGLE	1

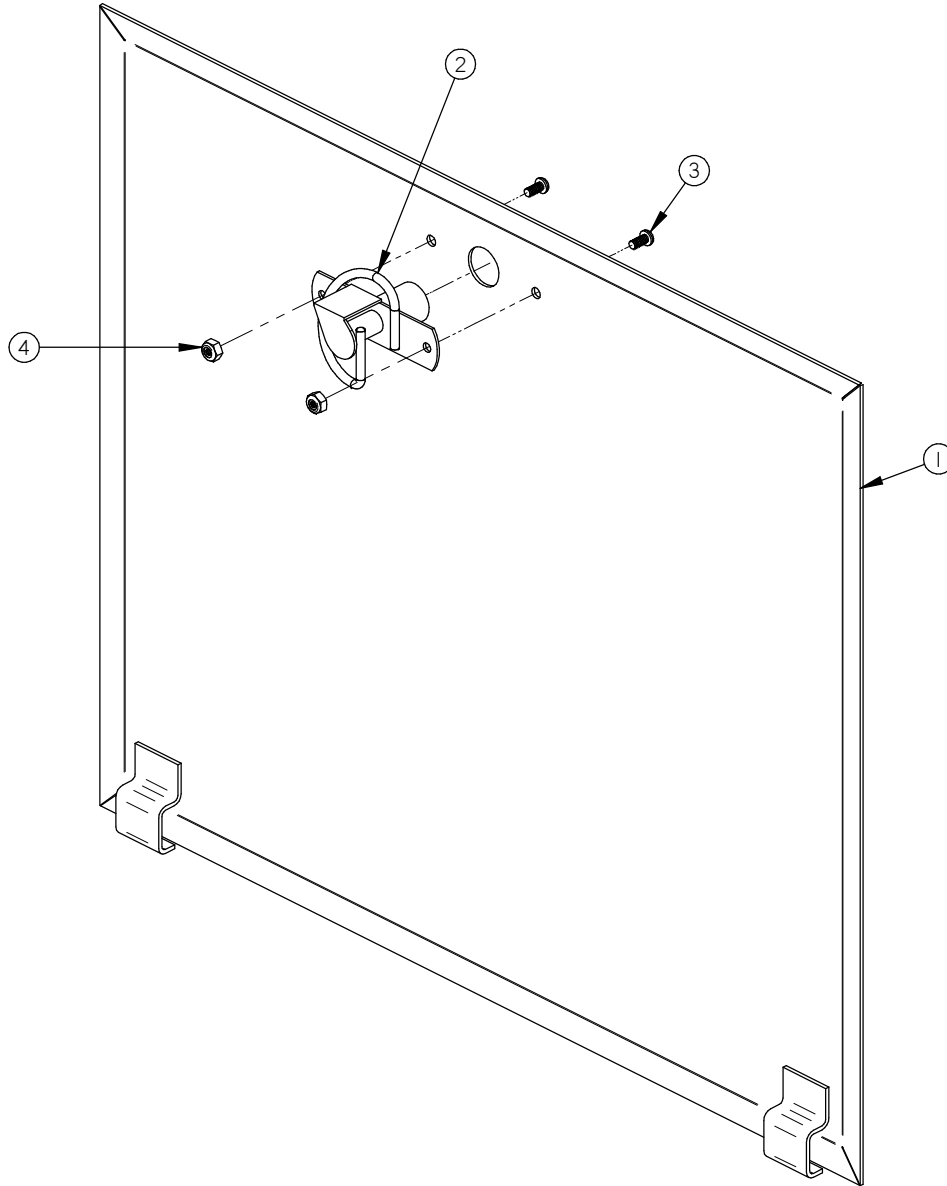


MACHINE		<b>VACUUM</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		<b>E-BOX DOOR ASSEMBLY</b>		USINAGE	± 0.1	± 0.004"	
ITEM		CNC		TOLERIE	± 0.5	± 0.020"	
MAT.		APP. BY <b>SBU</b>		DATE	<b>13-09-17</b>	NO.	<b>004A4100</b>
LET.		MODIFICATION		DATE		INT.	DEPT. <b>M</b> QTY. <b>1</b>

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

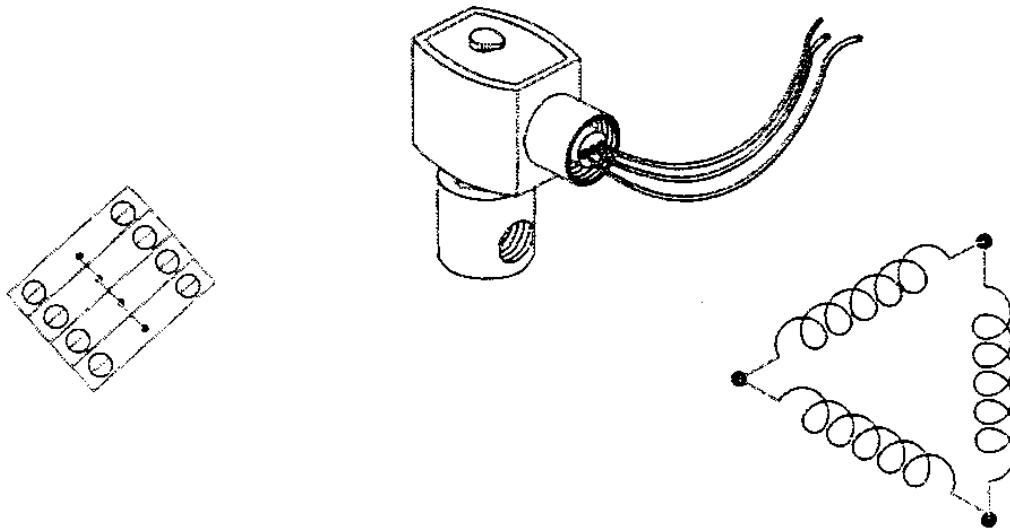
# 004A4090

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

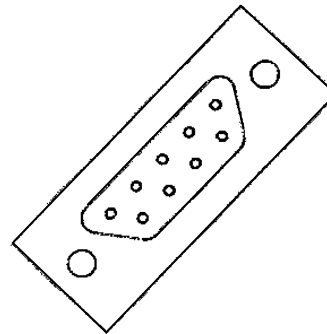
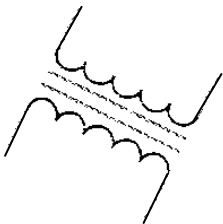


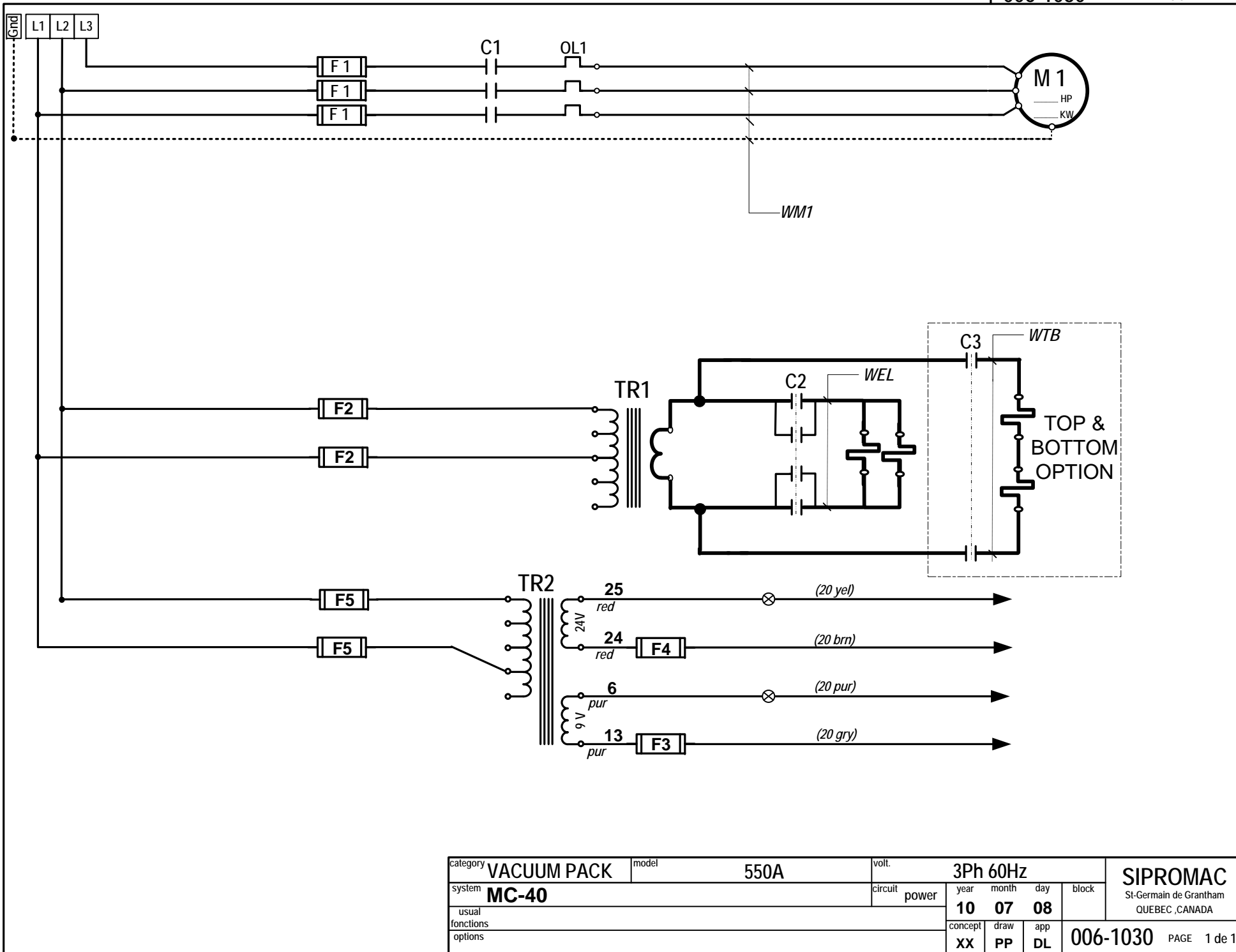
LET.	MODIFICATION	DATE	INT.
------	--------------	------	------

MACHINE		<b>VACUUM</b>		DEPT. TOL.	METRIC	INCH	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART		ACCESS DOOR ASSEMBLY		USINAGE	± 0.1	± 0.004"	
				TOLERIE	± 0.5	± 0.020"	
				SOUDEAGE	± 0.5	± 0.020"	N.T.S.
ITEM		CNC		DEPT.	M	QTY.	1
MAT.		DWG BY	SBU	DATE	13-09-11	NO.	004A4090
		APP. BY		DATE			



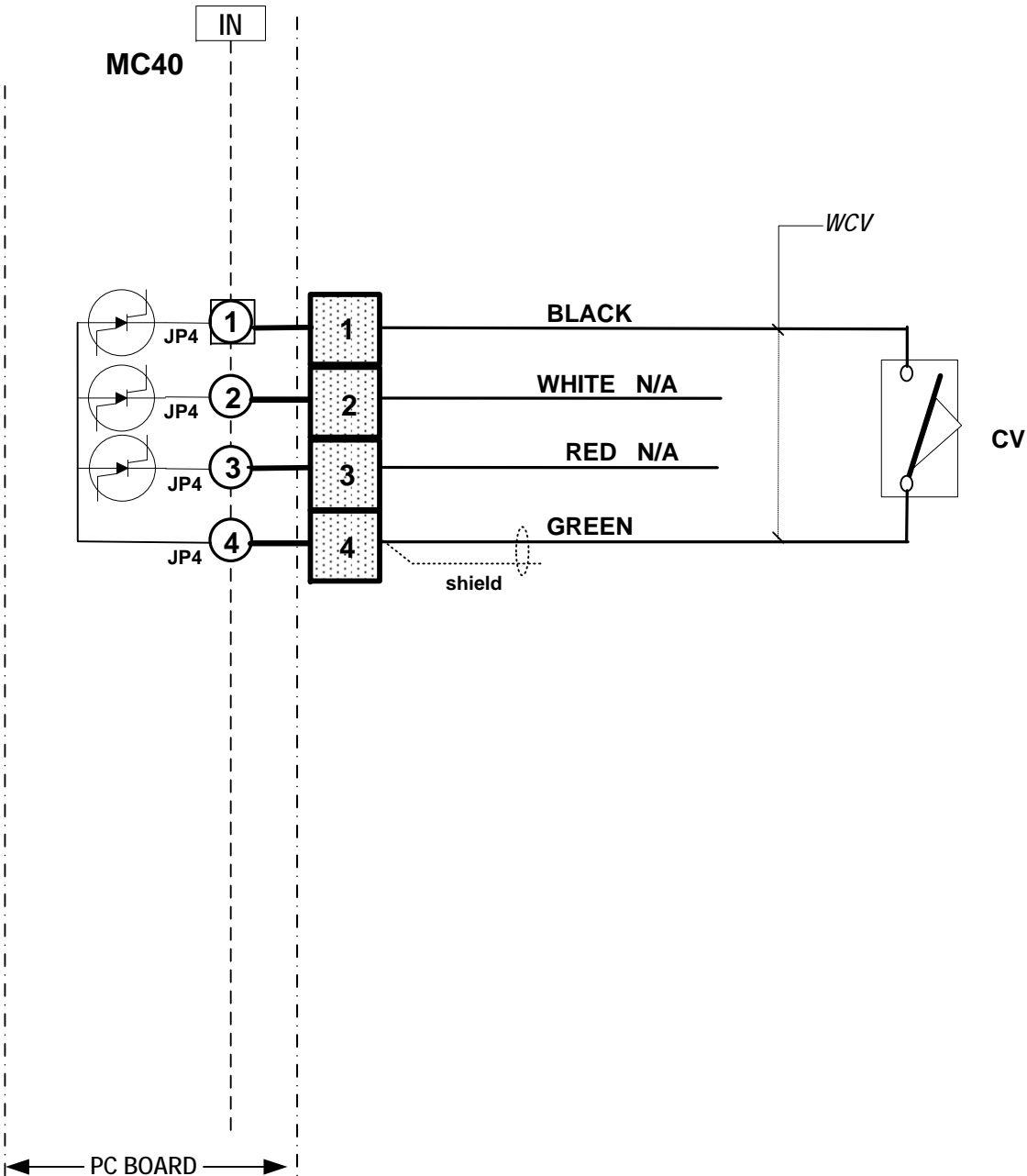
# ELECTRICAL DRAWING



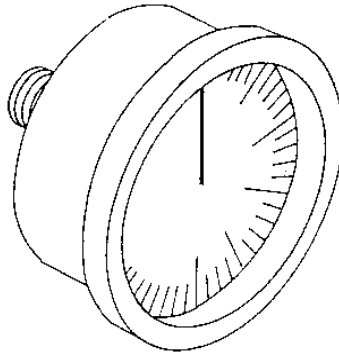


category	VACUUM PACK	model	550A	volt.	3Ph 60Hz				SIPROMAC St-Germain de Grantham QUEBEC, CANADA
system	MC-40			circuit	power	year	month	day	
usual functions						10	07	08	
options						concept	draw	app	
						XX	PP	DL	006-1030 PAGE 1 de 1





category	VACUUM PACK	model	550A	volt.	ALL			
system	MC-40	circuit	control	year	month	day	block	SIPROMAC St-Germain de Grantham QUEBEC, CANADA
usual fonctions				10	07	08		
options				concept	draw	app	006-1037 PAGE 2 de 2	
				XX	PP	DL		



# PNEUMATIC DRAWING

