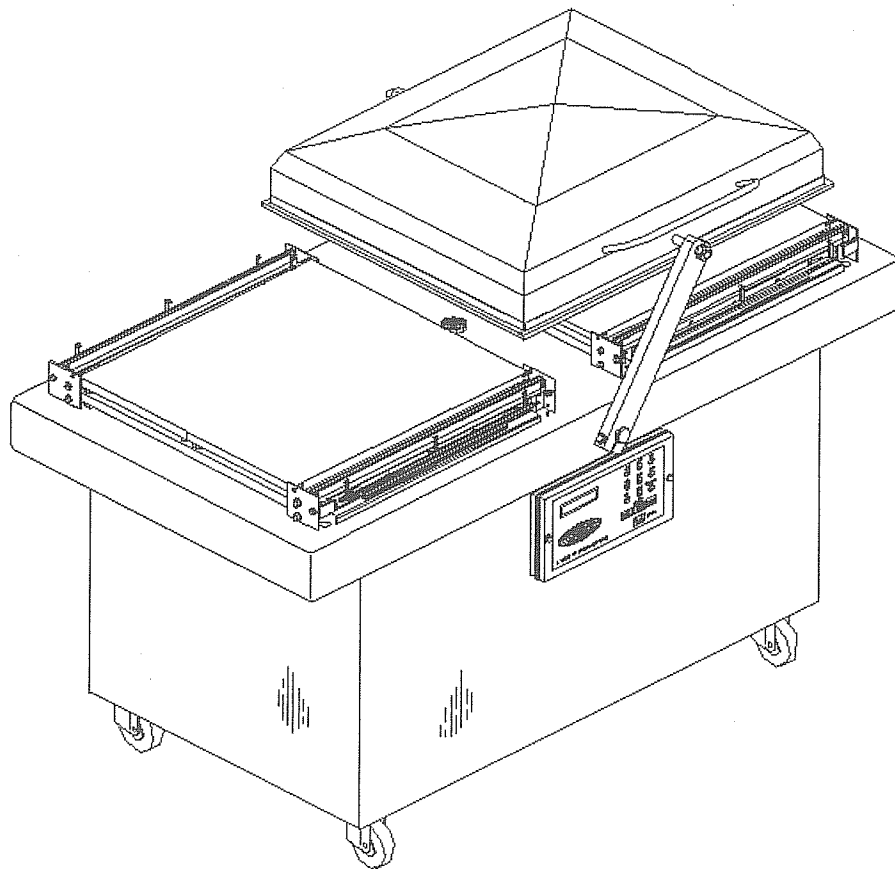


# VACUUM PACKAGING MACHINE

## MODEL 620A



### 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 620A

(MC-40 SIPROMAC)

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# VACUUM PACKAGING MACHINES

## OPERATION INSTRUCTIONS

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# SIPROMAC INC. VACUUM PACKAGING MACHINES

## 1. SETTING UP THE MACHINE:

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

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

Before starting to work, check the oil view glass on the pump, if there is a sufficient quantity of oil in the pump. Never use oil other than 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.

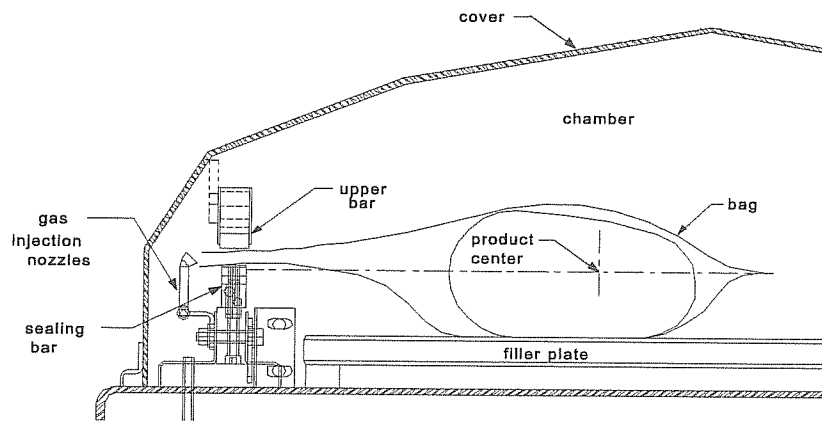


FIGURE 1

## **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).



### **3.3 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:**

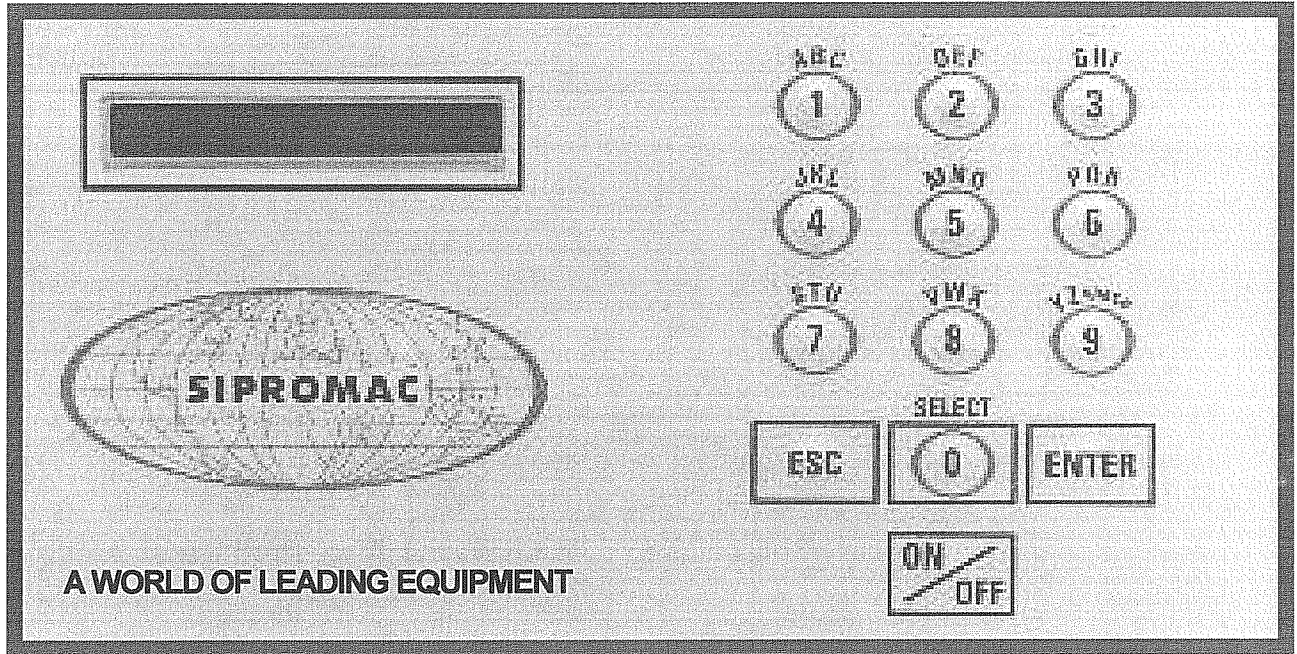
To accede the diagnostics menu, power up the vacuum packaging machine while keeping pushed in the "ESC"key. Use key "SELECT" to select the system monitor function and key "ENTER" to accede and visualize the monitored parameters. Use key "SELECT" to change over from the software revision, the amount of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

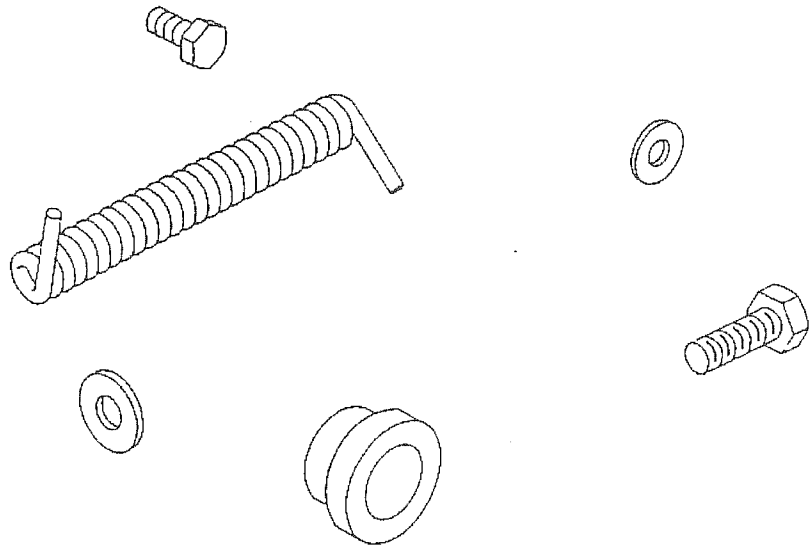
# MODEL 620A

## COVER ADJUSTMENT PROCEDURE

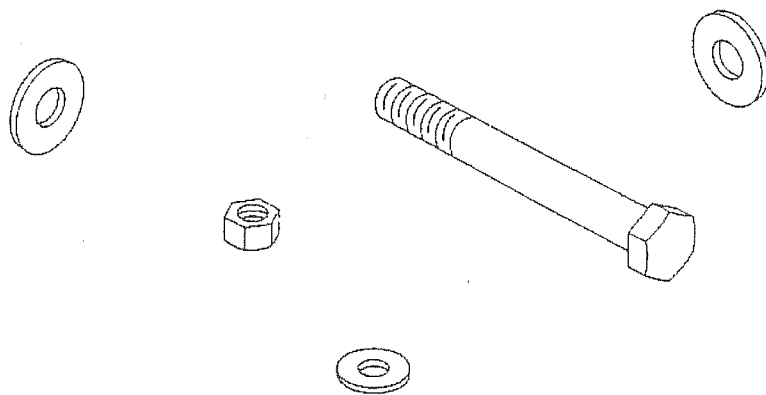
Reference Drawing:# 005C0415  
# 004B0223

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

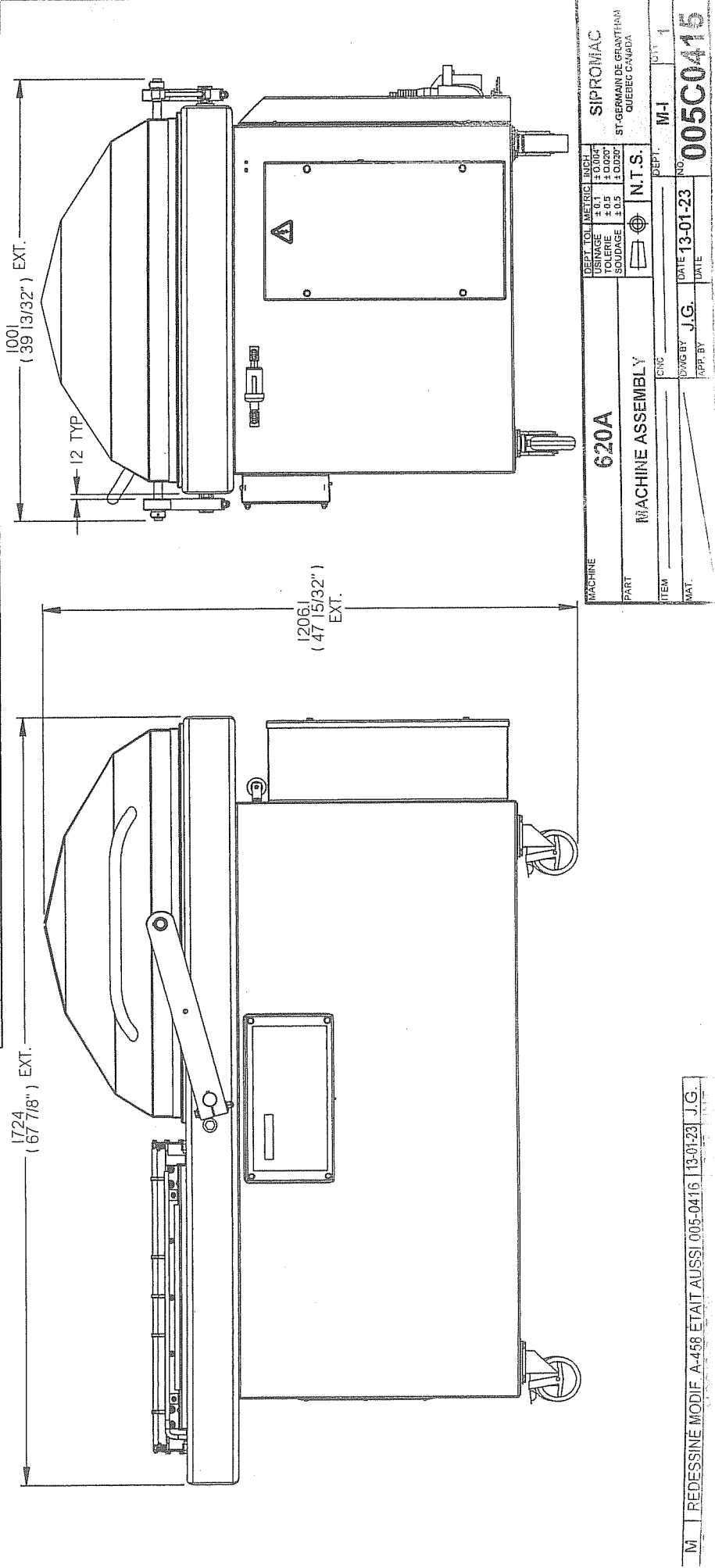
1. Floor should be flat (within 1/8" approx.).
  - 2.2 Loosen the two bolts of the guide arm axis (See drawing #004B0233; items #23).
  - 2.3 Now move the cover on each side and check how cover sits on the table. Distance between table and lid gasket should be less than 1/16" approx. If so, go to step 3.0 for guide arm adjustment. Otherwise go to step 2.4 for central arm adjustment.
  - 2.5 When closing cover (guide arm axis still loose), if cover is not sitting properly on either the front or rear of the table, you have to change the height of the flange bearings (See drawing # 004B0223; item #12) until cover is seating properly on each side. Normally shaft is centered in the table holes and the height is adjusted in a way that cover will slightly touch the back side of the table first.
3. Adjustment of guide arm: Both length of the guide arm and position on the guide arm axis have to be adjusted. Each of these should be adjusted separately. Fix the lower axis in a central position (centered in the holes) then adjust guide arm length until cover sit correctly on the right side. Move cover to the left side and check if cover sits correctly, if not move lower axis position and change length of the guide arm. Move the cover back to its original position to confirm, normally multiples tryout is required. Make sure there is no stress is transferred to the guide arm when machine is operating, stress induced arm will cause premature component fail.



# MECHANICAL DRAWING



EM	PART #	DESCRIPTION	QT.	ITEM	PART #	DESCRIPTION	QT.	ITEM	PART #	DESCRIPTION	QT.	ITEM	PART #	DESCRIPTION	QT.
35	005A0464	12" COVER ASSEMBLY	1	18	004A1394	GUIDE ARM PRE-ASSY	1	1	005B0457	STRUCTURE ASSY	1	1	005B0457	STRUCTURE ASSY	1
36	004-0427	HALF FILLER PLATE ASSY	4	19	058-0050	NYLON SPACER 1/2IDx3/4ODx1/16"	2	2	004B0223	TABLE ASSEMBLY	1	2	004B0223	TABLE ASSEMBLY	1
37	052-0420	SCREW 1/4"-20 N.C x 3/4" PAN SLOT BRASS	4	20	058-0060	NYLON SPACER 1/2IDx3/4ODx1/4"	2	3	005A0583	FRONT MC-40 SUPPORT ASSY	1	2	005A0583	FRONT MC-40 SUPPORT ASSY	1
38	051-0783	WASHER 3/8" FLAT THICK S/S	16	21	056-0331	EXT. RETAINING RING 1/2" S/S	2	4	057-0089	1/4" x 5/8" O.D. EPDM RUB. SEAL. WASHER	4	2	057-0089	1/4" x 5/8" O.D. EPDM RUB. SEAL. WASHER	4
39	051-0422	BOLT 3/8"-16nc. X 3/4" S/S	2	22	005A0812	REAR GAS 3 INJECTION BAR ASSEMBLY	2	5	051-0591	NUT 1/4"-20 ACORN S/S	4	2	051-0591	NUT 1/4"-20 ACORN S/S	4
40	051-0622	NUT 3/8"-16nc. NYLON LOCK S/S	2	23	005A0813	REAR GAS 4 INJECTION BAR ASSEMBLY	2	6	002-0327	RIGHT SEAL BAR GUIDE BLOCK	4	2	002-0327	RIGHT SEAL BAR GUIDE BLOCK	4
41	051-0360	BOLT 3/8"-16nc. X 1" S/S	6	24	005A0423	FRONT GAS 3 INJECTION BAR ASSEMBLY	2	7	002-0326	LEFT SEAL BAR GUIDE BLOCK	4	2	002-0326	LEFT SEAL BAR GUIDE BLOCK	4
42	051-0620	NUT 3/8"-16 NC S/S	6	25	005A0424	FRONT GAS 4 INJECTION BAR ASSEMBLY	2	8	051-0740	WASHER 1/4" FLAT S/S	36	2	051-0740	WASHER 1/4" FLAT S/S	36
43	005C0561	SEAL BAR ASS'Y W/SUPPORT	1	26	005-0320	BELLOWS ASSEMBLY	4	9	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	16	4	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	16
44	005A0562	SEAL BAR ASS'Y W/SUPPORT	1	27	004A0629	REAR PANEL 165 & 255M <sup>3</sup> PRE-ASSY	1	10	051-0581	NUT 1/4"-20 NYLON LOCK S/S	16	2	051-0581	NUT 1/4"-20 NYLON LOCK S/S	16
45	005A1376	SEAL BAR ASS'Y 10mm W/SUPPORT	1	28	130-4PHB	4" SWIVEL CASTER W/BRAKE	2	11	005-0422	FILLER PLATE ASSY	2	2	005-0422	FILLER PLATE ASSY	2
46	104-0064	SILICONE TUBING 3/8" OD x 3/16" ID x 80mm	4	29	130-4PHO	4" SWIVEL CASTER W/O BRAKES	2	12	004-0280	COVER ARM ASSY	2	2	004-0280	COVER ARM ASSY	2
47	004A1468	PUMP "BUSCH" 100 M <sup>3</sup> ASSEMBLY	1	30	052-0520	BOLT 5/16"-18nc. X 3/4" ZINC	16	13	005A0463	8" COVER ASSEMBLY	1	16	005A0463	8" COVER ASSEMBLY	1
48	004A1469	PUMP "BUSCH" 165 M <sup>3</sup> ASSEMBLY	1	31	052-3110	NUT 5/16" -18 ZINC	16	14	056-01675	KEY 1/4" SQ. x 1 1/4" ROUNDED END S/S	2	16	056-01675	KEY 1/4" SQ. x 1 1/4" ROUNDED END S/S	2
49	004A1470	PUMP "BUSCH" 63 M <sup>3</sup> ASSY	1	32	002-0390	COVER ARM COLLAR	2	15	005A0560	SEAL BAR ASSY W/SUPPORT	4	2	005A0560	SEAL BAR ASSY W/SUPPORT	4
				33	051-0178	SCREW 1/4"-20 x 5/16" SKT SET S/S	2	16	004-0726	REAR PANEL PRE-ASSEMBLY	1	2	004-0726	REAR PANEL PRE-ASSEMBLY	1
				34	004A1471	PUMP "BUSCH" 255 M <sup>3</sup>	1	17	051-0760	WASHER 5/16" FLAT S/S	33	1	051-0760	WASHER 5/16" FLAT S/S	33



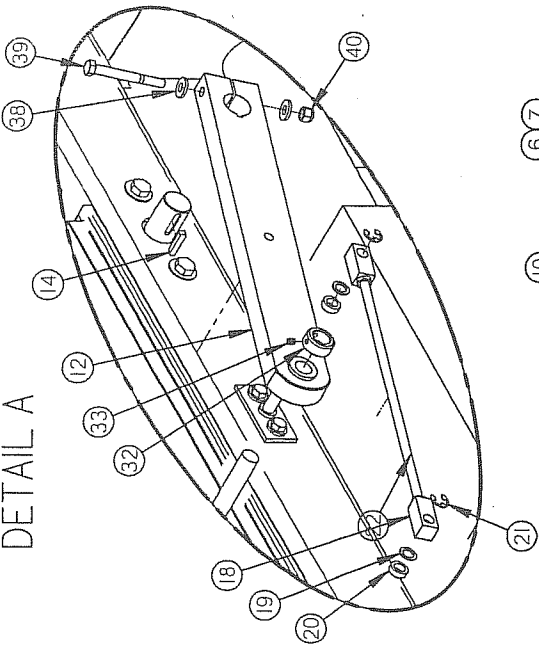
MACHINE: 620A  
 PART: MACHINE ASSEMBLY  
 ITEM: CMC  
 DATE: 13-01-23  
 APP. BY: J.G.  
 MAT.:

DEST. COL. METRIC: M-1  
 UNIT: 1  
 TOLERANCE: ± 0.1  
 TOLERANCE: ± 0.025  
 TOLERANCE: ± 0.3  
 TOLERANCE: ± 0.020

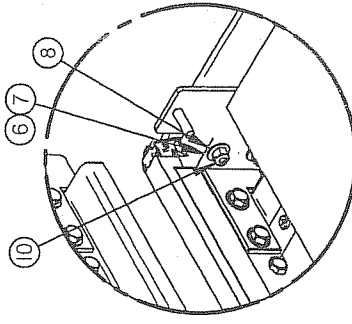
PREP. N.T.S.  
 ST-GERMAIN DE GRANTHAIA  
 QUEBEC CANADA

SIPROMAC  
 NO. 005C0415  
 DATE 13-01-23  
 DATE 13-01-23  
 DATE 13-01-23

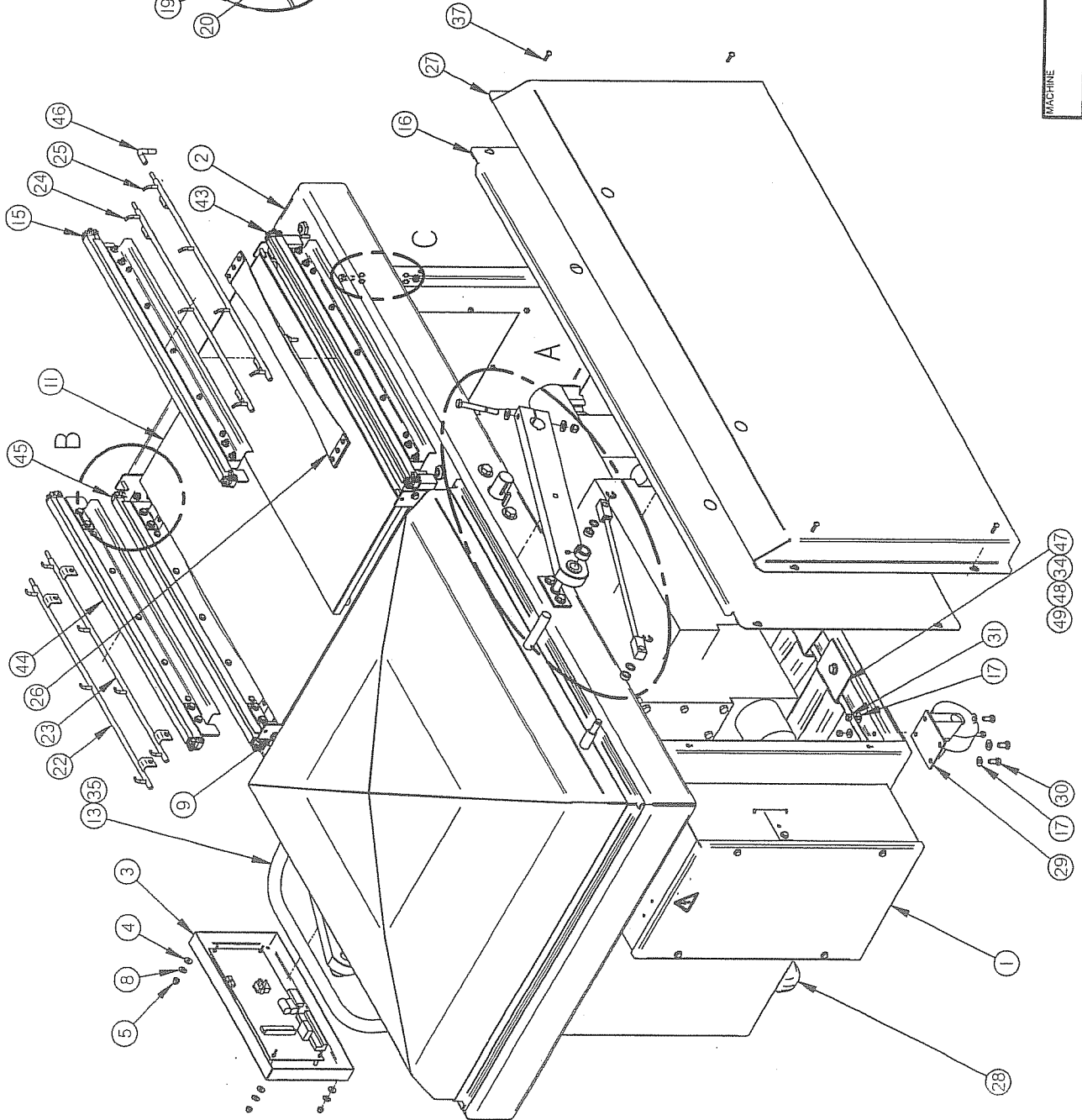
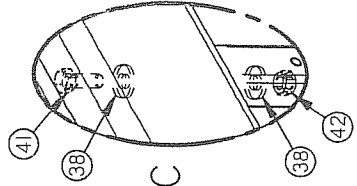
DETAIL A



DETAIL B



DETAIL C

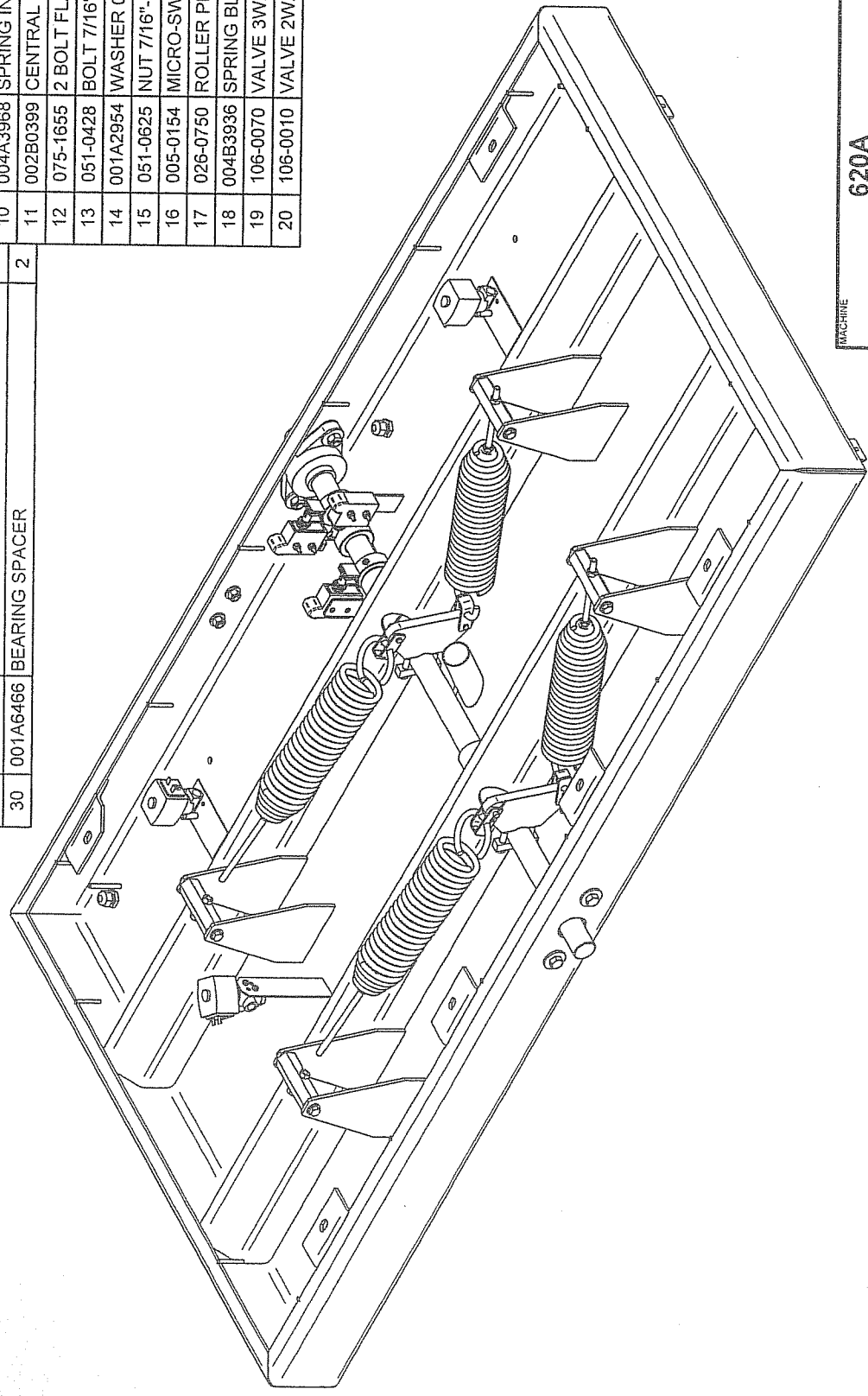


MACHINE <b>620A</b>	DEPT TOI METRIQUE INCH USINAGE ± 0.1 ± 0.004	ST-GERMAIN DE GRANTHAM QUEBEC CANADA	QTY. 1
PART MACHINE ASSEMBLY	TOLERIE ± 0.5 ± 0.020		
ITEM	SOUDAGE ± 0.5 ± 0.020	N.T.S.	
MAT.	CNC		
DRAWN BY J.G.	DATE 13-01-23		
APP'D BY			
			NO. <b>005C0415</b>

004B0223

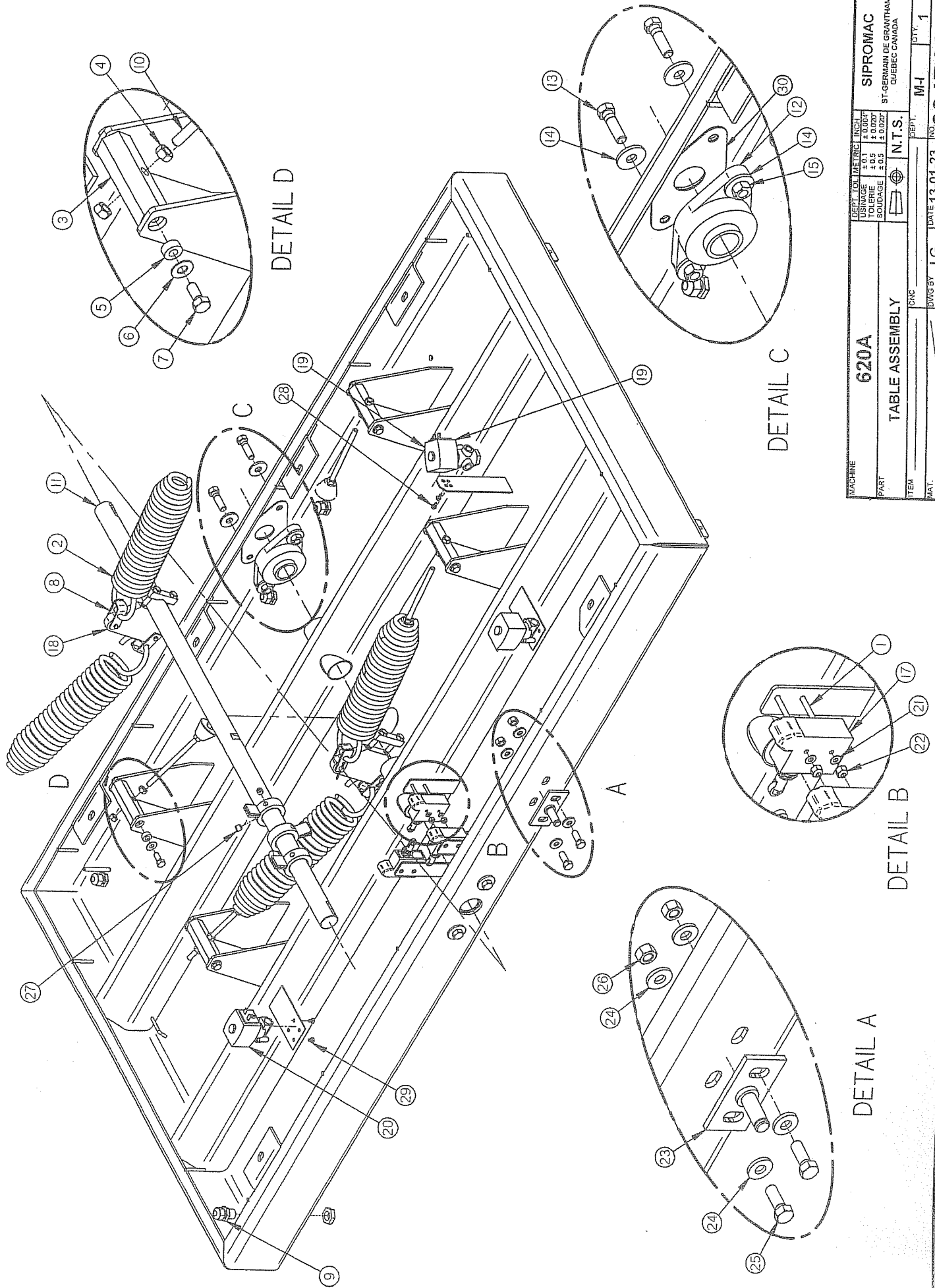
1/2

ITEM	PART #	DESCRIPTION	QT.	ITEM	PART #	DESCRIPTION	QT.
21	051-0720	WASHER #8 FLAT S/S	6	1	005B0414	TABLE ASSEMBLY	1
22	051-0560	NUT #8-32 NYLON LOCK S/S	6	2	008A1953	SPRING	4
23	005-0317	GUIDE ARM AXIS ASSY	1	3	002A3941	SPRING ADJ. PIVOT	4
24	051-0783	WASHER 3/8" FLAT THICK S/S	4	4	051-0600	NUT 5/16" -18 S/S	8
25	051-0360	BOLT 3/8"-16nc. X 1" S/S	2	5	002A4002	SPRING ADJ. PIVOT SPACER	8
26	051-0620	NUT 3/8"-16 NC S/S	2	6	051-0760	WASHER 5/16" FLAT S/S	8
27	051-0334	SCREW 3/8"-16 x 3/8" SET HEX SKT	6	7	051-0300	BOLT 5/16"-18 x 3/4" S/S	8
28	052-0216	SCREW 8-32 X 5/16" HEX WASHER HEAD ZINC	2	8	004A3937	SHACKLE ASSY	4
29	052-0290	SCREW #10-32 X 1/4" PAN PHIL. ZINC PLATED	4	9	036-0400	WIRE CONNECT. 3/8" NPT CD09/O-RING/NUT	8
30	001A6466	BEARING SPACER	2	10	004A3968	SPRING INSERT ASSEMBLY	4
				11	002B0399	CENTRAL SHAFT	1
				12	075-1655	2 BOLT FLANGED BEARING 1-1/4" PLASTIC	2
				13	051-0428	BOLT 7/16"-14NC x 1-1/2" SS	4
				14	001A2954	WASHER 0.468"Ø ID x 1.250"OD x 3.5	8
				15	051-0625	NUT 7/16"-14 S/S	4
				16	005-0154	MICRO-SWITCH COLLAR ASSY	3
				17	026-0750	ROLLER PLUNGER SWITCH SPDT	3
				18	004B3936	SPRING BLOCK PRE-ASSY	2
				19	106-0070	VALVE 3WAY 24V 1/4"NPT(G176)60Hz	1
				20	106-0010	VALVE 2WAY 24V 1/4"NPT(G22) 60Hz	2



MACHINE		DEPT. TO METRIC INCH		SIPROMAC	
PART		USINAGE ± 0.1	TOLERIE ± 0.004"	ST-GERMAN DE GRANTHAM	
ITEM		SOUDAGE ± 0.5	DATE 13-01-23	QUEBEC CANADA	
MAT.		DATE		N.T.S.	
620A		APP. BY J.G.		DEPT. M-H	
TABLE ASSEMBLY		DATE		NO. 004B0223	
1		1		1	

F	MOD. 002A3941, AJOUT 001A6466	13-04-10	SBU
E	REDESSINE MODIF. A-458	13-01-23	J.G.
ET	MODIFICATION	DATE	INT.

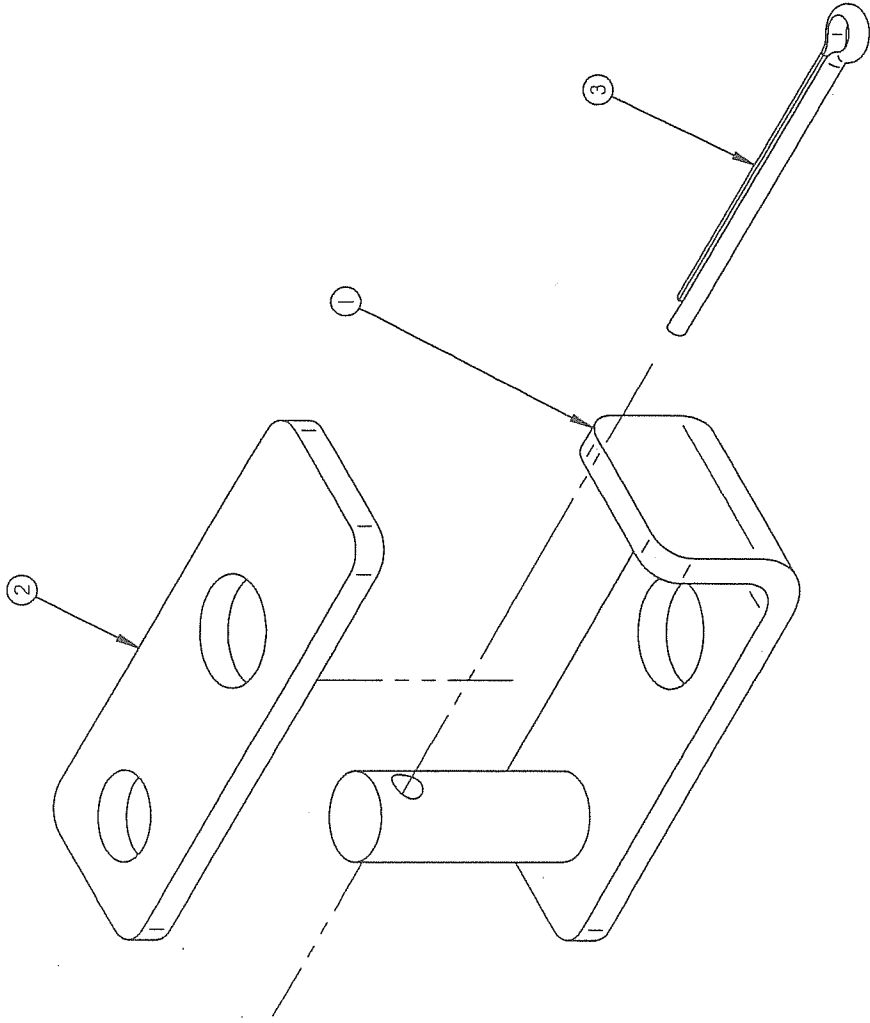


MACHINE	620A	UNIT	INCH	STANDARD	ST-GERMAIN DE GRANTHAM
PART	TABLE ASSEMBLY	USINAGE	± 0.007	TOLERIE	± 0.007
ITEM		SOUDEGE	± 0.027	N.T.S.	QUEBEC CANADA
MAT.		DATE	13-01-23	NO.	004B0223
		APP. BY	J.G.	DEPT.	M-H
		QTY.	1		



004A3937

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



620A	4
600A	4
MACHINE	QTY

MACHINE	VACUUMS	DEPT.	M-(M)	LISTE
PART	SHACKLE ASSY	DATE	12-11-06	004A3937
ITEM		DATE		
MAT.				

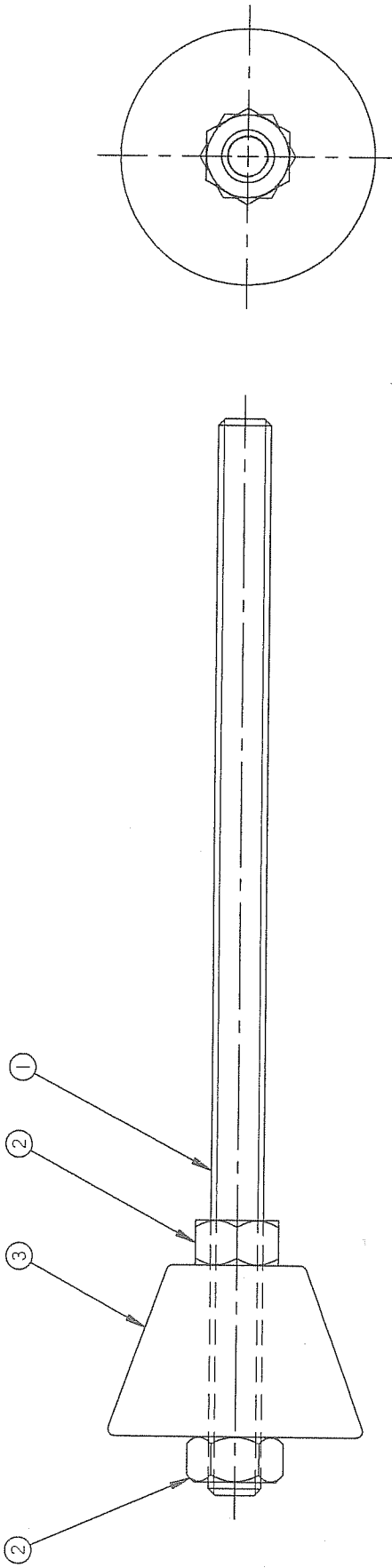
DEPT.	INDUSTRIE	
USINAGE	± 0.020"	
TOLERANCE	± 0.5	
SOUDEAGE	± 0.5	
	N.T.S.	

AJOUTER 620A  
MODIFICATION

13-01-23 J.G.

004A3968

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



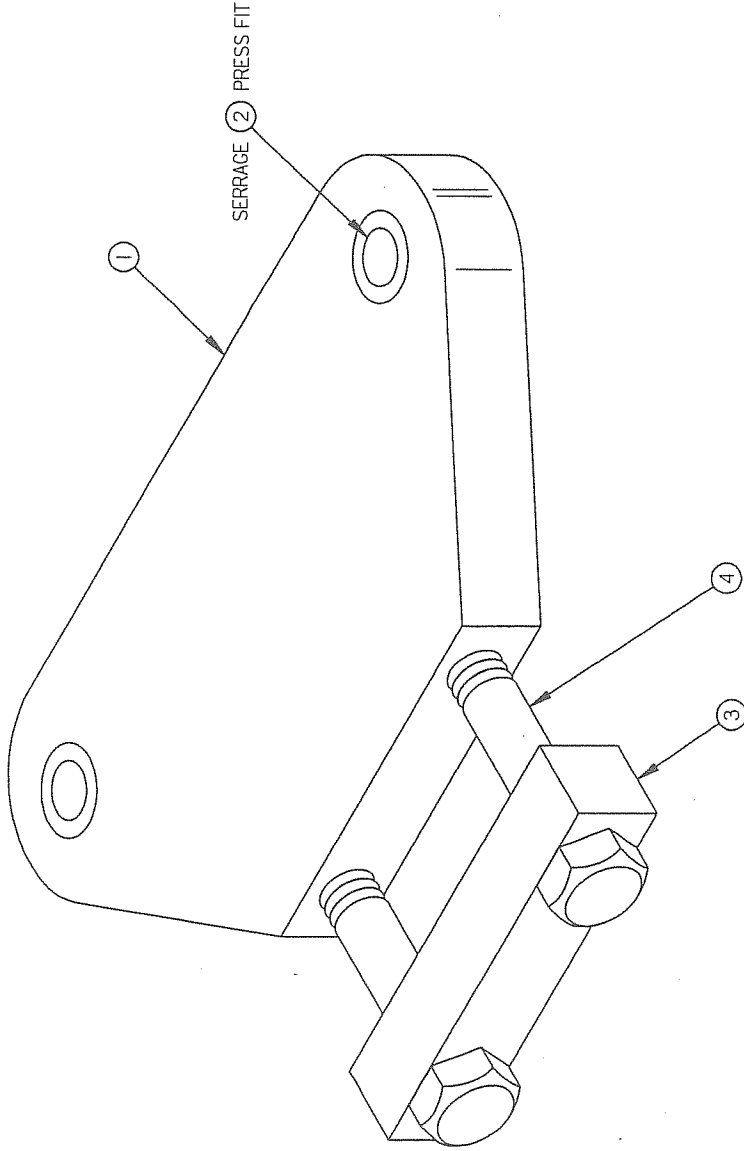
620A	4
600A	4
MACHINE	QTY
SIPROMAC	
ST-GERMAIN DE GRANTHAM	
QUEBEC CANADA	
M-(M)	QTY
LISTE	
004A3968	

MACHINE	600A & 620A
PART	SPRING INSERT ASSEMBLY
ITEM	CNC
MAT.	
DESIGN	DESIGNER
UTILISATION	DATE
TOLERANCE	± 0.05
SOUDAGE	± 0.020"
N.T.S.	
APP. BY	J.G.
DATE	13-01-15
DEPT.	

A	13-01-23	J.G.
LET.	DATE	INT.
AJOUTER 620A		
MODIFICATION		

004B3936

ITEM	PART #	DESCRIPTION	QT.
1	002B4058	SPRING BLOCK	1
2	075-0015	BUSHING PL. 5/16" x 1/2" x 1/2"	2
3	002B3939	UPPER SPRING BLOCK	1
4	051-0312	S/S BOLT 5/16" - 18NC. 2 1/4"	2



620A	2
600A	2
MACHINE	QTY
SIPROMAC	
ST-GERMAIN DE GRANTHAM	
QUEBEC CANADA	

MACHINE	VACCUM	DEPT.	
PART	SPRING BLOCK PRE-ASSY	DATE	13-01-15
ITEM		APP. BY	J.G.
MAT.			
U-(M)		LISTE	004B3936

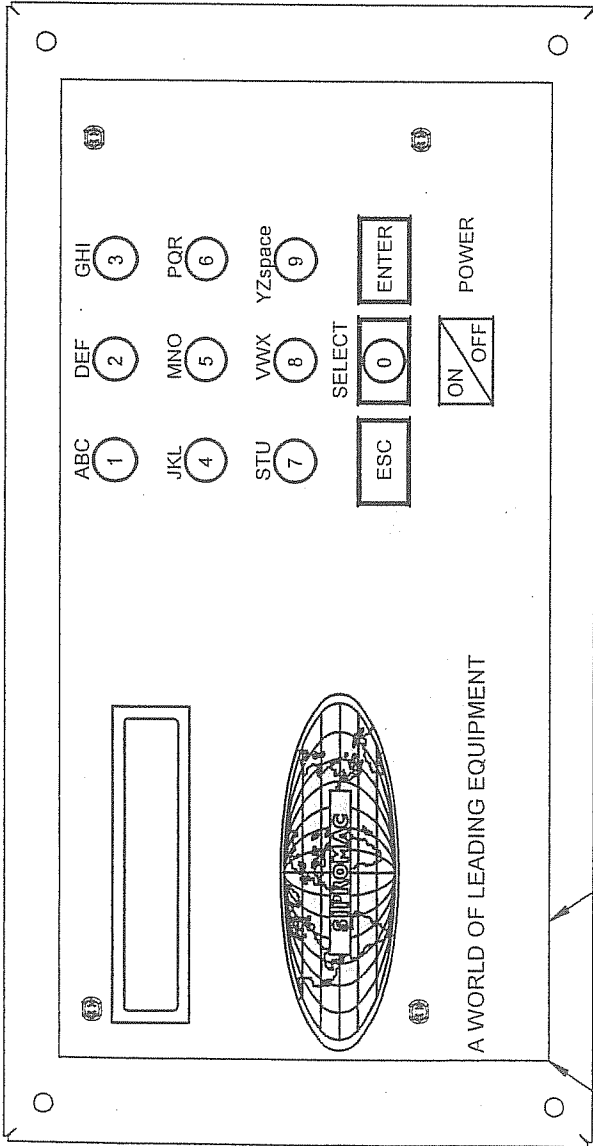
B	AJOUTER 620A	13-01-23	J.G.
A	REDESSINE	13-01-15	J.G.
ET	MODIFICATION		

DEPT. TOL. METRIC	INCH
USINAGE ± 0.1	± 0.004
TOLERIE ± 0.5	± 0.020
SOUDAGE ± 0.5	± 0.030

N.T.S.

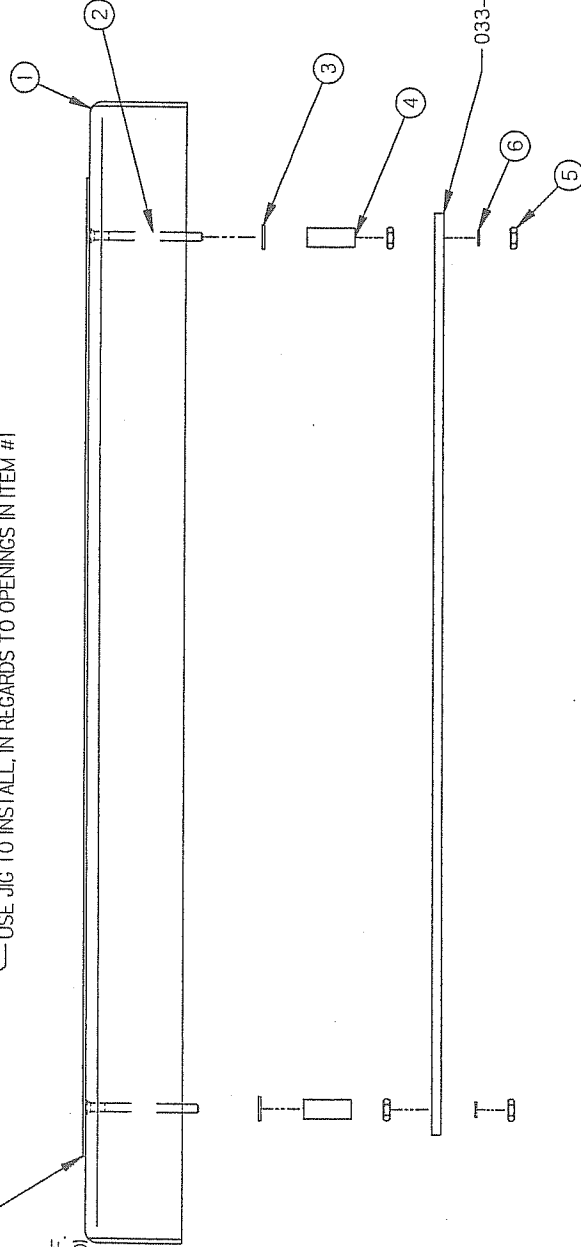
005A0583

ITEM	PART #	DESCRIPTION	QTY.
1	004A0425	FRONT MC-40 SUPPORT PRE-ASS'Y	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



033-0015 OR  
033-0017 OR  
033-0018 OR  
KEY BOARD REF.  
(NOT INCLUDED)

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

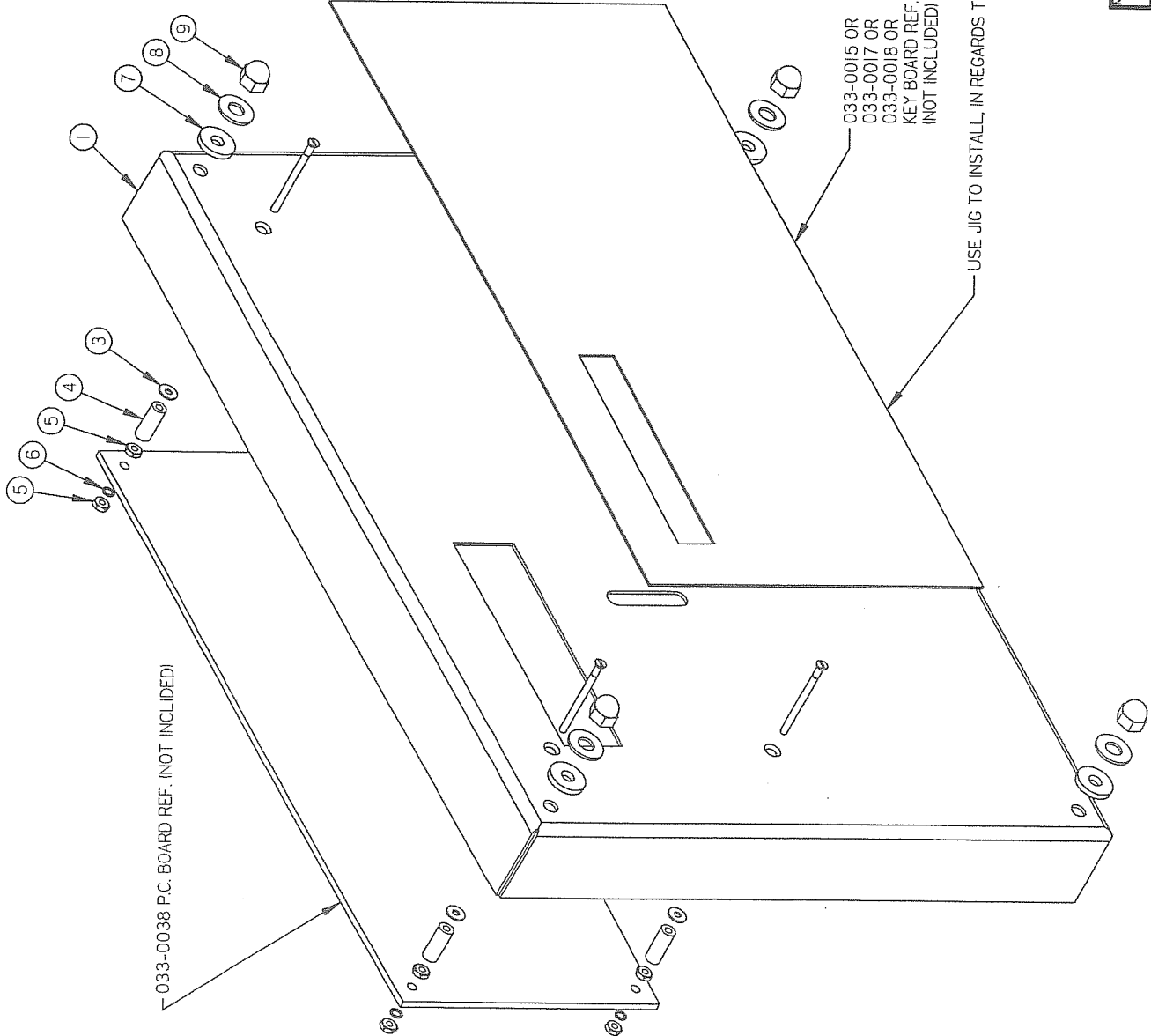


MACHINE	420A, 450A, 450T, 500A, 500D, 550A, 580A, 600A, 620A & 650A	UNIT OF METRIC	INCL. ± 0.020"
PART	FRONT MC-40 SUPPORT ASSY	TOLERANCE	± 0.5
ITEM	CNC	SOLDAGE	± 0.5
DEPT.	M (1)	DEPT.	N.T.S.
DATE	05-09-01	NO.	005A0583
APP. BY	M.A.I.	DATE	05-09-01
MAT.			

H	AJOUTER 500D	08-04-17	J.G.
G	REDRAWN	05-09-01	M.A.
LET.	MODIFICATION	DATE	INT.

# 005A0779

ITEM	PART #	DESCRIPTION	QT.
1	004A3166	FRONT MC-40 SUPPORT PRE-ASSY(OPT. HEATER)	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
7	057-0089	1/4" x 5/8" O.D. EPDM RUB. SEAL. WASHER	4
8	051-0740	WASHER 1/4" FLAT S/S	4
9	051-0591	NUT 1/4"-20 ACORN S/S	4

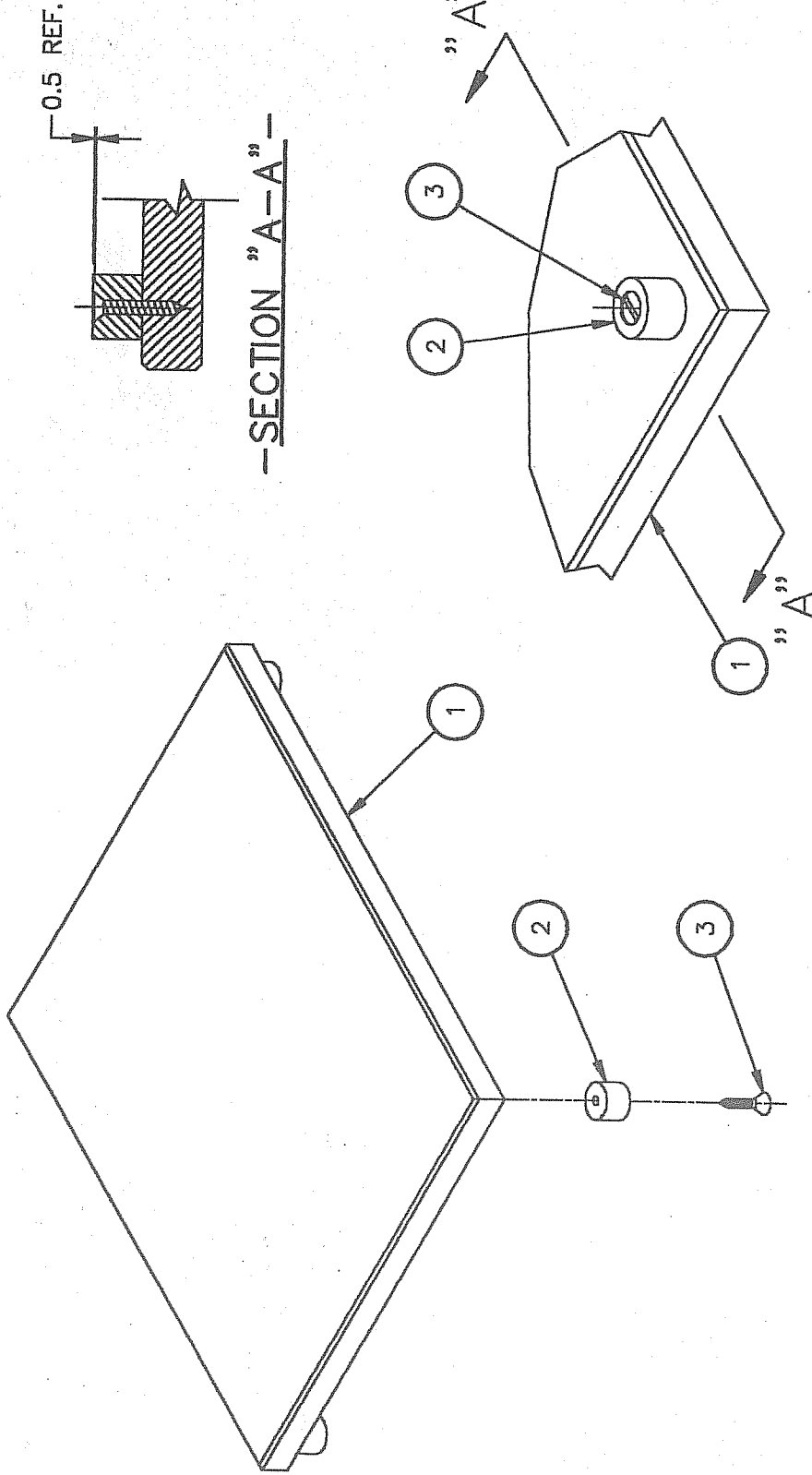


MACHINE	420A, 450A, 550A, 580A, 600A, 620A & 650A	DEPT. TOLERANCE INCH	± 0.004
PART	FRONT MC-40 SUPPORT ASSY(OPT. HEATER)	USINAGE	± 0.1
ITEM		TOLERIE	± 0.020"
MAT.		SOUDAGE	± 0.5
		N.T.S.	
DATE	10-02-03	NO	005A0779
DATE	10-02-05	DEPT.	MI
DATE		DTY.	1

LET.	MODIFICATION	DATE	INT.
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1005-0422

ITEM	PART #	DESCRIPTION	QT.
1	008-0404	FILLER PLATE	2
2	003-0080	FILLER PLATE FOOT	8
3	054-0004	METAL SCREW #10 X 1" FLAT SLOT S/S	8



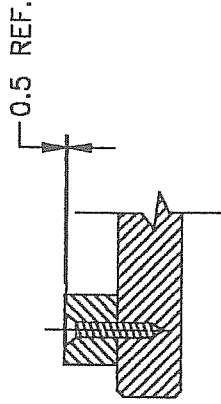
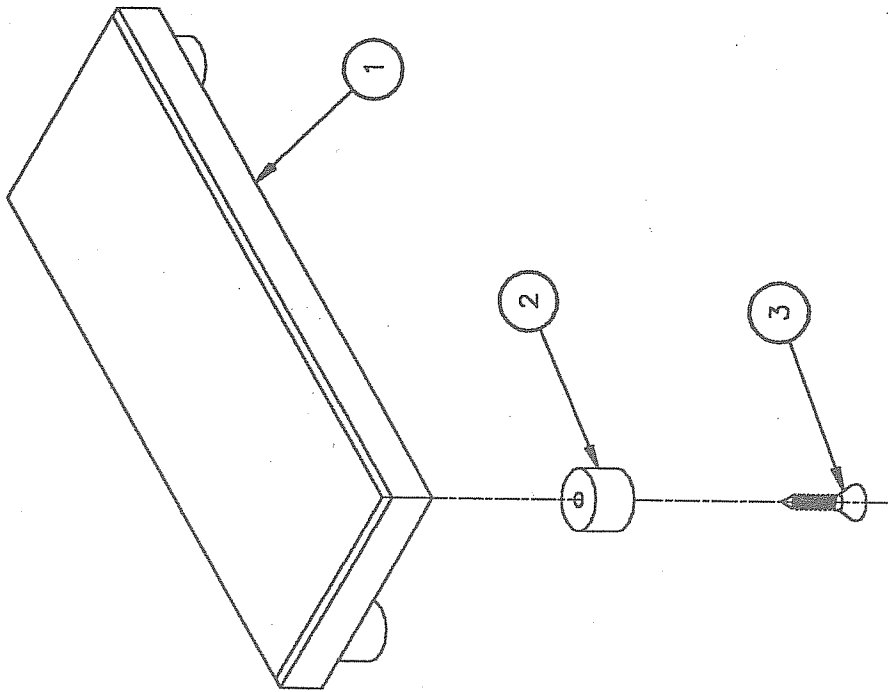
--INSTALLATION DETAIL--

MACHINE	620A	SIPROMAC	ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	FILLER PLATE ASSEMBLY	INCH TOLERANCE	.0 ± .015" .00 ± .005" .000 ± .0005"
ITEM:	CNC:	METRIC TOLERANCE	.0 ± .05 .00 ± .005 .000 ± .0005
MAT:	DWG BY: A. PROVENCHER	ANGLE ± 1°	N.T.S.
DATE	DATE 97-09-19	SCALE	SCALE
INT.	APP. <i>[Signature]</i>	NO.	NO. 005-0422

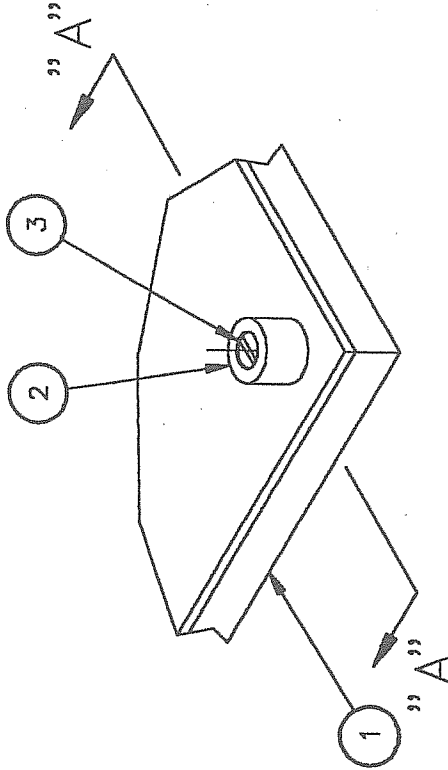
A	REDRAWN / MODIF. NO. A-0215	97-09-19	A.P.
LET.	MODIFICATION	DATE	INT.

1005-0427

ITEM	PART #	DESCRIPTION	QT.
1	008-0410	HALF FILLER PLATE	4
2	003-0080	FILLER PLATE FOOT	16
3	054-0004	METAL SCREW #10 X 1" FLAT SLOT S/S	16



--SECTION "A-A"--

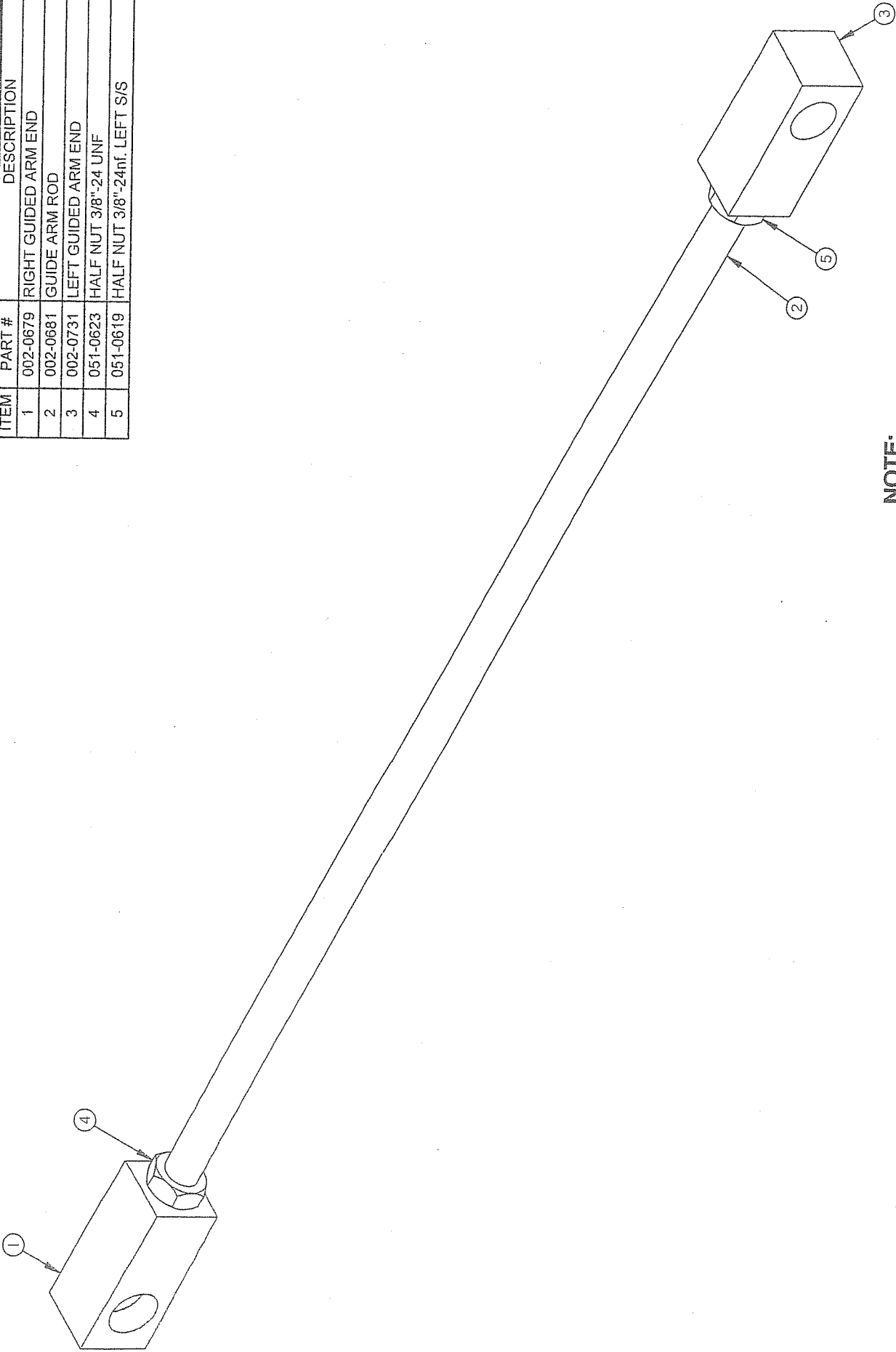


--INSTALLATION DETAIL--

MACHINE	620A	INCH TOLERANCE	.0 ± .015"	SIPROMAC	SCALE	4
PART	HALF FILLER PLATE ASSEMBLY	METRIC TOLERANCE	0. ± .5 .0 ± .005 .00 ± .0005 .000 ± .0005	ST-GERMAIN DE GRANTHAM QUEBEC CANADA	DATE	97-09-19
ITEM:	CNC:	ANGLE ± 1'	N.T.S.	DATE	DATE	DATE
MAT:	DWG. A. PROVENCHER	DATE	97-09-19	NO.	1005-0427	
APP.	APP.					
A	REDRAWN / MODIF. NO. A-0215	DATE	97-09-19	A.P.		
LET.	MODIFICATION	DATE		INT.		

004A1394

ITEM	PART #	DESCRIPTION	QT.
1	002-0679	RIGHT GUIDED ARM END	1
2	002-0681	GUIDE ARM ROD	1
3	002-0731	LEFT GUIDED ARM END	1
4	051-0623	HALF NUT 3/8"-24 UNF	1
5	051-0619	HALF NUT 3/8"-24nf. LEFT S/S	1



**NOTE:**

-PASSER AU JET DE SABLE APRÈS AVOIR ASSEMBÉ LES 5 ITEMS.

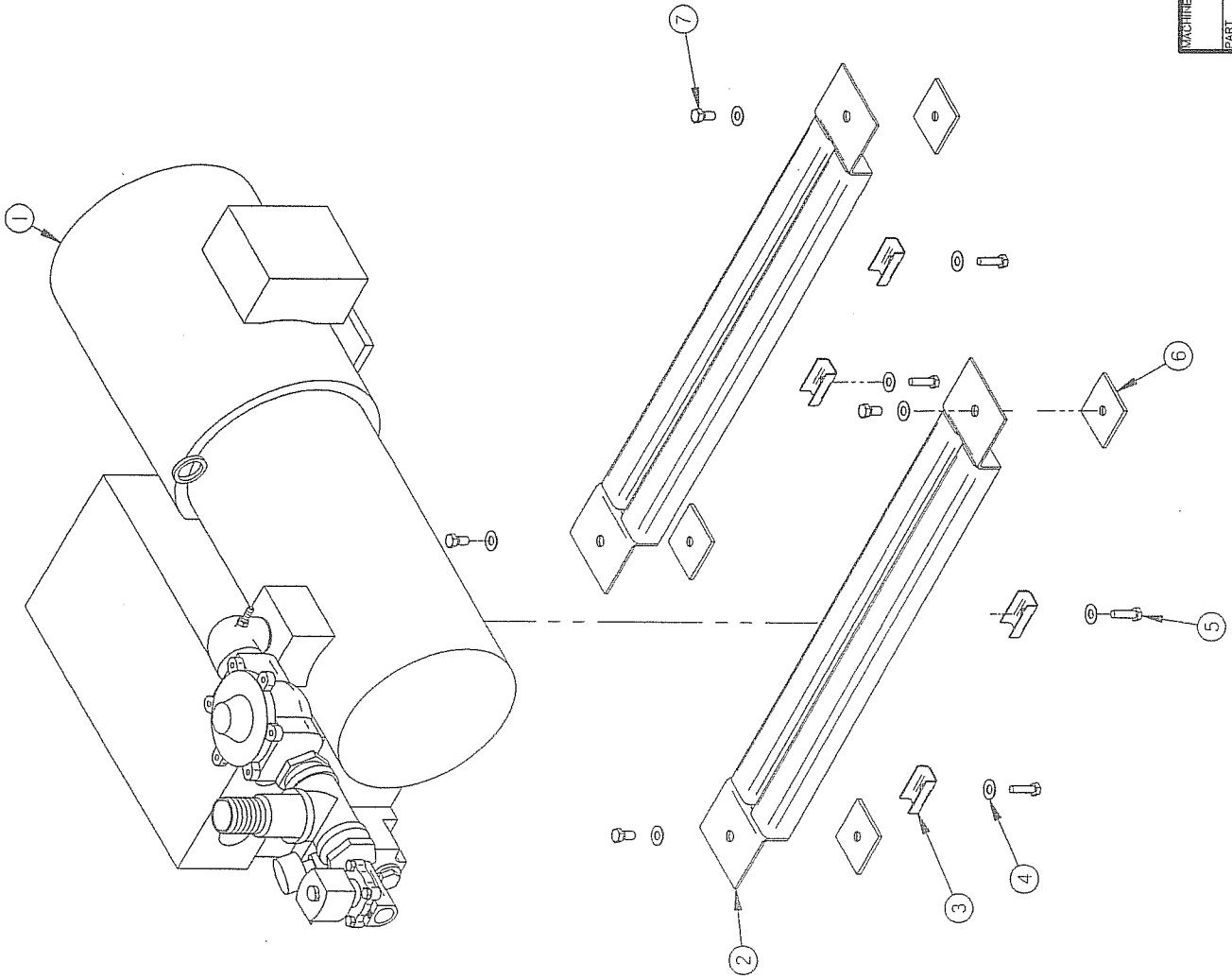
MACHINE	600 & 620	DEPT. / DIM. / METRIC / INCH	ST-GERMAIN DE GRANBY / QUÉBEC CANADA
PART	GUIDE ARM PRE-ASS'Y	TOLERANCE / TOURNAGE / SOUDAGE	N.T.S.
ITEM		CNC	U-M-(J) QTY. 1
DATE	03-12-09	DATE	28-05-09
APP. BY	J.C.	DATE	004A1394

A	AJOUTER JET DE SABLE	08-02-15	J.G.
LET.	MODIFICATION		DATE INT.



1004A1468

ITEM	PART #	DESCRIPTION	QT.
1	007A0115	"BUSCH" 100M3 & PLUMBING	1
2	005-0104	PUMP SUPORT ASSEMBLY	2
3	001-0199	PUMP FIXATION	4
4	051-0780	WASHER 3/8" FLAT S/S	8
5	052-4220	BOLT M8 x 30 ZINC	4
6	005-0088	PUMP SUPP. FIX. PLATE ASSY	4
7	051-0350	BOLT 3/8"-16nc. X 3/4" S/S	4



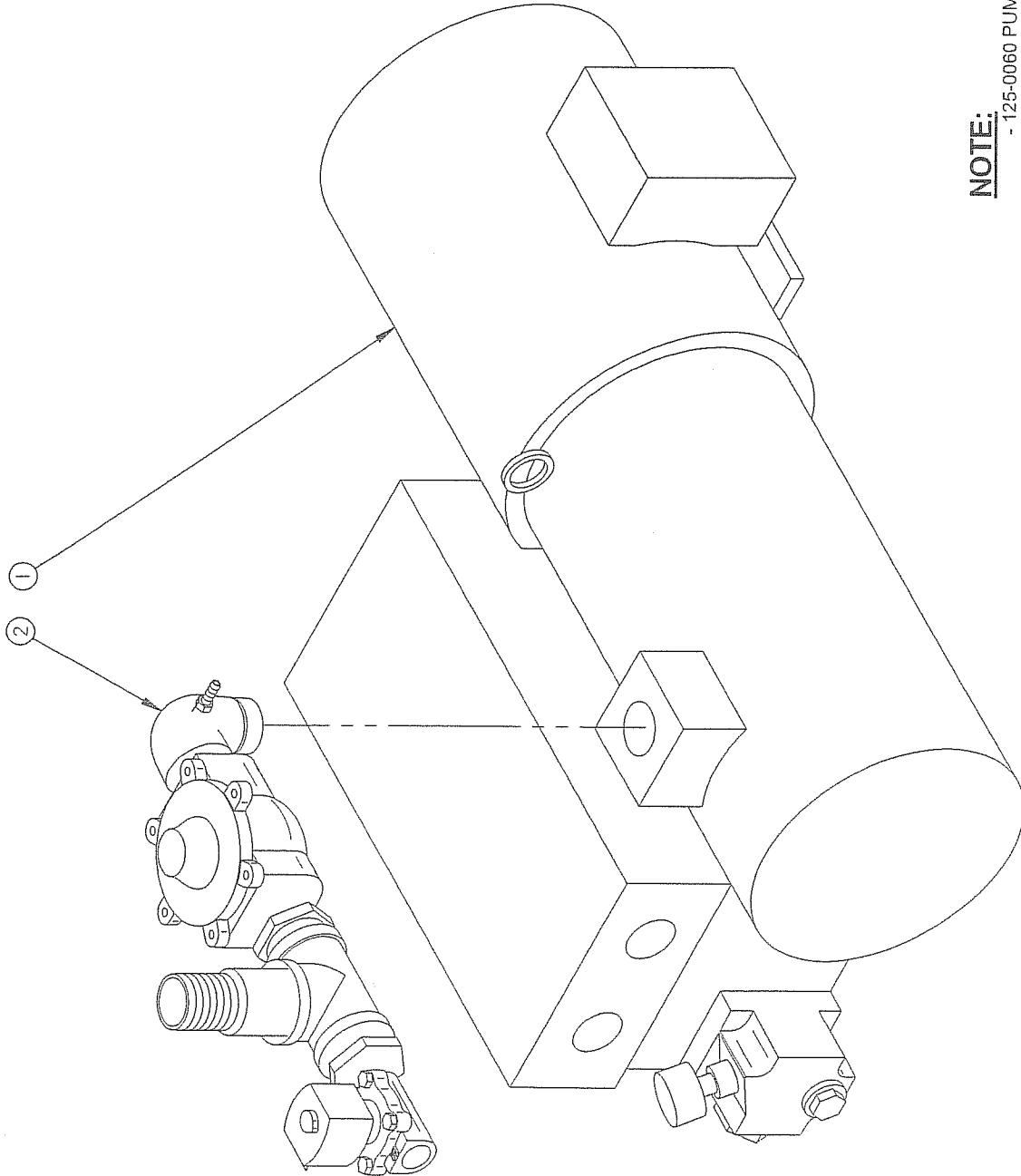
MACHINE	600A & 620A		DEPT. / T. / M. / H. / C. / H. / C.	SIPROMAC
PART	PUMP "BUSCH" 100 M <sup>3</sup> ASSEMBLY		USINAGE ± 0.1 ± 0.004 TOLERIE ± 0.5 ± 0.020 SOUDAGE ± 0.5 ± 0.020	ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM	GNC		⊕	N.T.S.
DWG BY	B.C.	DATE	04-02-24	NO.
APP. BY	L.T.	DATE		004A1468
				QTY. 1

LET. MODIFICATION ONE INT.

007A0115

ITEM	PART #	DESCRIPTION	QT.
1	125-XXXX	PUMP 100M <sup>3</sup>	1
2	004A1404	VACUUM / ATMOSPHERE VALVE ASSY.	1

VOIR NOTE



**NOTE:**

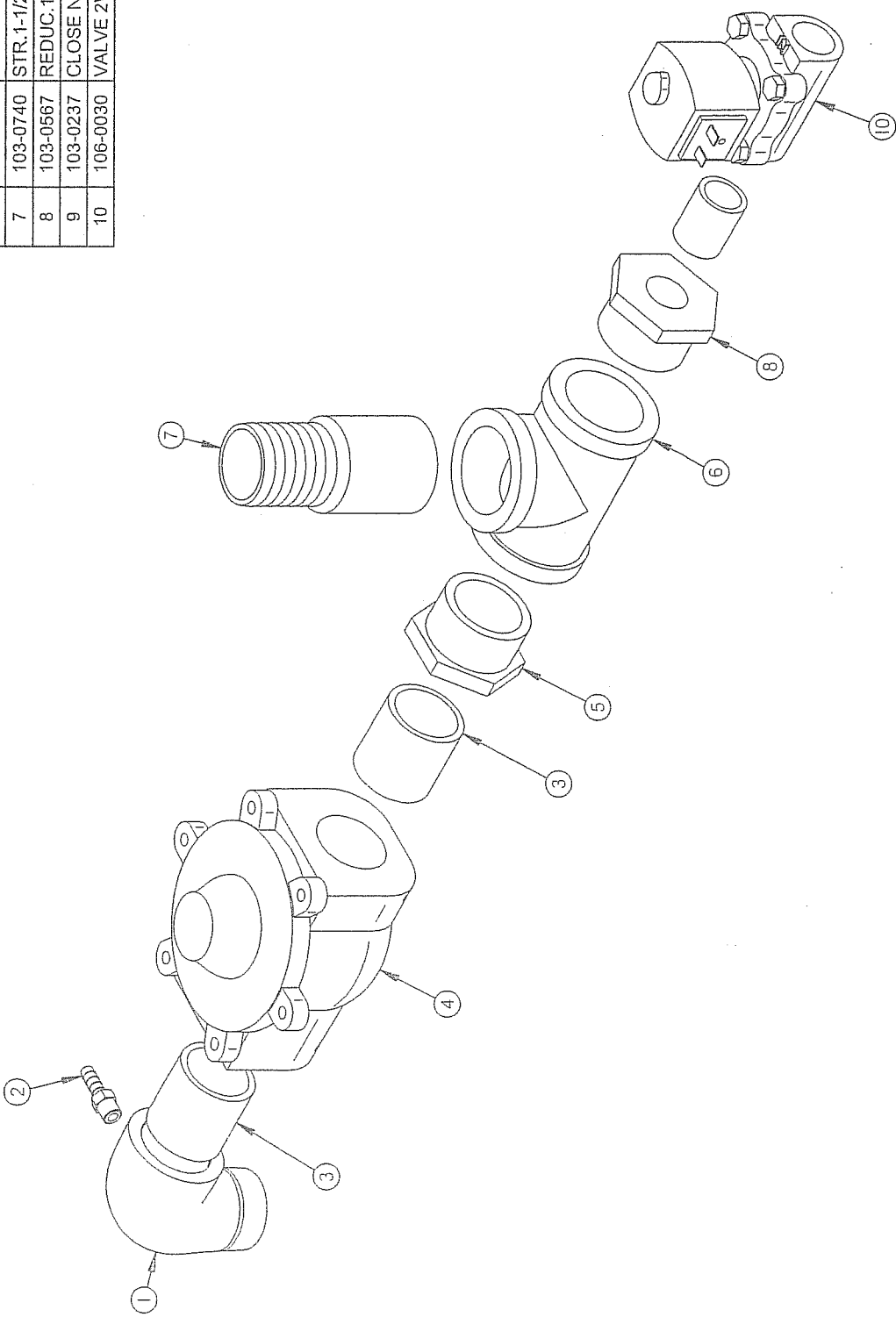
- 125-0060 PUMP BUSCH 100M/230-460V/3PH/60Hz / 400V/3PH/50Hz
- 125-0062 PUMP BUSCH 100M/575V/3PH/60Hz
- 125-0064 PUMP BUSCH 100M/220V/1PH/60Hz

SIPROMAC		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
600A & 620A		N.T.S.	
"BUSCH" 100M3 & PLUMBING		GNC	
ITEM	DATE	DATE	DATE
	04-01-23		
DWG BY J.G.		DATE	
APP BY L.F.		DATE	
MATERIAL		QTY.	
		1	
		007A0115	

LET. | MODIFICATION | DATE | INT.

1004A1404

ITEM	PART #	DESCRIPTION	QT.
1	003-0074	BELLOWS ELBOW CONNECTOR	1
2	101-0190	STRAIGHT 1/8MNPT x 1/4" HOSE BARB	1
3	103-0247	CLOSE NIPPLE 1 1/4" NPT ZINC	2
4	106-0050	VALVE 2WAY 24V 1-1/4"NPT(B60)60Hz	1
5	103-0577	RED. BUSH. 1 1/2"npt. X 1 1/4"npt. ZINC	1
6	103-0482	T 1-1/2"NPT ZINC	1
7	103-0740	STR. 1-1/2"MNPTx1-1/2"HOSE ZC	1
8	103-0567	REDUC. 1-1/4"NPT x 3/4"NPT ZINC	1
9	103-0237	CLOSE NIPPLE 3/4" NPT	1
10	106-0030	VALVE 2WAY 24V 3/4"NPT(G95) 60Hz	1



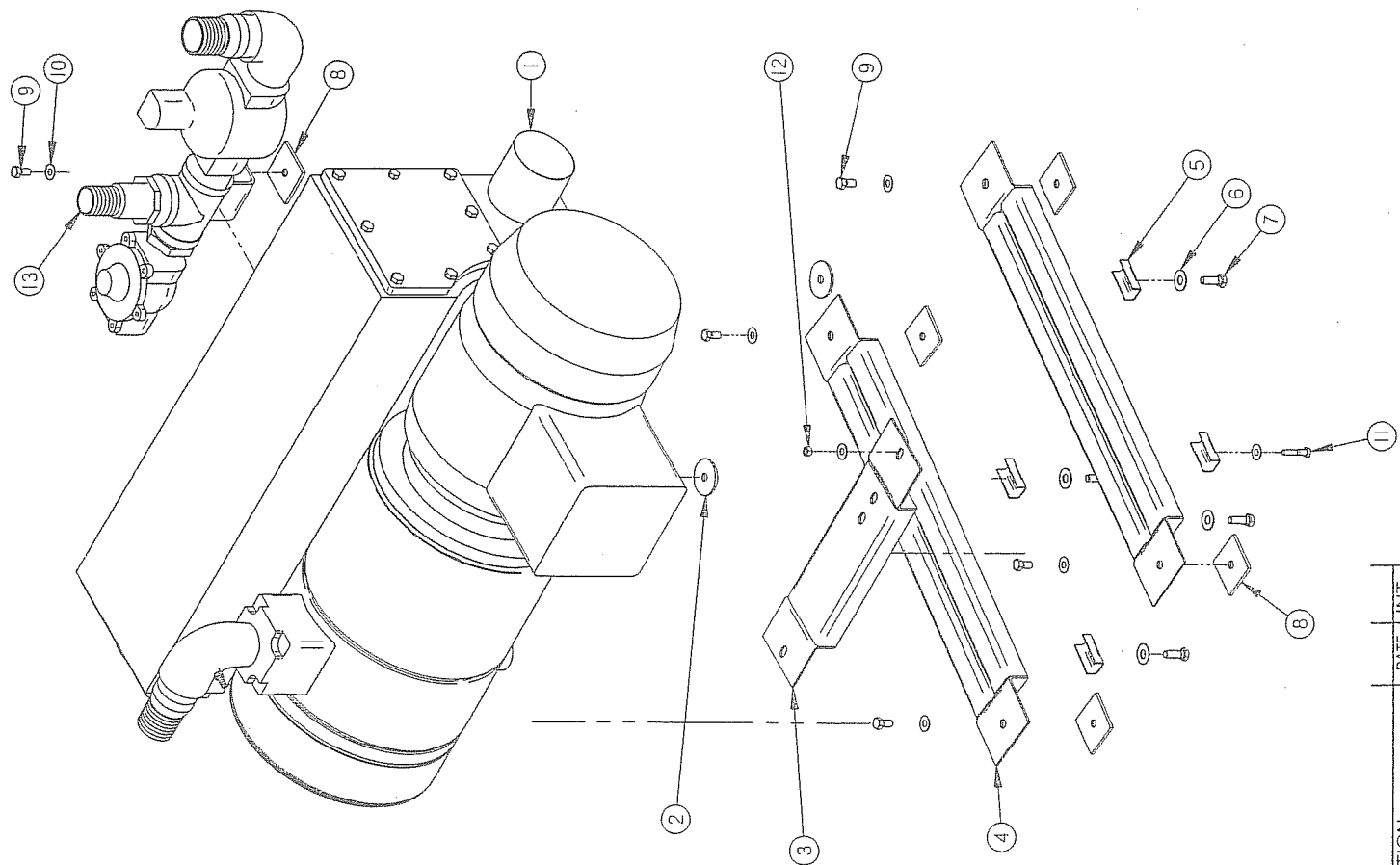
-63 m<sup>3</sup> & 100 m<sup>3</sup> OPTION -

DEPT. TOCTOER INC. INCH VIS. TOL. ± 0.1 TOLER. SOLDERAGE ± 0.5 ± 0.0008 ± 0.0020		DEPT. M-I NO. 004A1404 QTY. 1	
PART 600A & 620A VACUUM / ATMOSPHERE VALVE ASSY.		SIPROMAC ST-GERMAIN-DE-SARATHAM QUEBEC CANADA	
DATE 04-01-22 DATE		N.T.S.	
DWG BY J.G. APP BY ET	DATE 04-01-22 DATE	DEPT. M-I NO. 004A1404 QTY. 1	

LET. \_\_\_\_\_ MODIFICATION \_\_\_\_\_ DATE INT. \_\_\_\_\_

004A1469

ITEM	PART #	DESCRIPTION	QT.
1	007A0112	"BUSCH" 165M3 & PLUMBING	1
2	001A2952	WASHER 0.469" ID x 2.0100D x 3.5	2
3	004A1454	PUMP SUPPORT ASSY	1
4	005-0104	PUMP SUPPORT ASSEMBLY	2
5	001-0199	PUMP FIXATION	4
6	051-0785	WASHER 7/16" FLAT S/S	4
7	052-4240	BOLT M10 x 30 HEX. ZINC	4
8	005-0088	PUMP SUPP. FIX. PLATE ASSY	5
9	051-0350	BOLT 3/8"-16nc. X 3/4" S/S	5
10	051-0780	WASHER 3/8" FLAT S/S	7
11	051-0310	BOLT 5/16"-18nc. X 1 1/2" S/S	1
12	051-0600	NUT 5/16" -18 S/S	1
13	004-0863	VACUUM / ATMOSPHERE VALVE ASSY	1



MACHINE		DEPT. TOL. METRIC INCH	
600A & 620A		USINAGE ± 0.1 ± 0.004	
		TOLERANCE ± 0.5 ± 0.020	
		SOUDAGE ± 0.5 ± 0.020	
PART		N.T.S.	
PUMP "BUSCH" 165 M <sup>3</sup> ASSEMBLY			
ITEM		DEPT.	
MAT.		M-1	
DATE 04-02-24		CITY	
DATE		1	
DWG BY B.C.		NO. 004A1469	
APP. BY J.T.			

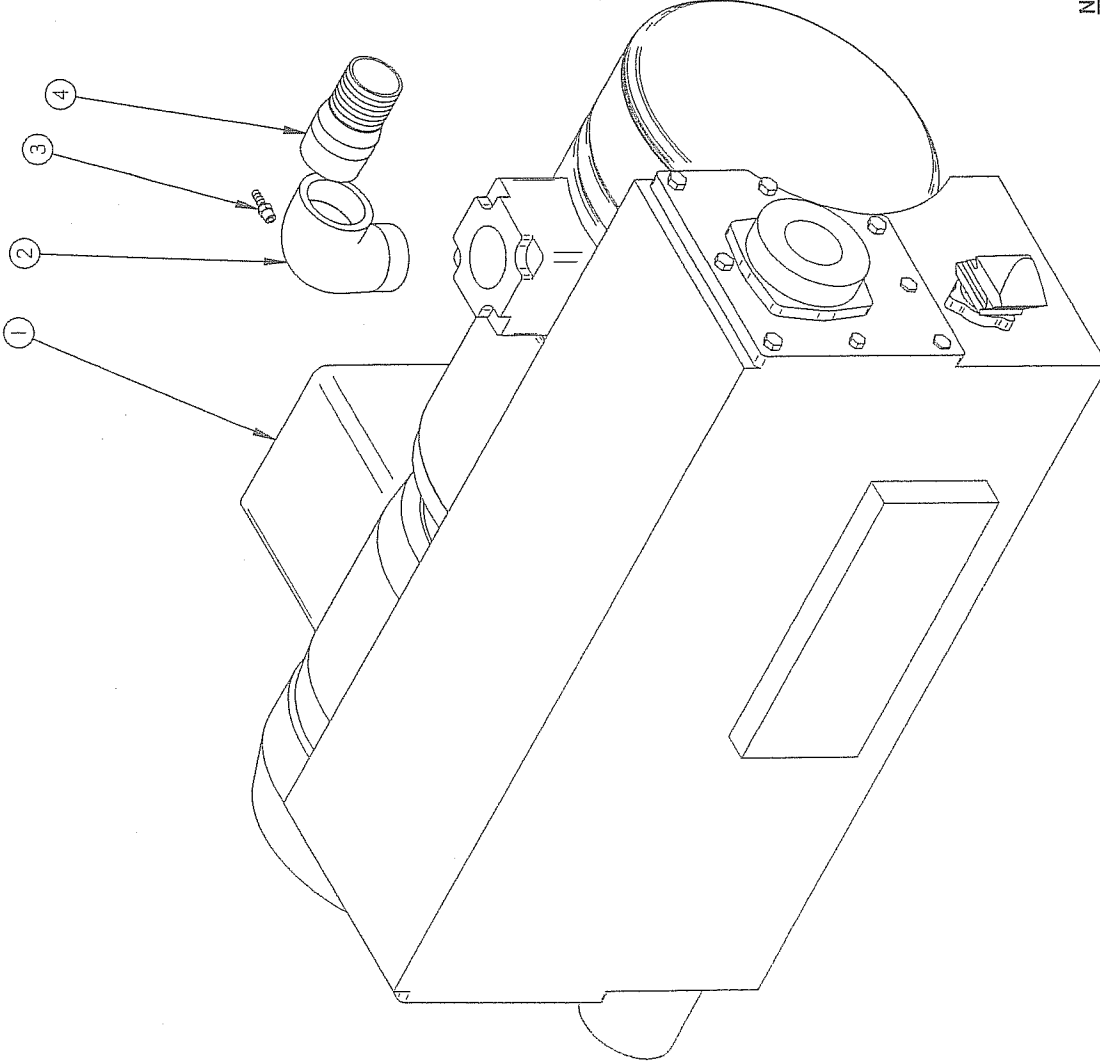
LET. \_\_\_\_\_ DATE INT. \_\_\_\_\_

MODIFICATION

007A0112

ITEM	PART #	DESCRIPTION	QT.
1	125-XXXX	PUMP BUSCH 165M3	1
2	003-0073	BELLOWS ELBOW CONNECTOR	1
3	101-0190	STRAIGHT 1/8MNPT x 1/4" HOSE BARB	1
4	103-0760	STRAIGHT 2"mnpt. X 2" HOSE ZINC	1

VOIR NOTE



NOTE:

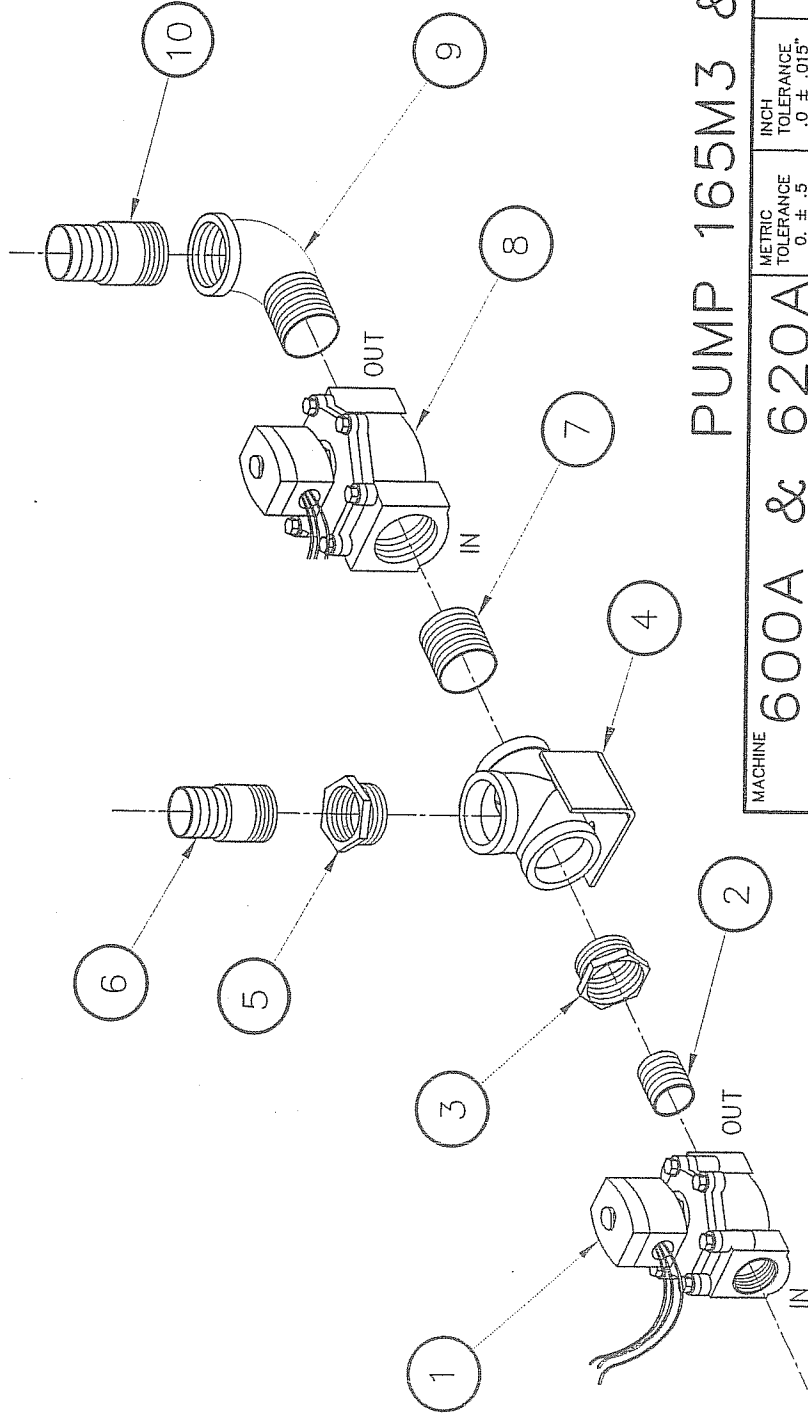
- 125-0070 PUMP BUSCH 165M/230-460V/3PH/60Hz / 400V/3PH/50Hz.
- 125-0075 PUMP BUSCH 165M/575V/3PH/60Hz

MACHINE <b>600A, 620A, 650A, 680A &amp; 700A</b>	DEPT. LOC. TIME INCH USINAGE ± 0.1 CLERIE ± 0.025 SOUDAGE ± 0.020	N.T.S.	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART "BUSCH" 165M3 & PLUMBING	CNC	DEPT. M-I	QTY. 1
ITEM	DWG BY J.G.	DATE 04-01-22	NO. 007A0112
REV.	APP. BY LT	DATE	

A	MODIF. #A-0392	04-01-22	J.G.
LET.	MODIFICATION	DATE	INT.

004-0863

ITEM	#PART	DESCRIPTION	QT.
1	106-0050	VALVE 2WAY /24V /60Hz / 1-1/4" NPT	1
2	103-0247	CLOSE NIPPLE 1-1/4" NPT ZINC	1
3	103-0587	RED.BUSHING 2" NPT x 1-1/4" NPT ZINC	1
4	004A1621	VAC./ATM. VALVE SUPP. PRE-ASSY	1
5	103-0592	RED.BUSHING 2"NPT x 1-1/2" NPT ZINC	1
6	103-0740	STRIGHT 1-1/2"NPT x 1-1/2"HOSE ZINC	1
7	103-0260	CLOSE NIPPLE 2"NPT ZINC	1
8	106-0060	VALVE 2WAY /24V /60Hz / 2" NPT	1
9	103-0095	ELBOW STREET 2"NPT ZINC	1
10	103-0760	STRIGHT 2"NPT x 2"HOSE ZINC	1



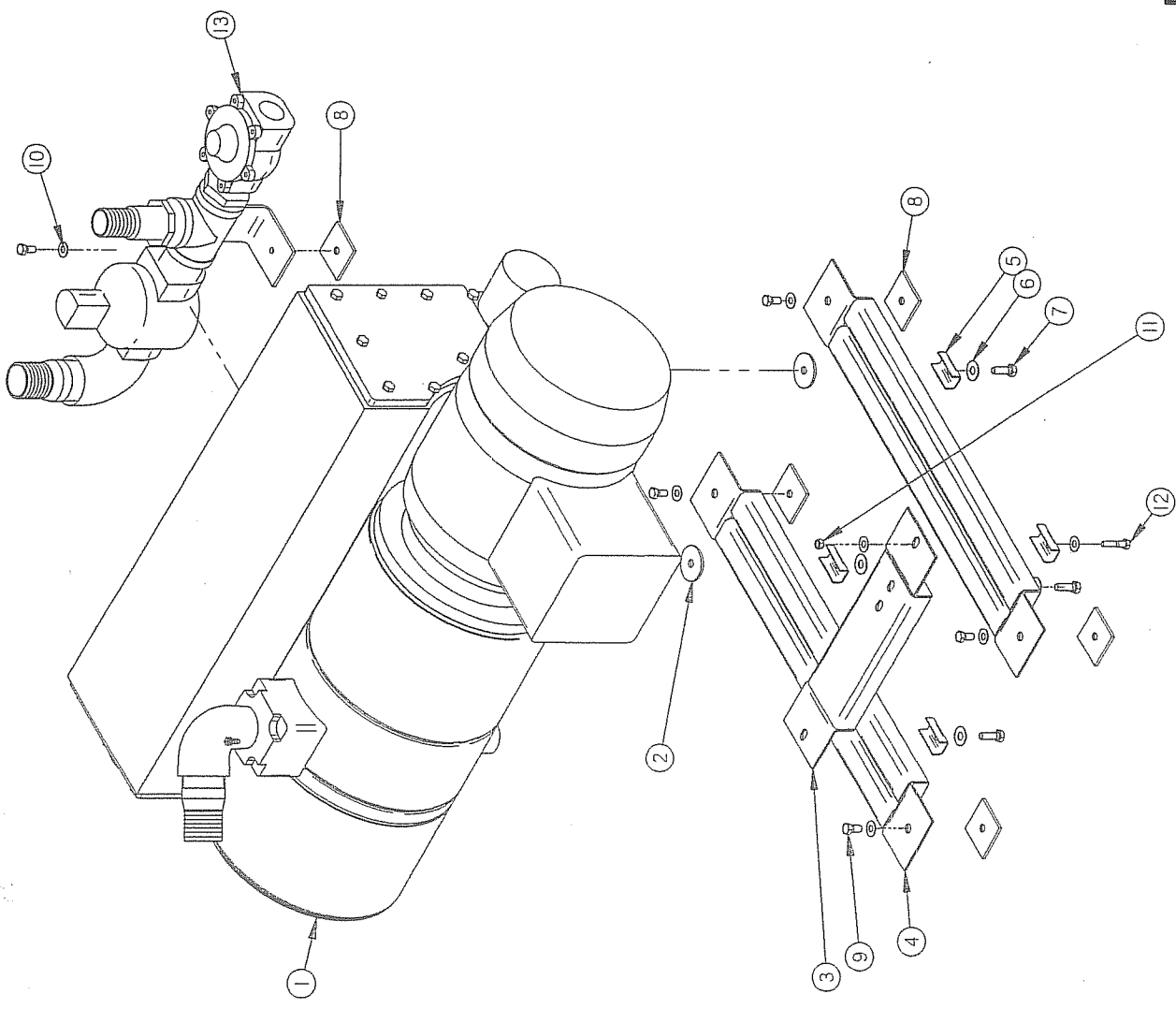
PUMP 165M3 & 255M3

MACHINE	600A & 620A	METRIC TOLERANCE	0. ± .05 .00 ± .005 .000 ± .0005 ANGLE ± 1°	INCH TOLERANCE	0.0 ± .015" .00 ± .005" .000 ± .0005"	SIPROMAC
PART	VACUUM/ATMOSPHERE VALVE ASSY.	N.T.S.		ST-GERMAIN DE GRANTHAM QUEBEC CANADA		
ITEM:	CNC:			M	QT.	1
MAT:	DWG BY	DAVE A	DATE	01-01-29	NO.	004-0863
	APP.		DATE	05-08-23		

A	004A1621 WAS 004-0183, 165M3 WAS160M3, 255M3 x 250M3	05-08-11	M.A.L.
LET.	MODIFICATION	DATE	INT.

004A1471

ITEM	PART #	DESCRIPTION	QT.
1	007A0113	"BUSCH" 255M3 & PLUMBING	1
2	001A2952	WASHER 0.469" ID x 2.010 OD x 3.5	2
3	004A1454	PUMP SUPPORT ASSY	1
4	005-0104	PUMP SUPPORT ASSEMBLY	2
5	001-0199	PUMP FIXATION	4
6	051-0785	WASHER 7/16" FLAT S/S	4
7	052-4240	BOLT M10 x 30 HEX. ZINC	4
8	005-0088	PUMP SUPP. FIX. PLATE ASSY	5
9	051-0350	BOLT 3/8"-16nc. X 3/4" S/S	5
10	051-0780	WASHER 3/8" FLAT S/S	7
11	051-0600	NUT 5/16" -18 S/S	1
12	051-0310	BOLT 5/16"-18nc. X 1 1/2" S/S	1
13	004-0863	VACUUM / ATMOSPHERE VALVE ASSY	1



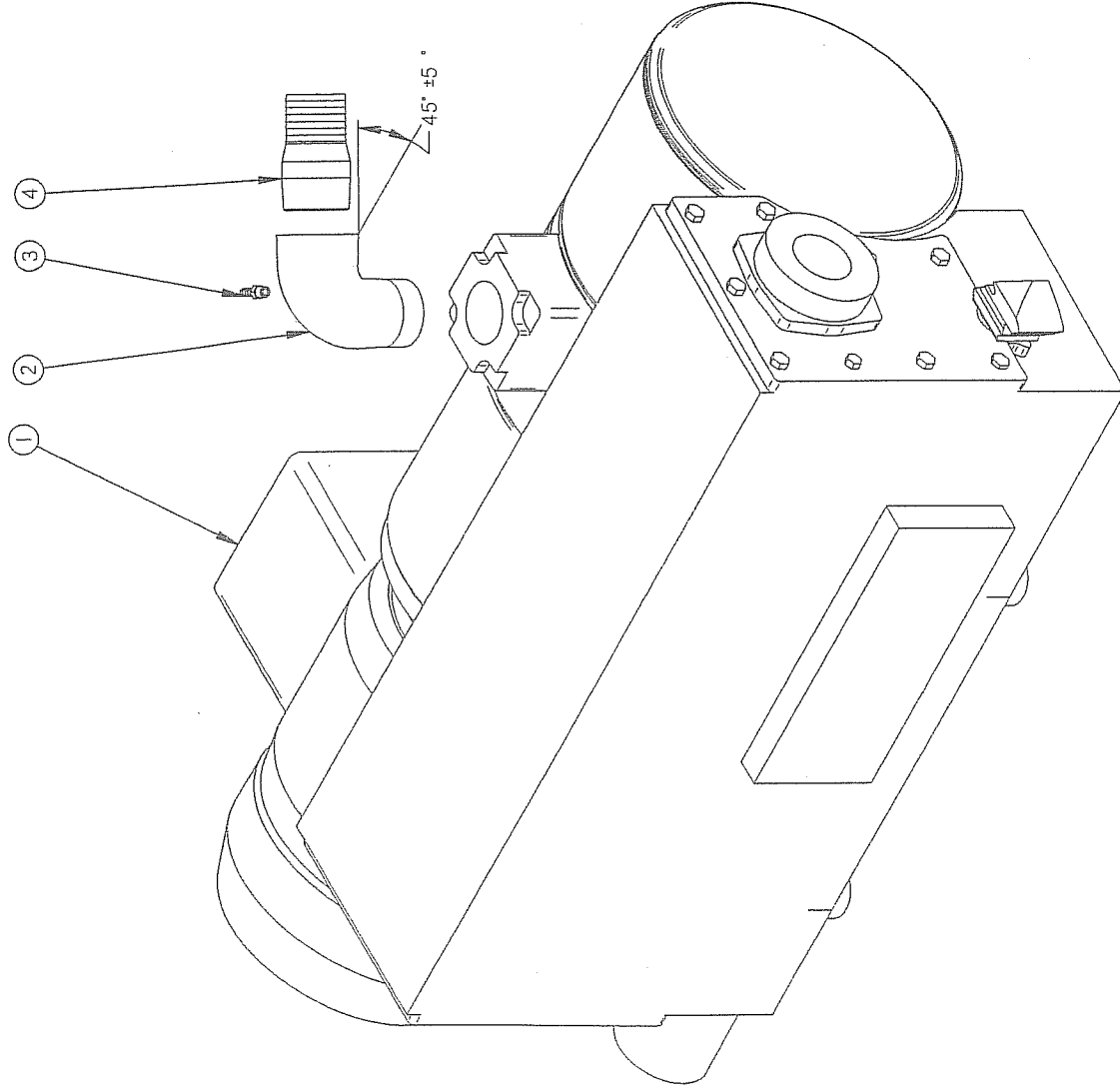
MACHINE		DEPT. LOG. METRIC INCH	
600A & 620A	SIPROMAC	USINAGE 1 0.1	2 0.004"
	ST-GERMAN DE GRANTHAM	CORRECTION 4 0.5	4 0.008"
	QUEBEC CANADA	SOLDAGE 2 0.3	2 0.003"
PART		N.T.S.	
ITEM		DEPT.	QTY.
		M-1	1
MAT.			
		DATE 04-02-23	NO. 004A1471
		DATE	
		DESIGNED BY B.C.	
		APP. BY LT	

LET. \_\_\_\_\_ DATE INT. \_\_\_\_\_  
 MODIFICATION \_\_\_\_\_

007A0113

ITEM	PART #	DESCRIPTION	QT.
1	125-XXXX	PUMP BUSCH 255M3	1
2	003-0073	BELLOWS ELBOW CONNECTOR	1
3	101-0190	STRAIGHT 1/8MNPT x 1/4" HOSE BARB	1
4	103-0760	STRAIGHT 2" mnpl. X 2" HOSE ZINC	1

VOIR NOTE



**NOTE:**

- 125-0080 PUMP BUSCH 255M/230-460V/3PH/60Hz / 380-415V/3PH/50Hz
- 125-0085 PUMP BUSCH 255M/575V/3PH/60Hz

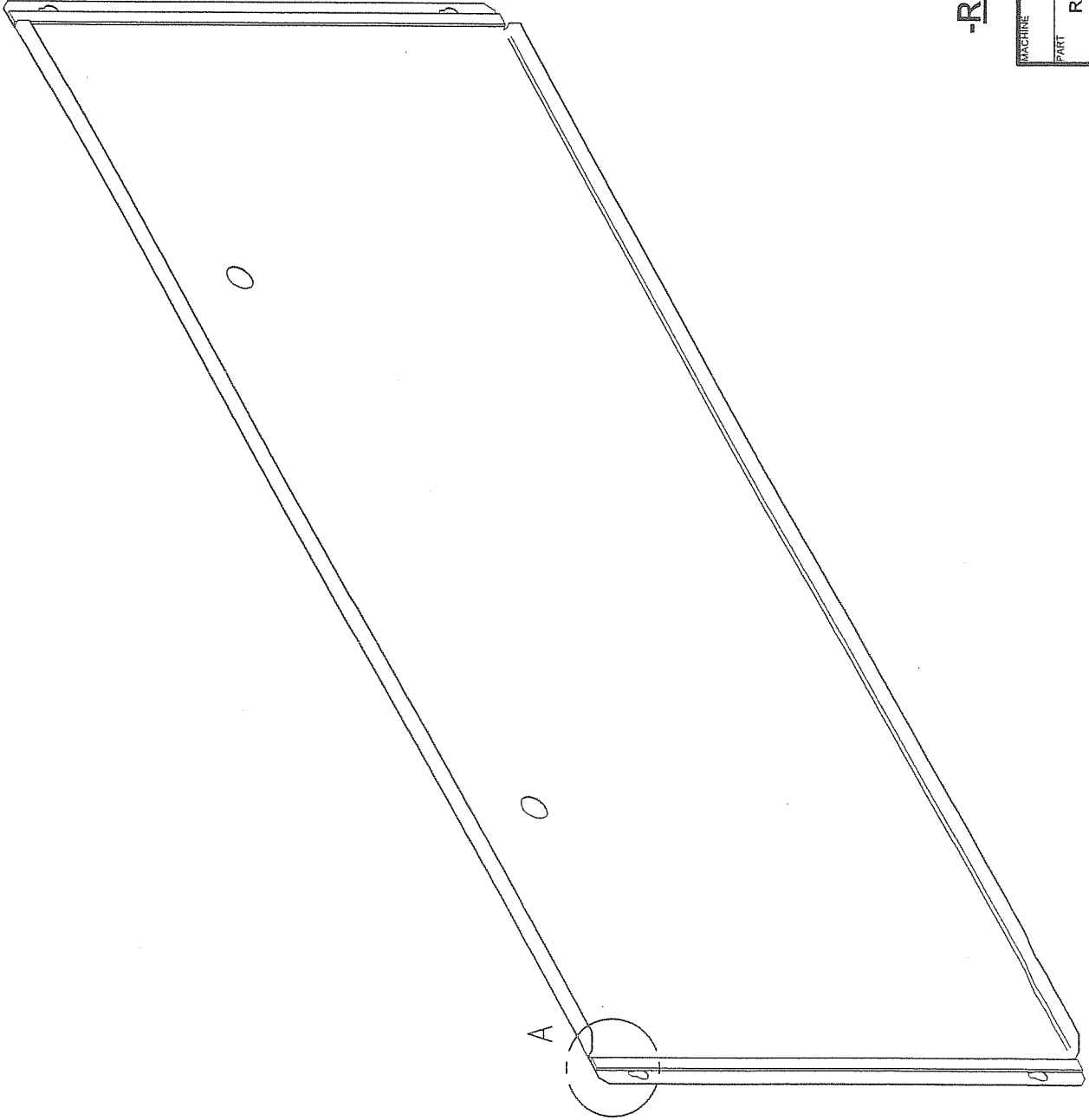
MACHINE		SIPROMAC	
PART		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
600A, 620A, 650A, 680A & 700A	"BUSCH" 255M3 & PLUMBING	DEPT.	QTY. 1
ITEM	GNC	DWG BY J.G.	DATE 04-01-22
MAT.		APP. BY LT	URTE
		NO. 007A0113	

A	MODIF. #A-0392	04-01-22	J.G.
LET.	MODIFICATION	DATE	INT.



1004-0726

ITEM	PART #	DESCRIPTION	QTY.
1	001-2030	REAR GUARD	1
2	179-0004	NEOPRENE SPONGE 1/8" x 1/2" ADHESIVE (3.6')	1



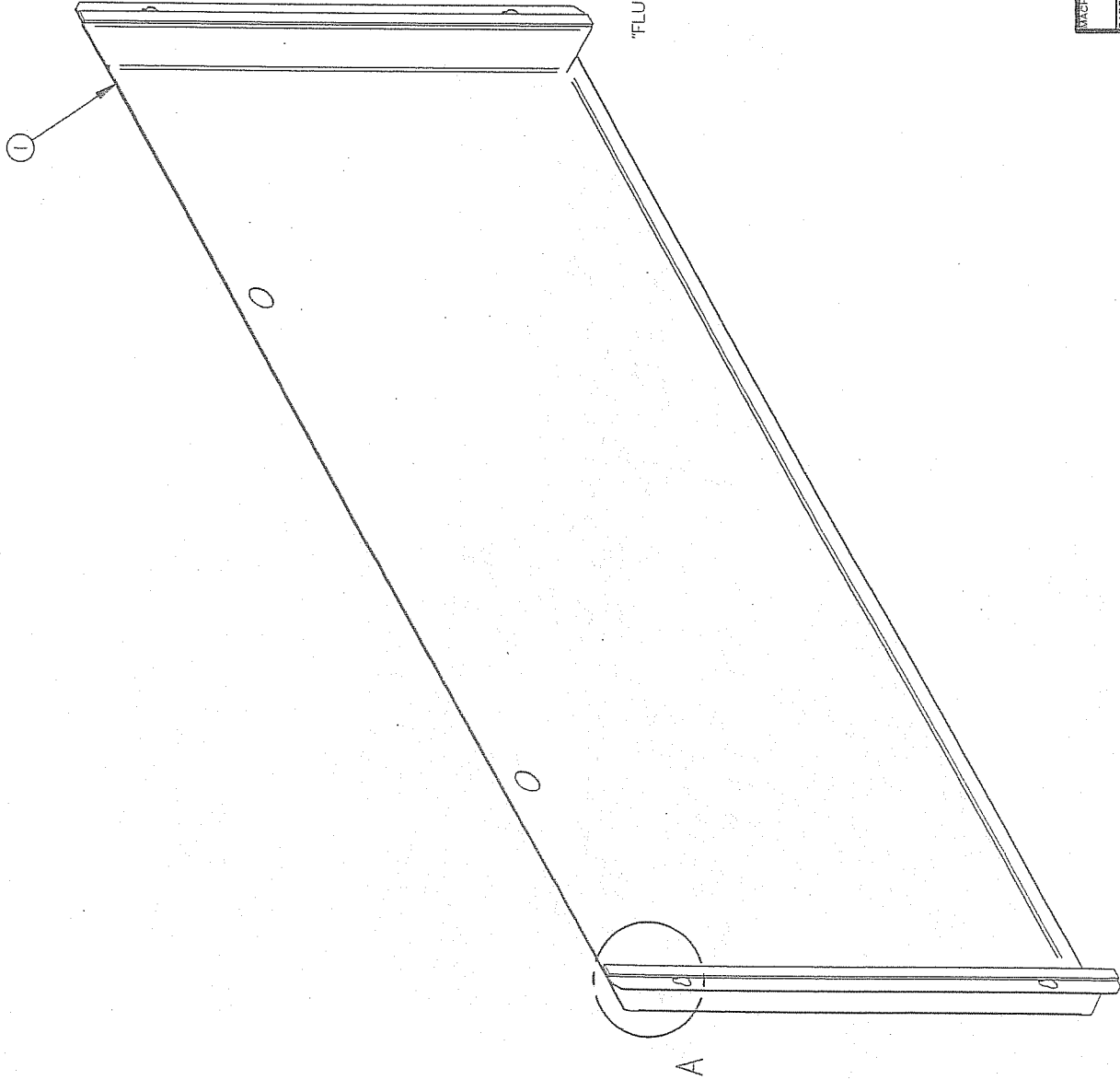
**-REAR GUARD OPTION-**

MACHINE	600A & 620A	DEPT. FOR METRIC (INCH)	SIPROMAC
PART	REAR PANEL PRE-ASSEMBLY	USINAGE ± 0.1	ST-GERMAIN DE GRANTHAM
ITEM		TOLERIE ± 0.5	QUEBEC CANADA
MAT.		SOUDAGE ± 0.5	
		N.T.S.	
		DEPT.	M
		DATE 06-03-07	NO
		APP. BY J.G.	004-0726

A	REDESSINE	06/03/07	J.G.
LET.	MODIFICATION	DATE	INT.

004A0629

ITEM	PART #	DESCRIPTION	QTY.
1	004A2162	REAR PANEL 165 & 255M <sup>3</sup> PRE-ASSY	1
2	179-0004	NEOPRENE SPONGE 1/8" x 1/2" ADHESIVE (4.1')	1



DETAIL A

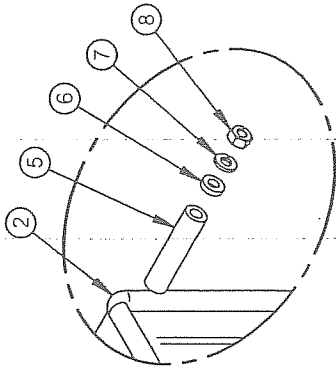
**-REAR GUARD 165M<sup>3</sup> & 255M<sup>3</sup> OPTION-**

MACHINE	600A & 620A	DEPT	M	QTY.	1
PART	REAR PANEL 165 & 255M <sup>3</sup> PRE-ASSY	DATE	06-02-22	NO	004A0629
ITEM		APP. BY	J.G.	DATE	07-08-02
MAT.					

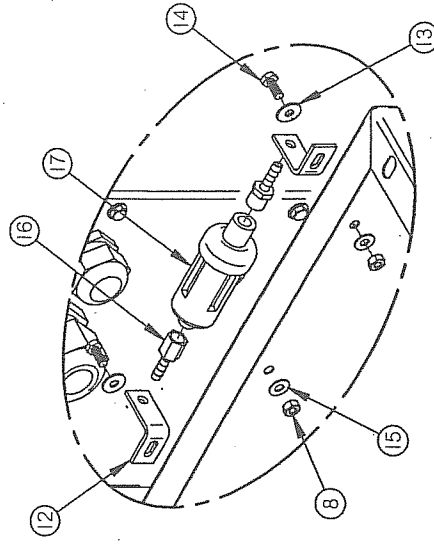
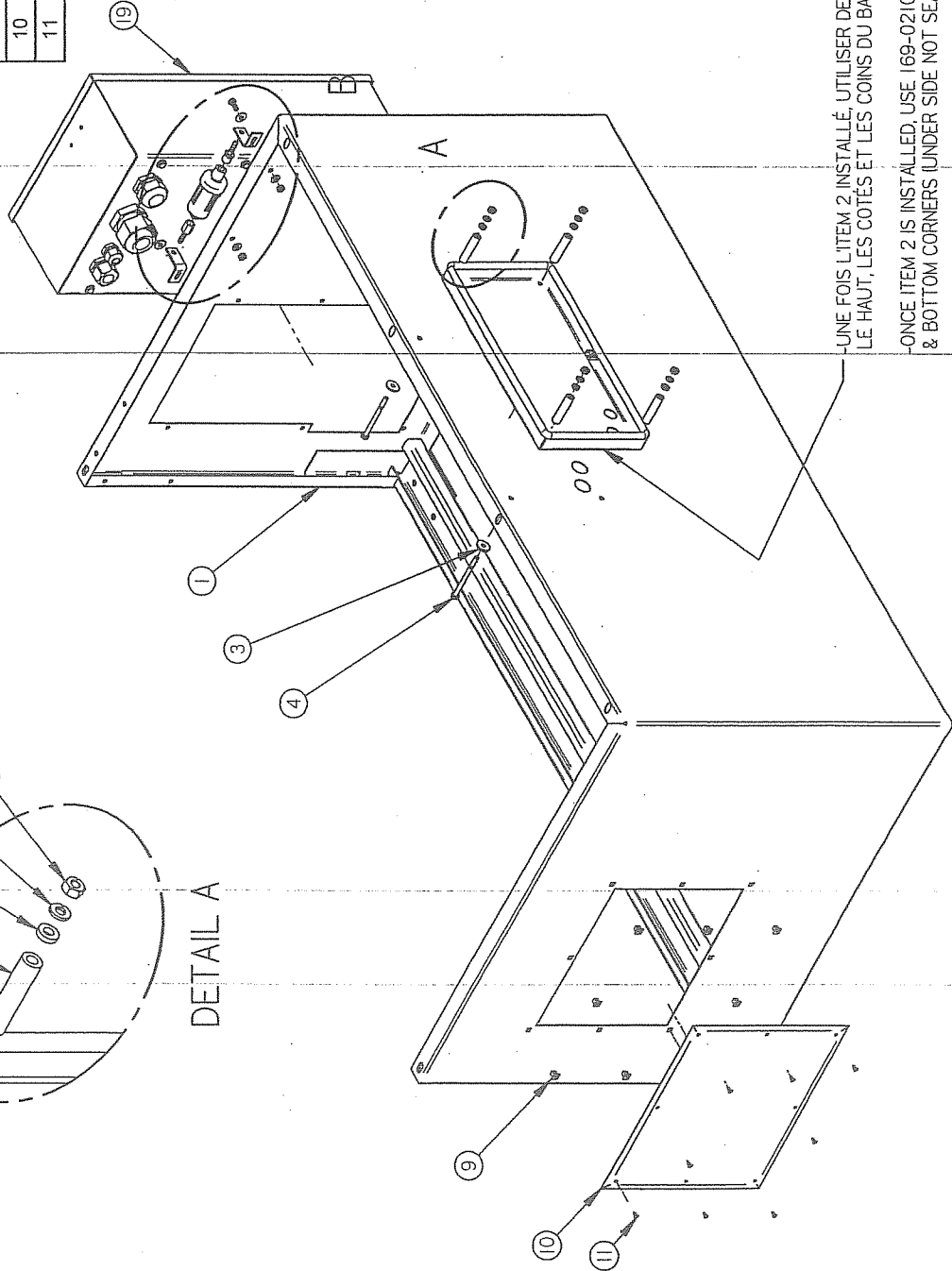
LET.	A	004A2162 ETAIT 001A2768	07-08-02	E.D.
		MODIFICATION		INT.

1005B0457

ITEM	PART #	DESCRIPTION	QT.	ITEM	PART #	DESCRIPTION	QT.
12	001-2062	DRYER SUPPORT	2	1	004C0114	STRUCTURE PRE-ASSEMBLY	1
13	051-0741	WASHER 1/4" FLAT LARGE SS	2	2	005A0584	REAR MC-40 SUPPORT ASSY	1
14	051-0189	BOLT 1/4-20 x 5/8" HEX S/S	2	3	051-0757	WASHER 1/4" FLAT THICK S/S	4
15	051-0740	WASHER 1/4" FLAT S/S	2	4	051-0287	BOLT 1/4-20 x 3-1/4" S/S	4
16	101-0210	STRAIGHT 1/4" FNPT x 1/4" HOSE BARB	1	5	058-0139	NYLON SPACER 1/4" ID X 1/2" OD X 2-1/8"	4
17	114-2020	FILTER / DRYER 3/4" FNPT. X 3/8" I.P. COMP.	1	6	058-0016	NYLON SPACER .252" ID X 1/2" OD X 1/8" THK	4
18	101-0200	STRAIGHT 1/4" MNPT x 1/4" HOSE BARB	1	7	051-0750	WASHER 1/4" LOCK S/S	4
19	005A1162	E-BOX ASSEMBLY	1	8	051-0580	NUT 1/4"-20 S/S	6
				9	057-5010	NYLON SCREW #10 RECEPTACLE INSERT	8
				10	001A3230	STRUCTURE COVER	1
				11	054-0180	METAL SCREW #6 x 3/8" PAN SLOT S/S	8



DETAIL A



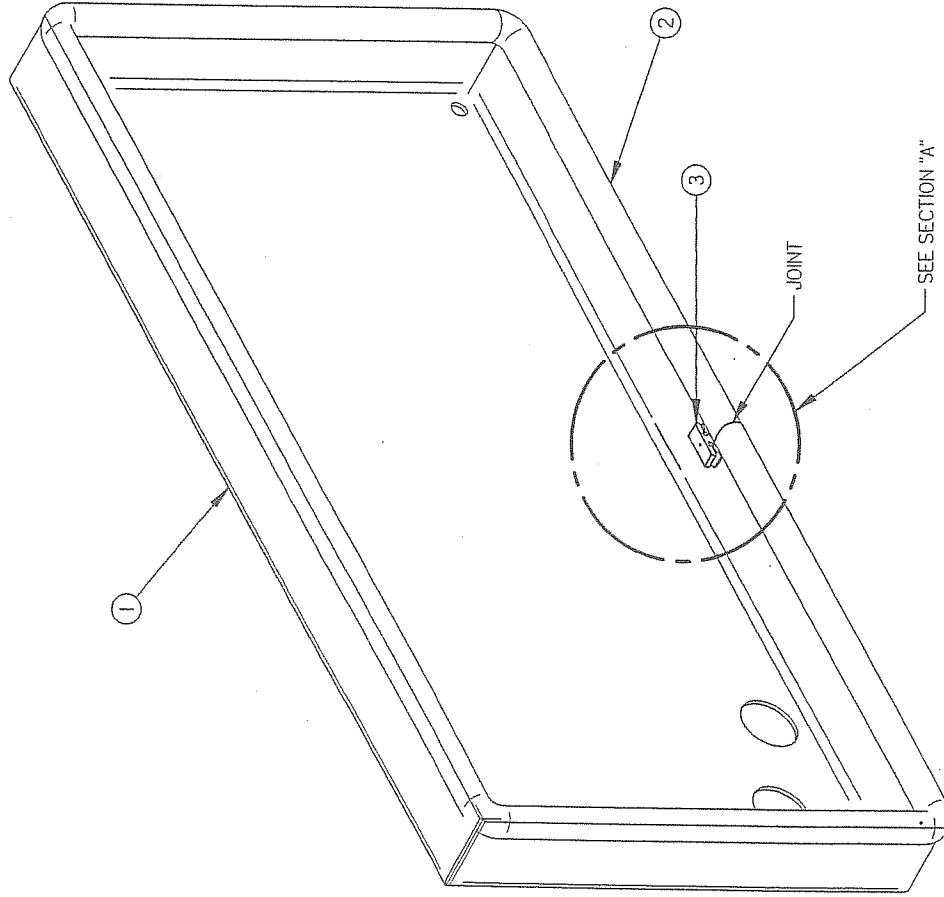
DETAIL B

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

MACHINE	600A & 620A	DEPT. TOL. (METRIC) INCH	SIPROMAC
PART	STRUCTURE ASS'Y	USINAGE ± 0.1	ST-BERMAN DE GRANTHAM
ITEM		TOLERIE ± 0.5	QUEBEC CANADA
MAT.		SOUDAGE ± 0.5	
		⊕ N.T.S.	
		CNC	DEPT. M-(M)H
		DWG BY J.G.	QTY. 1
		APP BY	NO 005B0457
		DATE 10-09-09	DATE 10-24-15

# 005A0584

ITEM	PART #	DESCRIPTION	Q.T.
1	004A0426	REAR MC-40 SUPPORT PRE-ASSY	1
2	179-0019	U-CHANNEL BLACK EPDM FOAM (3.9)	1
3	057-0002	CABLE CLAMPS 9mm (11,2 X 9,3)	1

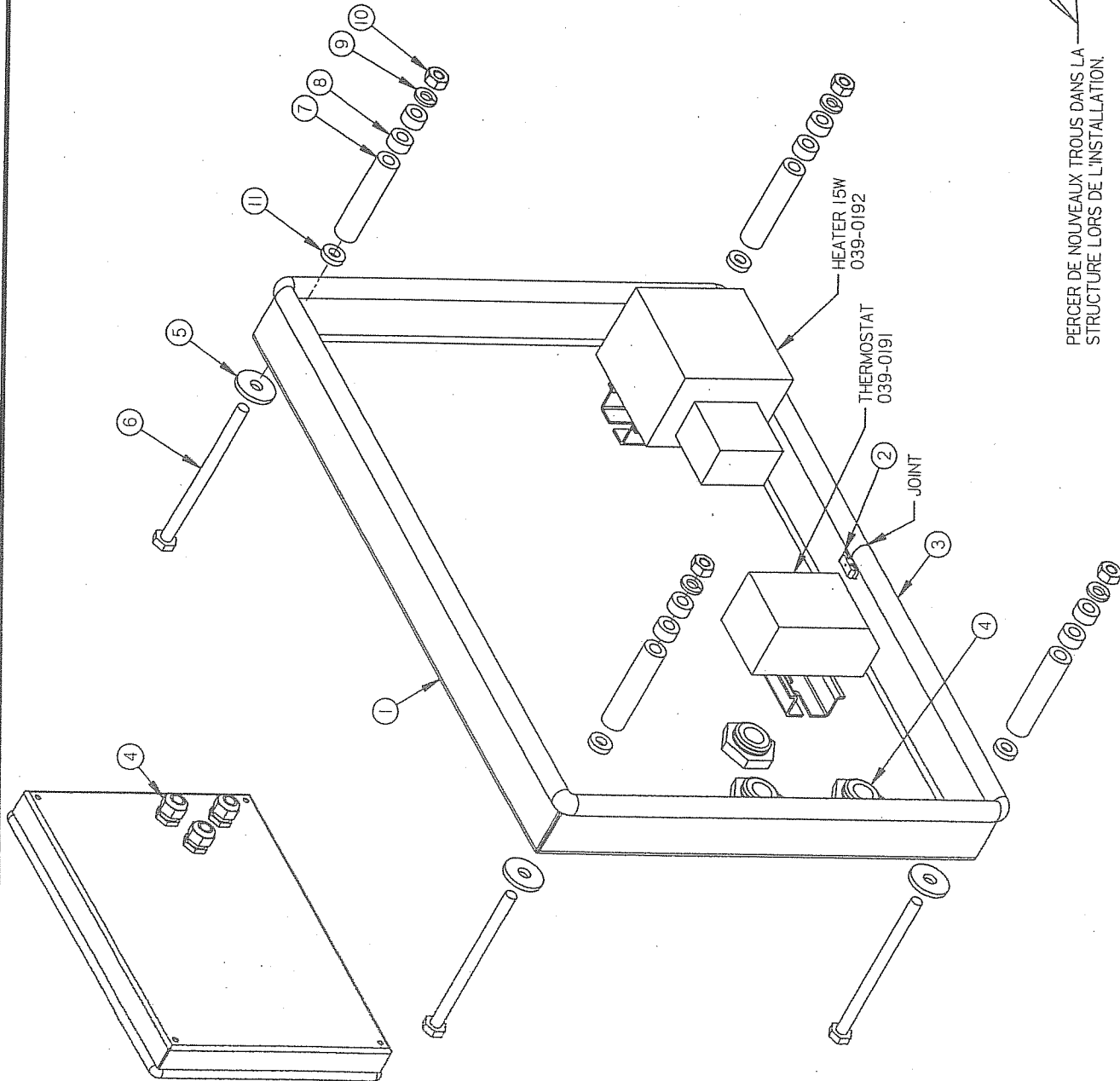


MACHINE 420A, 450T, 450A, 550A, 570A, 580A, 600A, 620A & 650A		DEPT. M	QTY. 1
PART REAR MC-40 SUPPORT ASSY	DATE 05-09-01	NO. 005A0584	
ITEM MAT.	APP. BY	DATE 06-10-24	
DESIGN BY M.A.L.	DATE 05-09-01	NO. 005A0584	
APP. BY	DATE	NO.	
MACHINE 420A, 450T, 450A, 550A, 570A, 580A, 600A, 620A & 650A		DEPT. M	QTY. 1
PART REAR MC-40 SUPPORT ASSY	DATE 05-09-01	NO. 005A0584	
ITEM MAT.	APP. BY	DATE 06-10-24	
DESIGN BY M.A.L.	DATE 05-09-01	NO. 005A0584	
APP. BY	DATE	NO.	
MACHINE 420A, 450T, 450A, 550A, 570A, 580A, 600A, 620A & 650A		DEPT. M	QTY. 1
PART REAR MC-40 SUPPORT ASSY	DATE 05-09-01	NO. 005A0584	
ITEM MAT.	APP. BY	DATE 06-10-24	
DESIGN BY M.A.L.	DATE 05-09-01	NO. 005A0584	
APP. BY	DATE	NO.	

F	REDRAWN	050901	M.A.
LET.	MODIFICATION	DATE	INT.

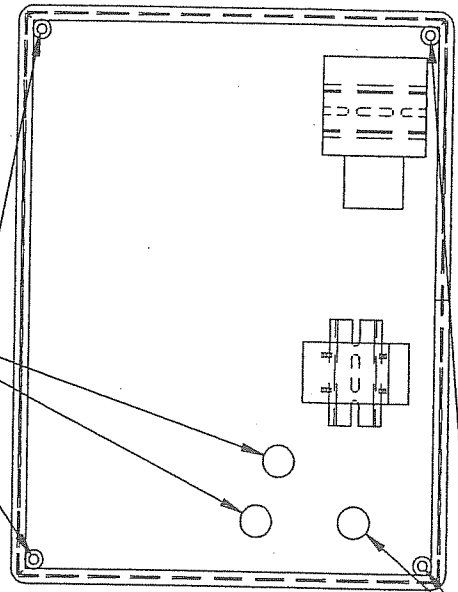
1005A0780

ITEM	PART #	DESCRIPTION	QT.
1	004A3167	REAR MC-40 SUPPORT PRE-ASSY	1
2	057-0002	CABLE CLAMPS 9mm (11,2 X 9,3)	1
3	179-0019	U-CHANNEL BLACK EPDM FOAM (4.5265)	1
4	036-0409	PRESSE-ETOUPE CD13	3
5	051-0757	WASHER 1/4" FLAT THICK S/S	4
6	051-02885	BOLT 1/4-20 x 3-3/4" HEX SS	4
7	058-0139	NYLON SPACER 1/4" ID X 1/2" OD X 2-1/8"	4
8	058-0025	NYLON SPACER 0.257"ID x 0.500"OD x 1/4"	8
9	051-0750	WASHER 1/4" LOCK S/S	4
10	051-0580	NUT 1/4"-20 S/S	4
11	058-0016	NYLON SPACER .252"ID X 1/2"OD X 1/8"THK	4



UTILISER LES TROUS EXISTANTS DE LA STRUCTURE LORS DE L'INSTALLATION.  
USE EXISTING HOLES IN STRUCTURE DURING INSTALLATION.

PERCER DE NOUVEAUX TROUS DANS LA STRUCTURE LORS DE L'INSTALLATION.  
DRILL NEW HOLES IN STRUCTURE DURING INSTALLATION.

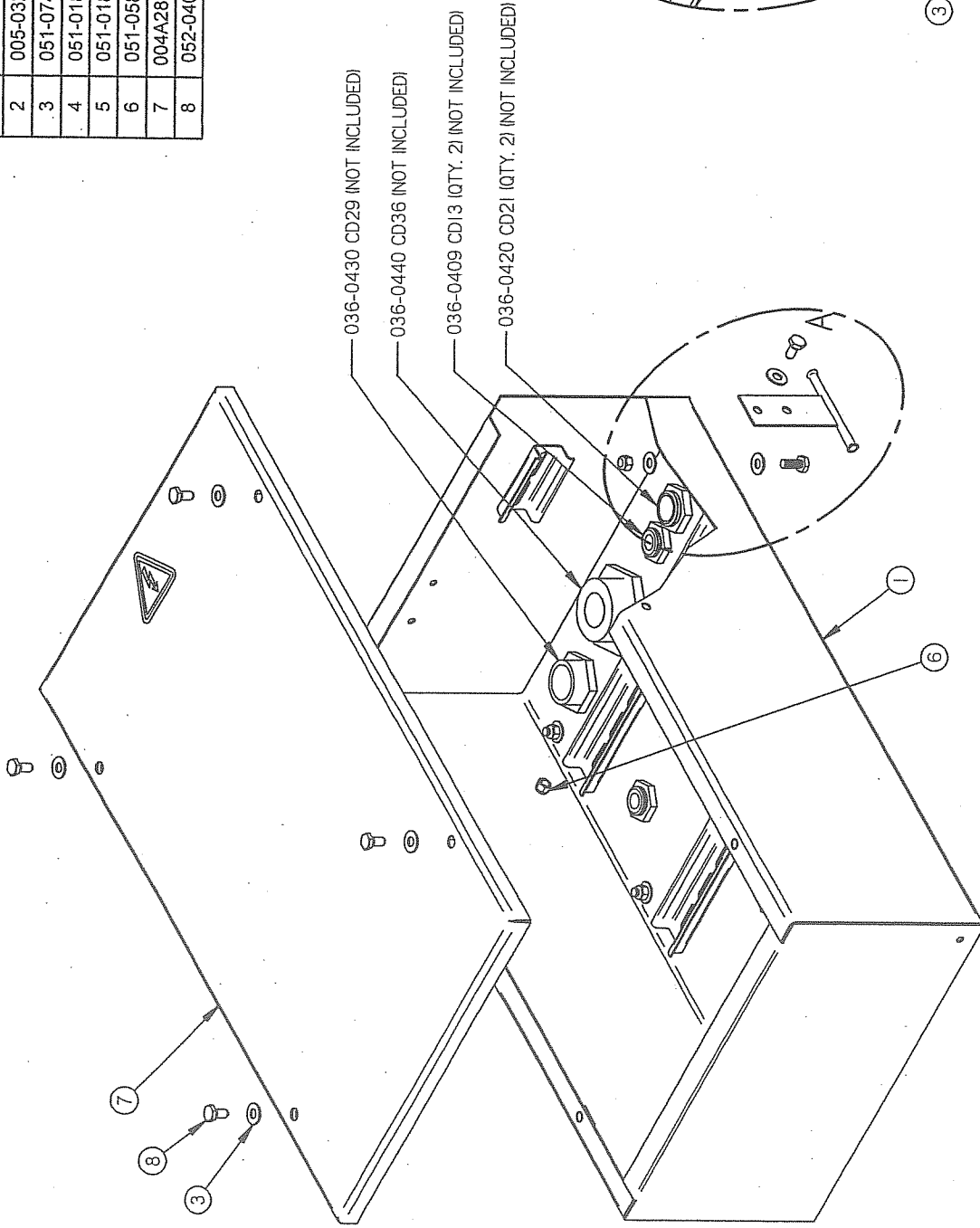


MACHINE	420A, 450A, 550A, 580A, 600A, 620A & 650A	DEPT. TOL. METRIC INCH	± 0.1	± 0.004
PART	REAR MC-40 SUPPORT ASSY(OPT. HEATER)	USINAGE	± 0.1	± 0.004
ITEM		TOLERIE	± 0.5	± 0.020
MAT.		SOUDEUSE	± 0.5	± 0.020
		N.T.S.		
		CNC		
A AJOUTER ITEM 058-0016 ET 058-0139 ETAIT 058-0140		DATE	10-02-03	1
LET.	MODIFICATION	DATE	10-29-01	
				DEPT.
				M-(M)-1
				NO
				005A0780

A AJOUTER ITEM 058-0016 ET 058-0139 ETAIT 058-0140 10-09-01 J.G.  
LET. DATE INT.

# 005A1162

ITEM	PART #	DESCRIPTION	QT.
1	005A0991	E-BOX PRE-ASSY	1
2	005-0323	INLET ASSEMBLY	1
3	051-0740	WASHER 1/4" FLAT S/S	17
4	051-0180	BOLT. HEX. 1/4"-20 NC. x 1/2" S/S	1
5	051-0189	BOLT 1/4-20 x 5/8" HEX S/S	6
6	051-0581	NUT 1/4"-20 NYLON LOCK S/S	7
7	004A2827	E-BOX COVER PRE-ASSY	1
8	052-0402	BOLT. HEX. 1/4"-20 NC. x 1/2" BRASS	4



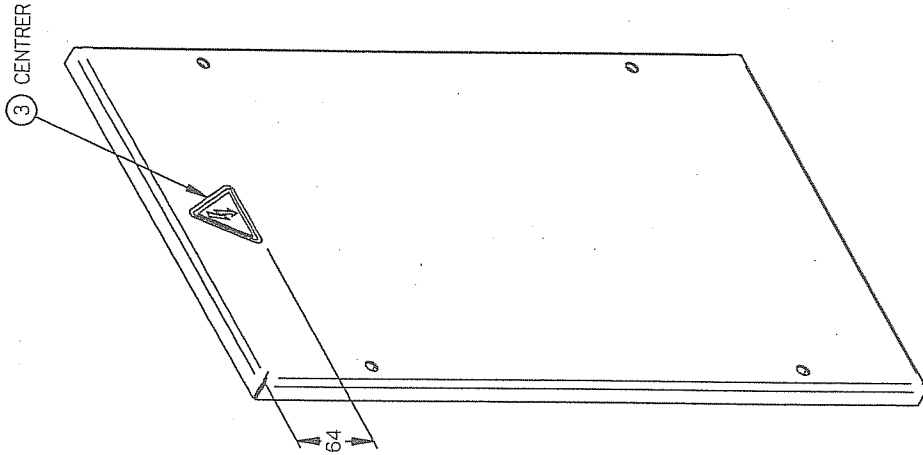
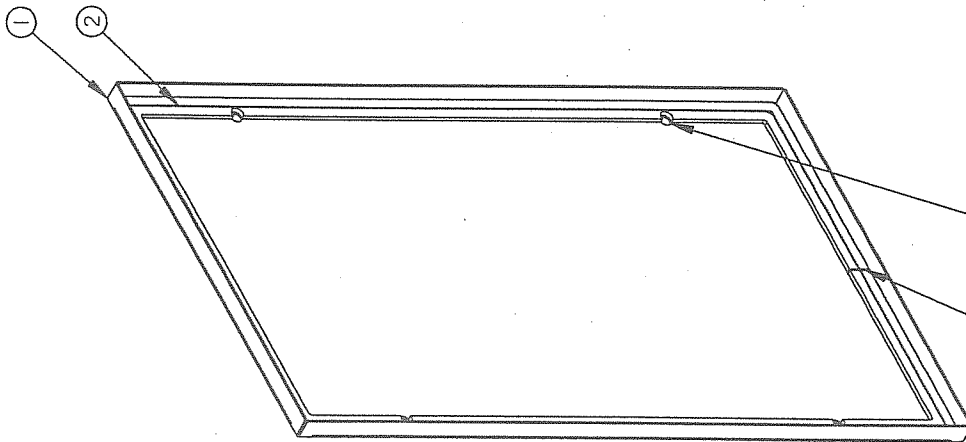
036-0430 CD29 (NOT INCLUDED)  
 036-0440 CD36 (NOT INCLUDED)  
 036-0409 CD13 (QTY. 2) (NOT INCLUDED)  
 036-0420 CD21 (QTY. 2) (NOT INCLUDED)

MACHINE		DEPT. FOR METRIC INCH	DEPT.
600A, 620A & 650A		USINAGE ± 0.1	M-(M)-I
E-BOX ASSEMBLY		TOLERIE ± 0.5	QTY. 1
N.T.S.		SOUDEGE ± 0.5	DATE 10-09-09
CNC			APP. BY J.G.
MATERIAL			DATE 10-09-14
NO. 005A1162			

A	REDESSINE RETIRER DISSICANT VOIR 005B0465	10-09-09	J.G.
LET.	AJOUTER 600A & 620A	DATE	INT.
	MODIFICATION		

1004A2827

ITEM	PART #	DESCRIPTION	QT.
1	001A4933	E-BOX COVER	1
2	179-0004	NEOPRENE 1/2" x 1/8" ADHESIVE (3350mm) (11)	1
3	127-0100	STICKER ELEC.HAZARD ISO 2-1/2" TRIANGLE	1



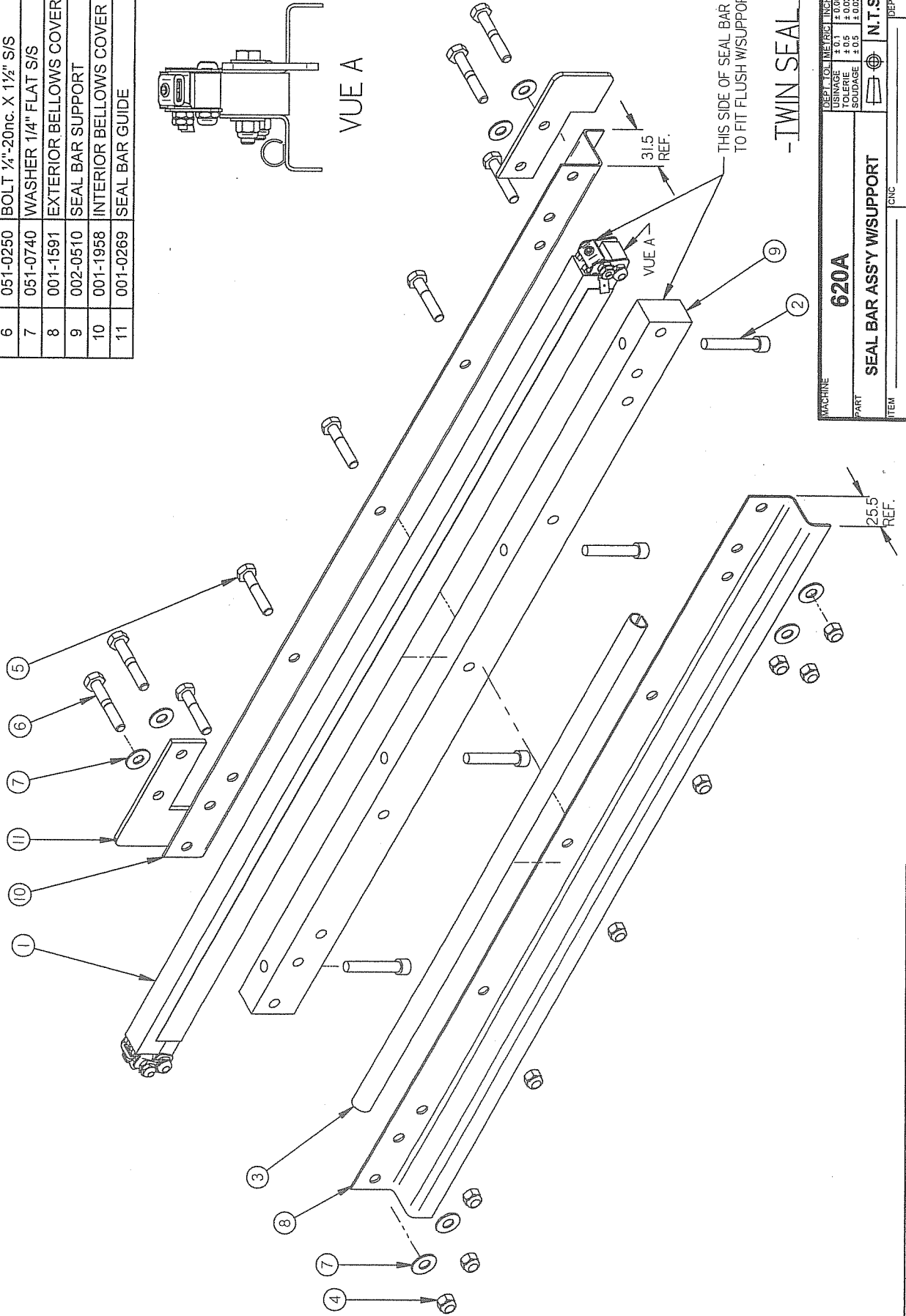
PASSER UNE LIME RONDE POUR DÉGAGER LES TROUS

B	AJOUTER 600A, 620A (MODIF. A-454) ÉTAIT 004-0279	10-09-09	J.G.
A	MODIF. #A-0443 / ÉTAIT 004-0279	08-12-16	J.G.
LET.	MODIFICATION	DATE	INT.

MACHINE	600A, 620A & 650A	DEPT. TOI	IMÉTRIC	INCH	SIPROMAC
PART	E-BOX COVER PRE-ASS'Y	USINAGE	± 0.004"	± 0.1	ST-GERMAIN DE GRANTHAM
ITEM	CNC	VERGE	± 0.1	± 0.002"	QUEBEC CANADA
MAT.		SOLIDAGE	± 0.5	± 0.020"	
			N.T.S.		
			DEPT.	M-(M)	QTY. 1
		DWG BY	J.G.	DATE	08-12-16
		APP. BY		NO	10-07-14
					004A2827

# 1005A0560

ITEM	PART #	DESCRIPTION	QT.
1	005A0418	SEAL BAR PRE-ASSY	1
2	051-0251	CAP. HEX. SKT BOLT 1/4"-20 NC. x 1 1/2"	4
3	038-0230	WIRING DUCT W/ ADHESIVE BACKING (0.35" x 0.5" x 412) (1.4)	1
4	051-0581	NUT 1/4"-20 NYLON LOCK S/S	9
5	051-0230	HEX BOLT 1/4"-20 x 1 1/4" SS	5
6	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	4
7	051-0740	WASHER 1/4" FLAT S/S	8
8	001-1591	EXTERIOR BELLOWS COVER	1
9	002-0510	SEAL BAR SUPPORT	1
10	001-1958	INTERIOR BELLOWS COVER	1
11	001-0269	SEAL BAR GUIDE	2



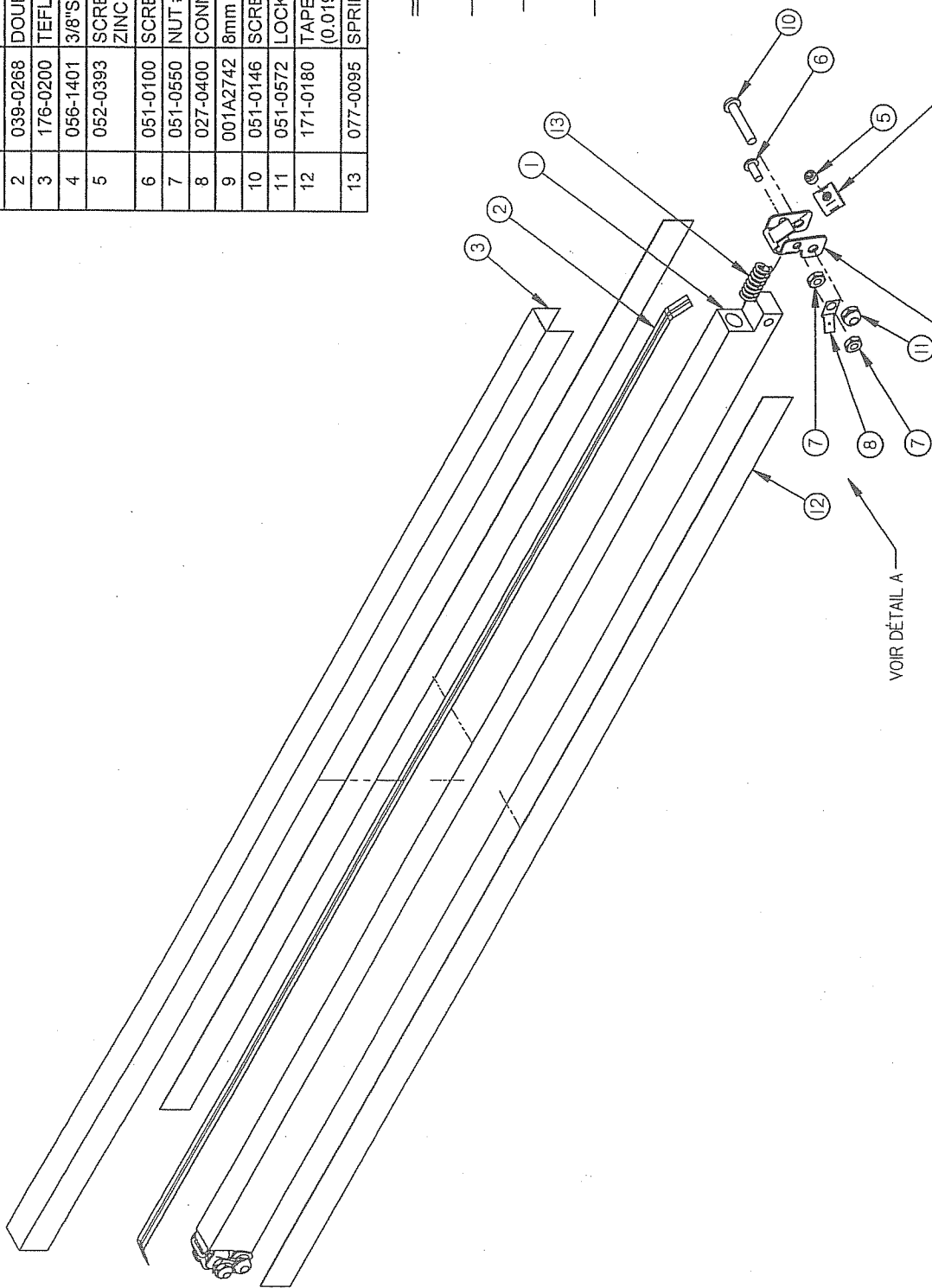
MACHINE		DEPT. TOL. METRIC INCH	
PART		USINAGE ± 0.1 ± 0.004	
ITEM		TOLERANCE ± 0.5 ± 0.002	
MATERIAL		SOUDAGE ± 0.3 ± 0.002	
DRAWN BY: M.A.L.		DATE: 05-09-12	NO. 005A0560
APP. BY: [Signature]		DATE: 10-07-16	DEPT. M-(M)-1
QTY. 4			

B. LET.	REDRAWN	05-09-12	M.A.
	MODIFICATION		DATE INT.



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	LOCK NUT #10-24 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-

PERMETTRE DE BOUGER LIBREMENT ⑨ ALLOW TO MOVE FREELY

INSTALLER CONTRE L'ENCOCHE DE L'ITEM #9 ④ INSTALL AGAINST NOTCH OF ITEM #9

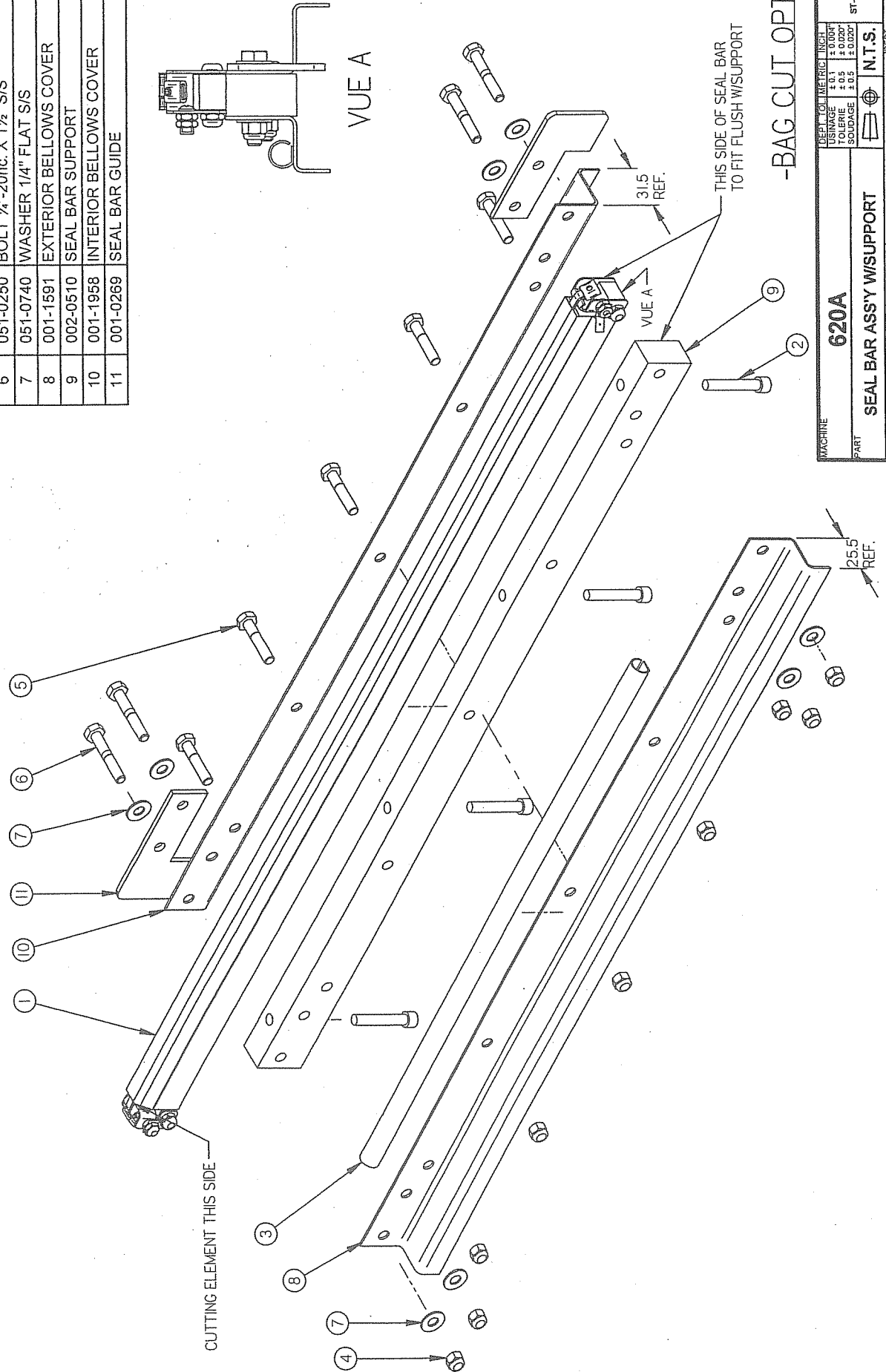
-TWIN SEAL OPTION-

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

MACHINE	620A	REVISIONS	INCH	SIPROMAC
PART	SEAL BAR PRE-ASS'Y	USAGE	± 0.004	ST-GERMAIN DE GRANTHAM
ITEM		TOLERANCE	± 0.020	QUEBEC CANADA
MAT.		SOUDAGE	± 0.020	
				N.T.S.
				M-(M)-I
				QTY. 4
				NO. 005A0418
				DATE 05-09-12
				APP. BY

# 005C0561

ITEM	PART #	DESCRIPTION	QT.
1	005C0419	SEAL BAR PRE-ASSY	1
2	051-0251	CAP. HEX. SKT BOLT 1/4"-20 NC. x 1 1/2"	4
3	038-0230	WIRING DUCT W/ ADHESIVE BACKING (0.35" x 0.5" x 412) (1.4)	1
4	051-0581	NUT 1/4"-20 NYLON LOCK S/S	9
5	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	5
6	051-0250	BOLT 1/4"-20nc. X 1 1/2" S/S	4
7	051-0740	WASHER 1/4" FLAT S/S	8
8	001-1591	EXTERIOR BELLOWS COVER	1
9	002-0510	SEAL BAR SUPPORT	1
10	001-1958	INTERIOR BELLOWS COVER	1
11	001-0269	SEAL BAR GUIDE	2

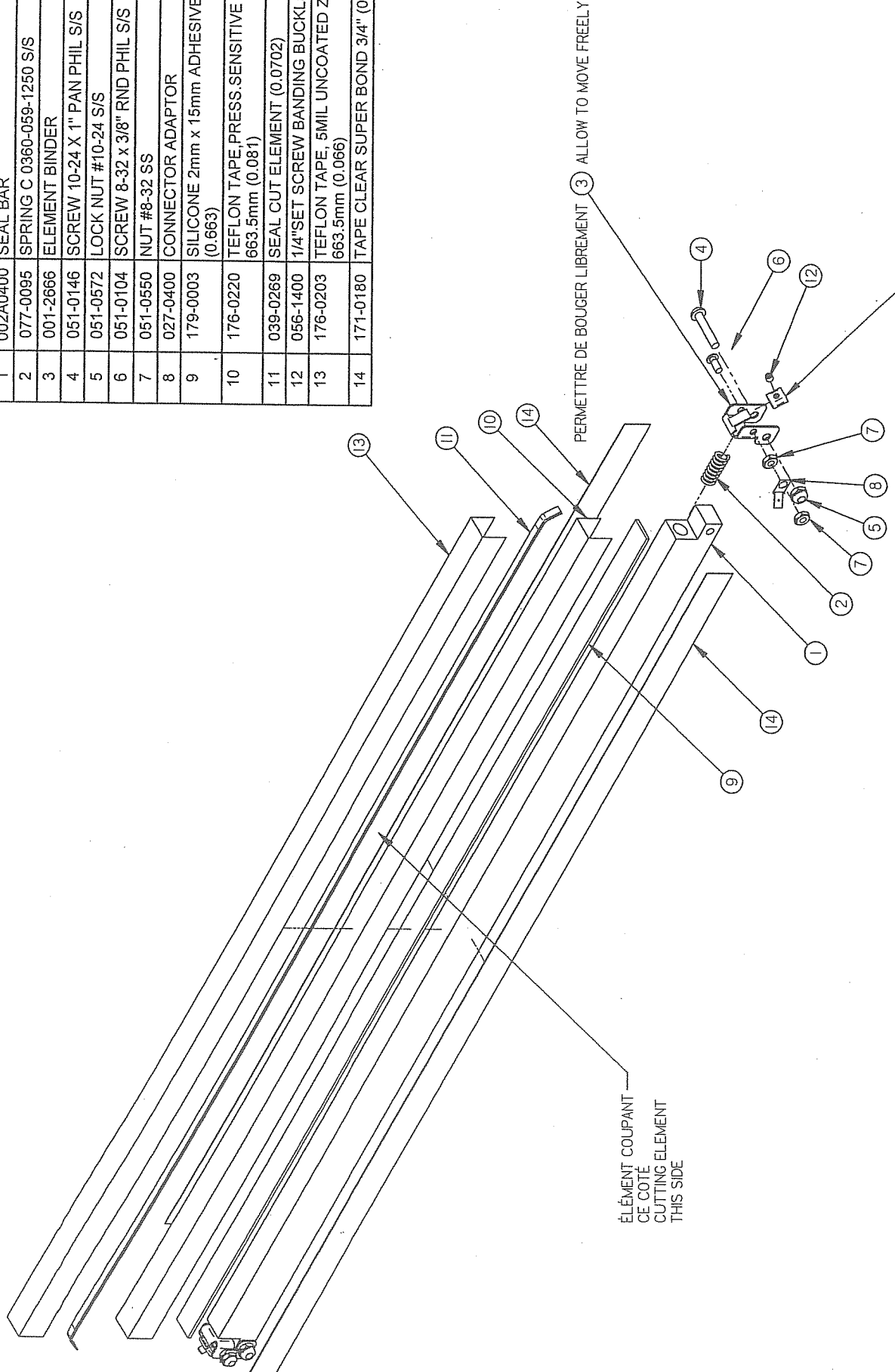


MACHINE		DEPT. Q. METRIC INCH	
PART		USINAGE	± 0.1 ± 0.004
ITEM		TOLERANCE	± 0.5 ± 0.025
MATERIAL		SURFACE	± 0.025
DRAWN BY M.A.L.		DATE 06-05-29	NO. 005C0561
APP. BY		DATE 06-29-16	
SEAL BAR ASSY W/SUPPORT		N.T.S.	
620A		DEPT.	M-(M)-1
SIPROMAC		QTY.	4
ST-GERMAIN DE GRANTHAM			
QUEBEC CANADA			

C	REDRAWN	06-05-29	M.A.
T	MODIFICATION	DATE	INT.

005C0419

ITEM	PART #	DESCRIPTION	Q.T.
1	002A0400	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	051-0104	SCREW 8-32 x 3/8" RND 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 663.5mm (0.663)	1
10	176-0220	TEFLON TAPE, PRESS.SENSITIVE 2" 663.5mm (0.081)	1
11	039-0269	SEAL CUT ELEMENT (0.0702)	1
12	056-1400	1/4" SET SCREW BANDING BUCKLE S/S	2
13	176-0203	TEFLON TAPE, 5MIL UNCOATED ZONE 663.5mm (0.066)	1
14	171-0180	TAPE CLEAR SUPER BOND 3/4" (0.02)	2



INSTALLER CONTRE L'ENCOCHE DE L'ITEM #3 (12) INSTALL AGAINST NOTCH OF ITEM #3

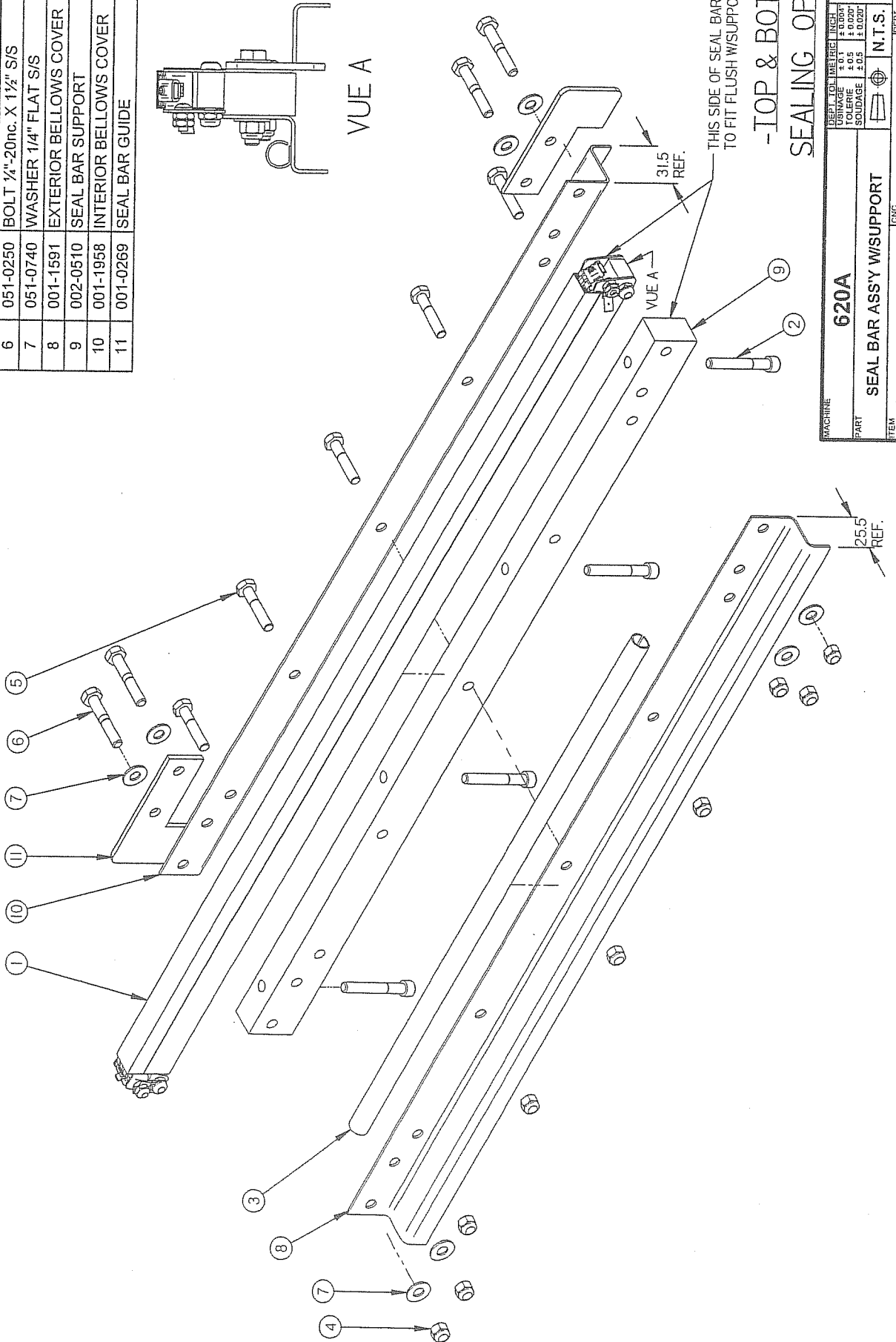
-BAG CUT OPTION-

MACHINE		DEPT. L.O.L. METRIC INCH	
PART		USINAGE ± 0.1	± 0.004"
ITEM		COLÈRE ± 0.5	± 0.002"
MAT.		SOUDEUSE ± 0.33	± 0.002"
620A		N.T.S.	
SEAL BAR PRE-ASSY		DEPT. M-(M)-1	
DATE 06-05-29		QTY. 4	
DRAWN BY M.A.L.		NO. 005C0419	
APP. BY		DATE 10-09-16	

J	MODIF. A-453 002A0400 ETAIT 009A0192	10-06-01	J.G.
H	REDRAWN	06-05-29	M.A.
LET.	MODIFICATION	DATE	INT.

1005A0562

ITEM	PART #	DESCRIPTION	QT.
1	005A0420	SEAL BAR PRE-ASSY	1
2	051-0256	BOLT 1/4"-20nc. X 1 3/4" CAP SKT S/S	4
3	038-0230	WIRING DUCT W/ ADHESIVE BACKING (0.35" x 0.5" x 412) (1.4)	1
4	051-0581	NUT 1/4"-20 NYLON LOCK S/S	9
5	051-0230	HEX BOLT 1/4"-20 x 1 1/4" SS	5
6	051-0250	BOLT 3/4"-20nc. X 1 1/2" S/S	4
7	051-0740	WASHER 1/4" FLAT S/S	8
8	001-1591	EXTERIOR BELLOWS COVER	1
9	002-0510	SEAL BAR SUPPORT	1
10	001-1958	INTERIOR BELLOWS COVER	1
11	001-0269	SEAL BAR GUIDE	2

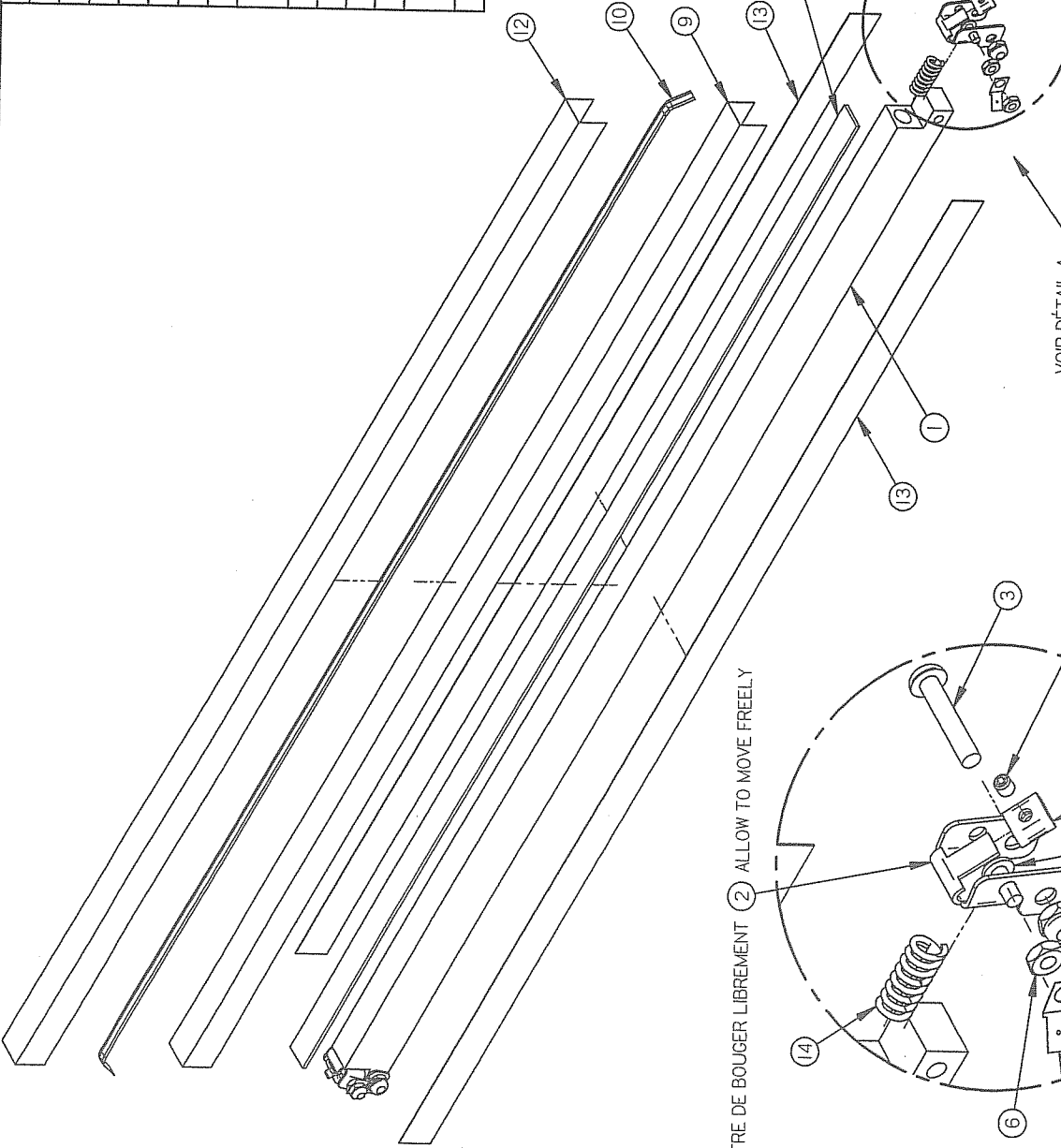


MACHINE		620A	
PART		SEAL BAR ASSY WSUPPORT	
ITEM		CNC	
MAT.		M.A.L.	
DEPT.		M-H	
QTY.		4	
DATE		07-12-17	
APP. BY		[Signature]	
N.T.S.		SIPROMAC	
ST-GERMAIN DE GRANTHAM		QUEBEC CANADA	
005A0562		005A0562	

A LET. REDRAWN 07-12-17 M.A. MODIFICATION DATE INT.

1005A0420

ITEM	PART #	DESCRIPTION	QT.
1	002A0400	SEAL BAR	1
2	001-2666	ELEMENT BINDER	2
3	051-0146	SCREW 10-24 X 1" PAN PHIL S/S	2
4	051-0572	NUT #10-24 NYLON LOCK S/S	2
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	176-0200	TEFLON TAPE 5MIL (0.81)	1
13	171-0180	TAPE CLEAR SUPER BOND 3/4" 664mm (0.02)	2
14	077-0095	SPRING C 0360-059-1250 S/S	2



PERMETTRE DE BOUGER LIBREMENT ② ALLOW TO MOVE FREELY

VOIR DÉTAIL A

DETAIL B

-DÉTAIL A-

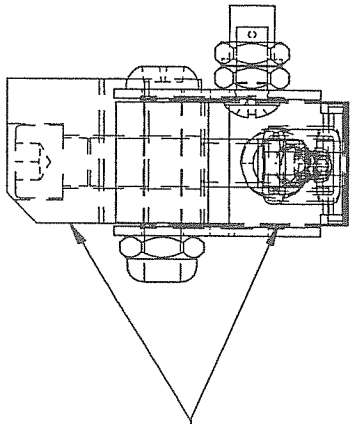
-TOP & BOTTOM  
SEALING OPTION-

MACHINE	620A	DEPT. / METRE / INCH	USINAGE ± 0.1	TOLERIE ± 0.002"	SOUDEGE ± 0.5	ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	SEAL BAR PRE-PRESSY	DEPT.	N.T.S.			
ITEM		DATE	07-12-17	NO	005A0420	QTY. 4
MAT.		APP. BY	MAL			

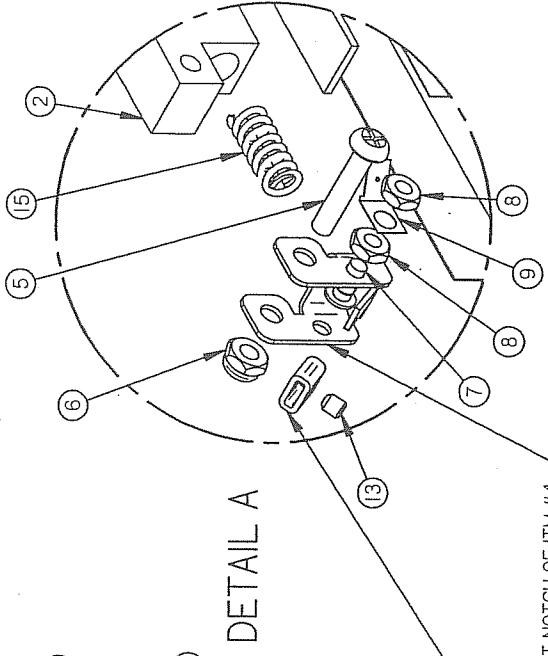
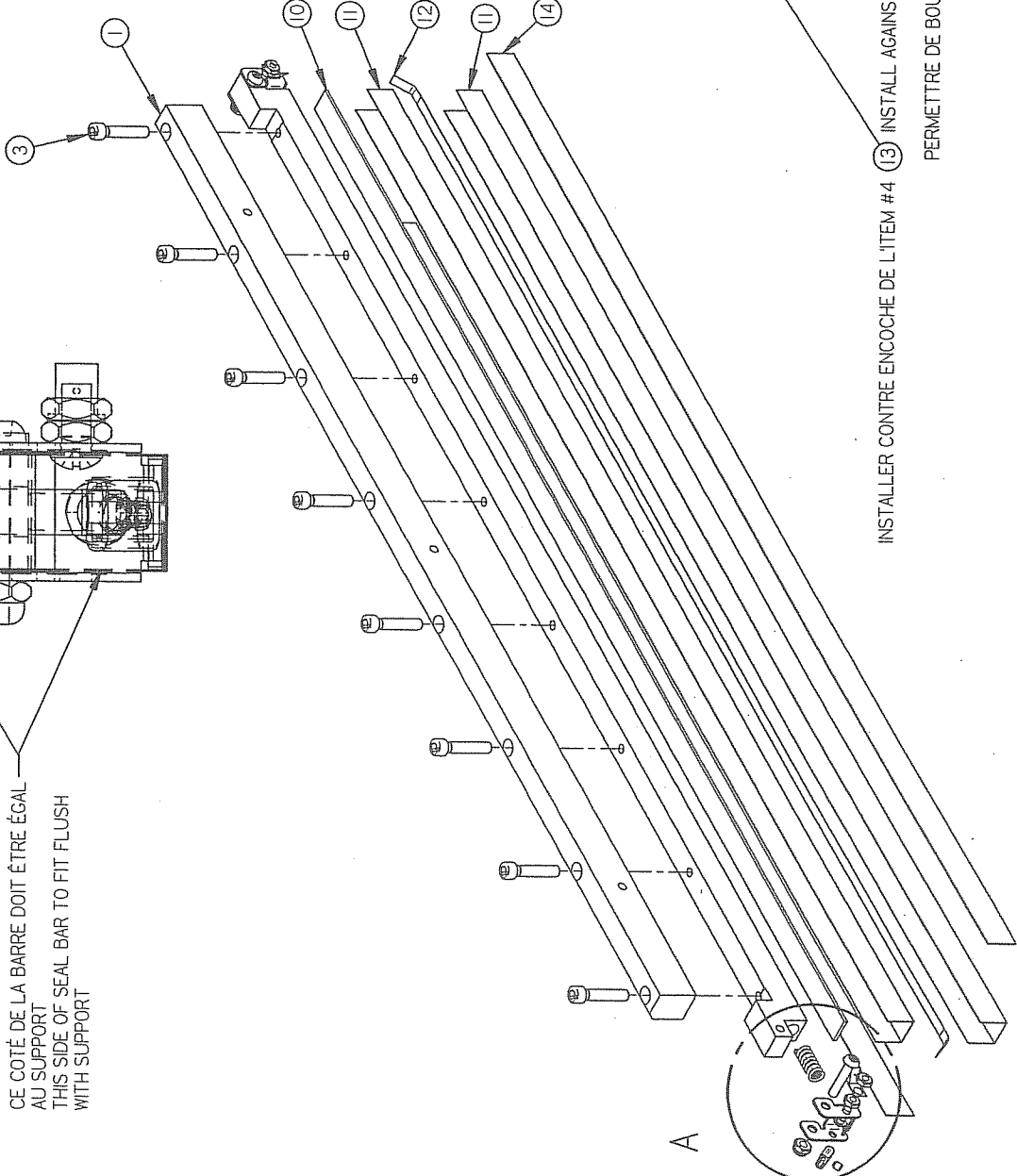
INSTALLER CONTRE L'ENCOCHE DE L'ITEM #2 ⑪ INSTALL AGAINST NOTCH OF ITEM #2

F	MODIF. A-453 AJOUTER 077-0095	10-06-01	J.G.
E	REDRAWN	07-12-17	M.A.
LET.	MODIFICATION	DATE	INT.

1005B0421



CE COTÉ DE LA BARRE DOIT ÊTRE ÉGAL  
AU SUPPORT  
THIS SIDE OF SEAL BAR TO FIT FLUSH  
WITH SUPPORT



DETAIL A

INSTALLER CONTRE ENCOCHE DE L'ITEM #4 (13) INSTALL AGAINST NOTCH OF ITEM #4  
PERMETTRE DE BOUGER LIBREMENT (4) ALLOW TO MOVE FREELY

ITEM	PART #	DESCRIPTION	QT.
1	002A0536	UPPER SEAL BAR SUPPORT	1
2	002B0401	UPPER SEAL BAR	1
3	051-0232	SCREW 1/4-20x 1-1/4"SKT CAP SS	8
4	001-2666	ELEMENT BINDER	2
5	051-0146	SCREW 10-24 X 1" PAN PHIL S/S	2
6	051-0572	LOCK NUT #10-24 S/S	2
7	051-0104	SCREW 8-32 x 3/8" RND PHIL S/S	2
8	051-0550	NUT #8-32 SS	4
9	027-0400	CONNECTOR ADAPTOR	2
10	179-0003	SILICONE 2mm x 15mm ADHESIVE 733mm (0.73)	1
11	176-0220	TEFLON TAPE, PRESS.SENSITIVE 2" 733mm (0.089)	2
12	039-0220	BI-ACTIVE SEALING ELEMENT (6mm) 776mm (0.078)	1
13	056-1400	1/4"SET SCREW BANDING BUCKLE S/S	2
14	171-0180	TAPE CLEAR SUPER BOND 3/4" 700mm (0.021)	2
15	077-0095	SPRING C 0360-059-1250 S/S	2

**-TOP & BOTTOM SEALING OPTION-**

MACHINE		DEPT. TOL. METRIC INCH	DEFY.	CITY.
PART		USINAGE ±0.1 ±0.00R	IPROMAC	
ITEM		ALUMINUM ±0.05 ±0.02P	ST GERMAIN DE GRANTHAM	
MAT.		SOUDAGE ±0.5 ±0.02S	QUEBEC CANADA	
DATE 07-12-17		NO	M-(M)-1	
DATE 07-12-17		NO	005B0421	
DATE 07-12-17		NO		

G	MODIF. A-453 AJOUTER 077-0095	10-06-01	J.G.
F	REDESSINE	07-12-17	J.G.
LET.	MODIFICATION	DATE	INT.

# 010A0066

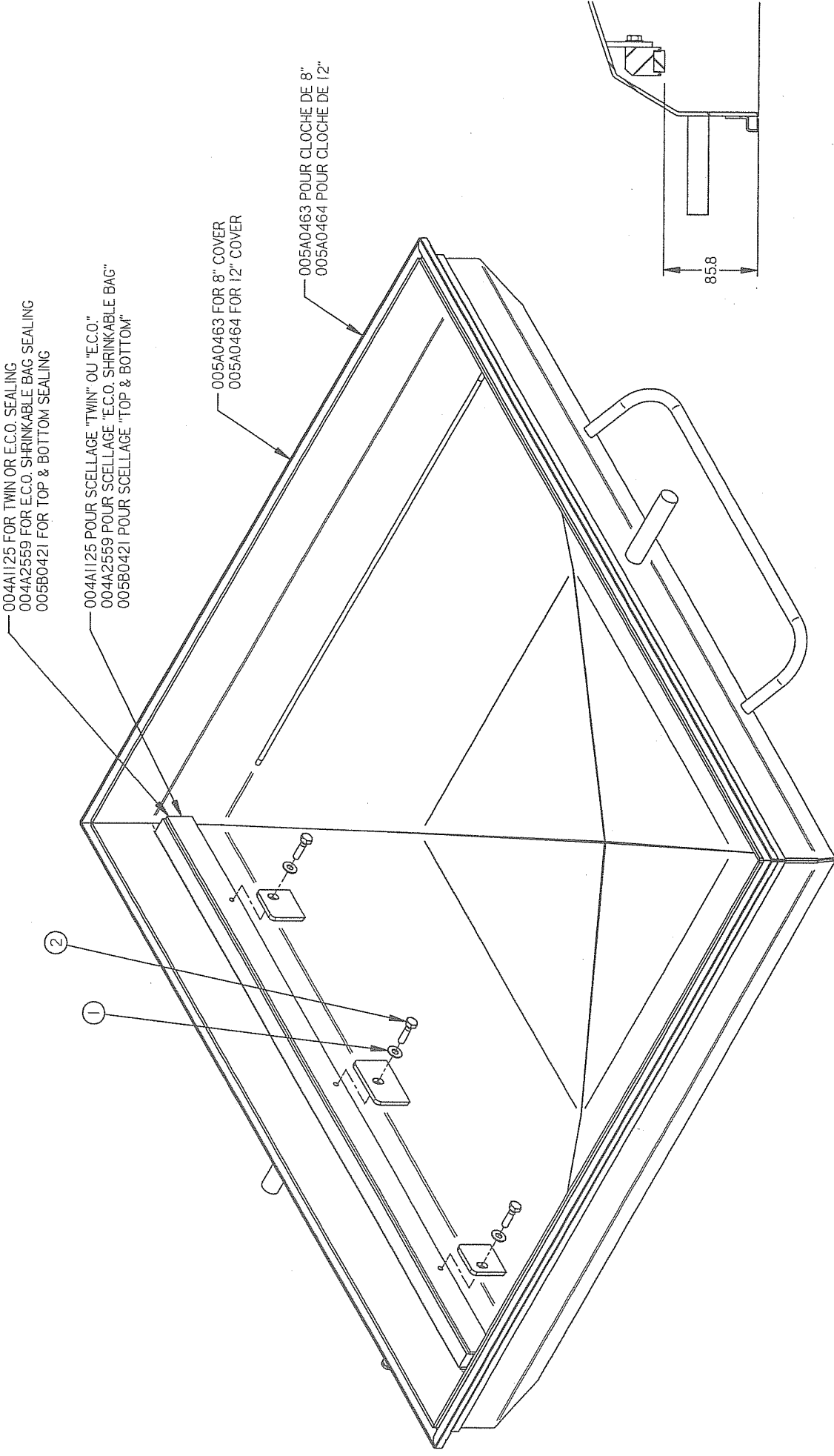
ITEM	PART #	DESCRIPTION	QT.
1	051-0740	WASHER 1/4" FLAT S/S	6
2	051-0210	BOLT 1/4"-20nc. X 1" S/S	6

004A1125 FOR TWIN OR E.C.O. SEALING  
 004A2559 FOR E.C.O. SHRINKABLE BAG SEALING  
 005B0421 FOR TOP & BOTTOM SEALING

004A1125 POUR SCELLAGE "TWIN" OU "E.C.O."  
 004A2559 POUR SCELLAGE "E.C.O. SHRINKABLE BAG"  
 005B0421 POUR SCELLAGE "TOP & BOTTOM"

005A0463 FOR 8" COVER  
 005A0464 FOR 12" COVER

005A0463 POUR CLOCHE DE 8"  
 005A0464 POUR CLOCHE DE 12"



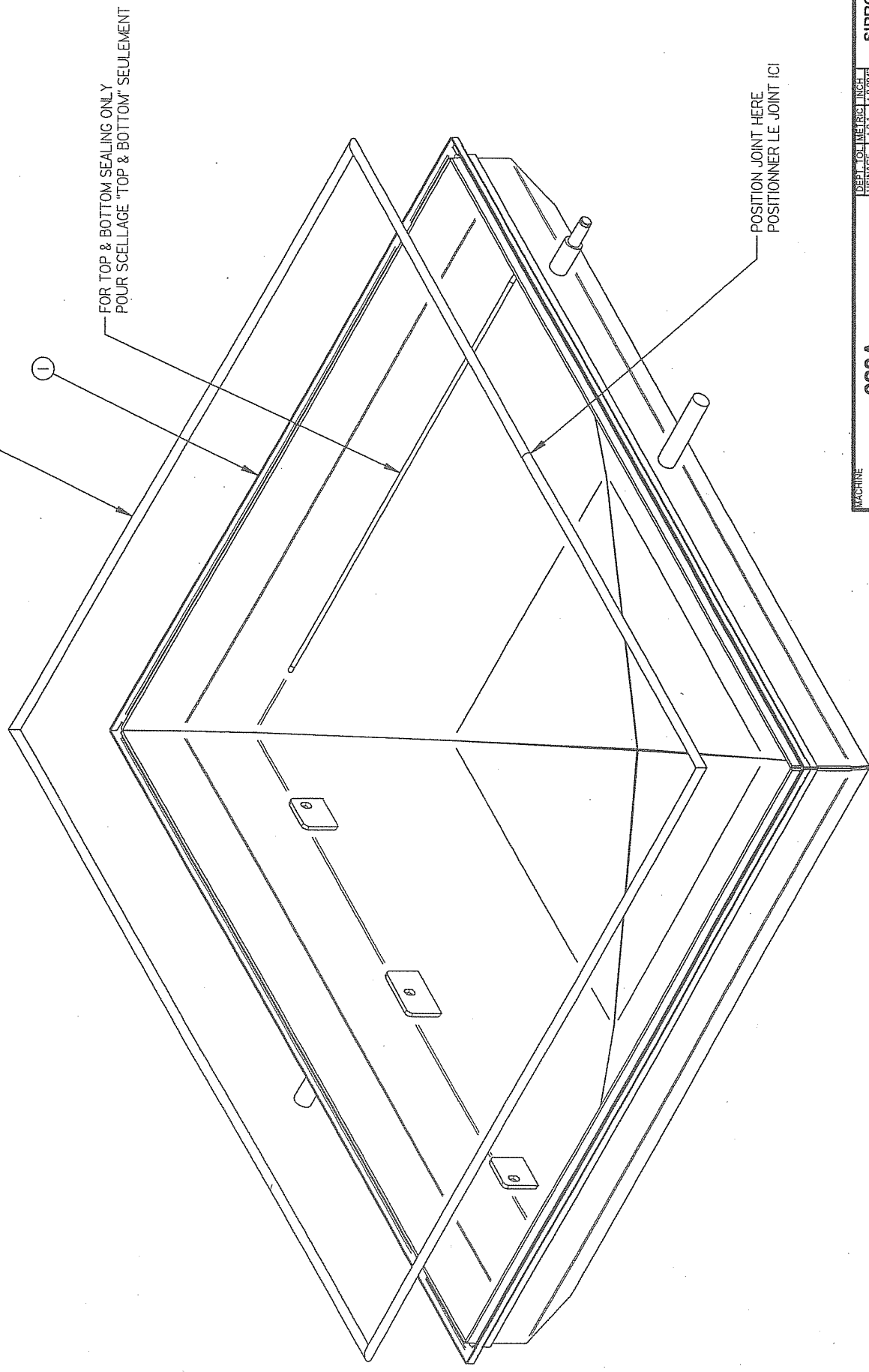
MACHINE	620A	DEPT. TO METRIC	INCH	US IMAGE	+0.1	+0.004	TOLERANCE	+0.5	+0.020	SOLDAGE	+0.5	+0.020	N.T.S.	DEPT.	M-(M)-1	QTY.	1
PART	UPPER SEAL BAR INSTALLATION	DATE	10-10-01	DWG BY	J.G.	DATE	10-10-01	NO	010A0066	ST-GERMAIN DE GRANTHAM	QUEBEC CANADA	ST-GERMAIN DE GRANTHAM	QUEBEC CANADA	DATE	10-10-04	NO	010A0066
ITEM		CNC		APP BY													

LET.	A	MODIF. #A-0444 ETAIT 005-0463 & 005-0464	10-10-01	J.G.
		MODIFICATION	DATE	INT.

# 1005A0463

ITEM	PART #	DESCRIPTION	Q.T.
1	004A0227	8" COVER PRE-ASSY	1
2	179-0020	NEOPRENE SPONGE 1/2" x 14.5'	1

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



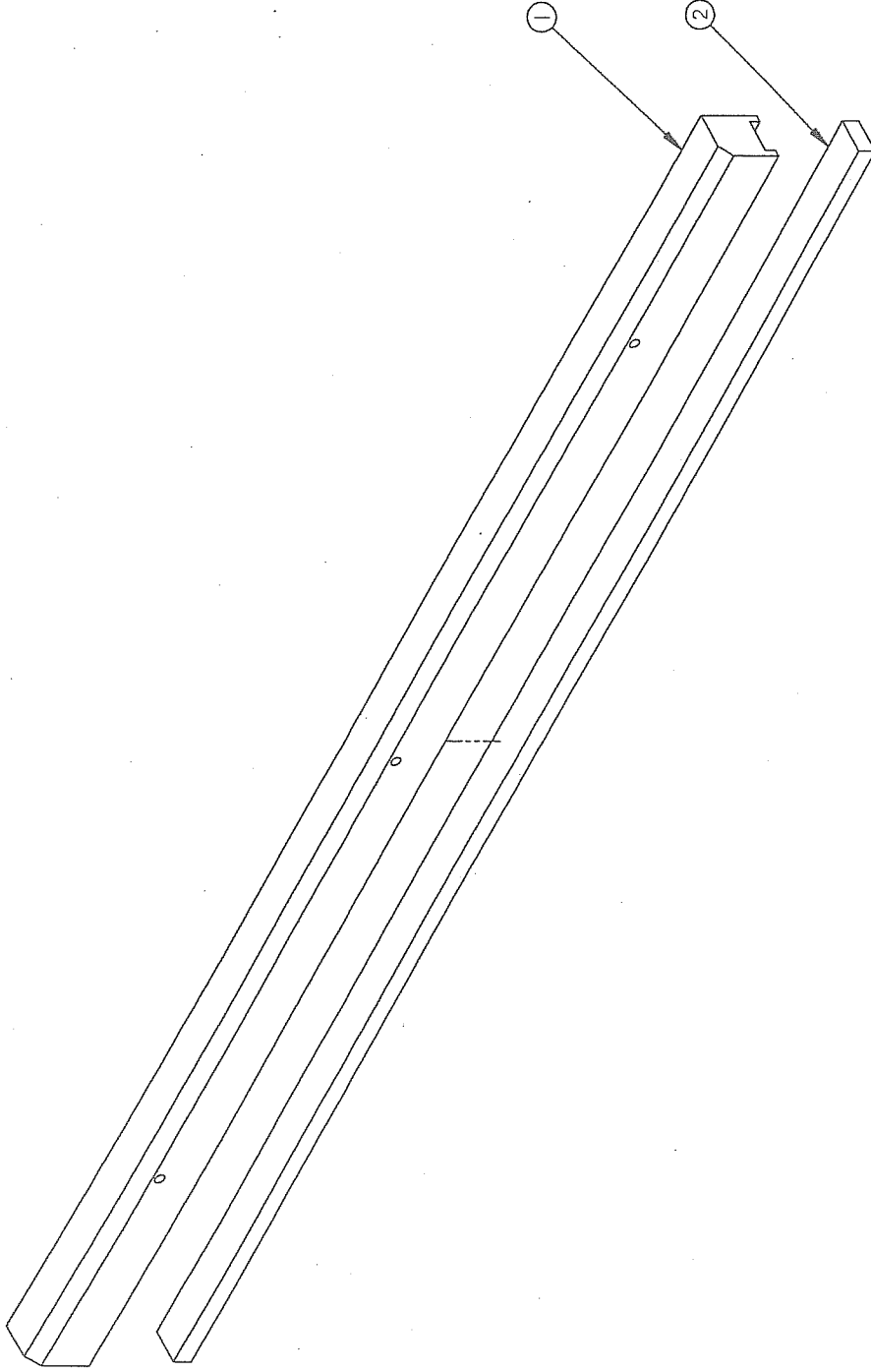
MACHINE	620A	DEPT. / TOI METRIC / INCH	USINAGE ± 0.1 ± 0.004"	SIPROMAC
PART	8" COVER ASSEMBLY	TOLERIE ± 0.5 ± 0.020"	SOUDAGE ± 0.5 ± 0.020"	ST-GERMAIN DE GRANTHAM
ITEM	CNC	QTY.	N.T.S.	QUEBEC CANADA
MAT.				
DWG BY	J.G.	DATE	10-10-01	NO
APP. BY	D	DATE	10-10-04	005A0463

B	REDESSINE MODIF. #A-0444 / VOIR AUSSI 010A0066	10-10-01	J.G.
LET.	MODIFICATION	DATE	INT.



1004A1125

ITEM	PART #	DESCRIPTION	QTY.
1	002A2124	UPPER SEAL BAR SUPPORT	1
2	008-0402	UPPER SEAL BAR RUBBER	1



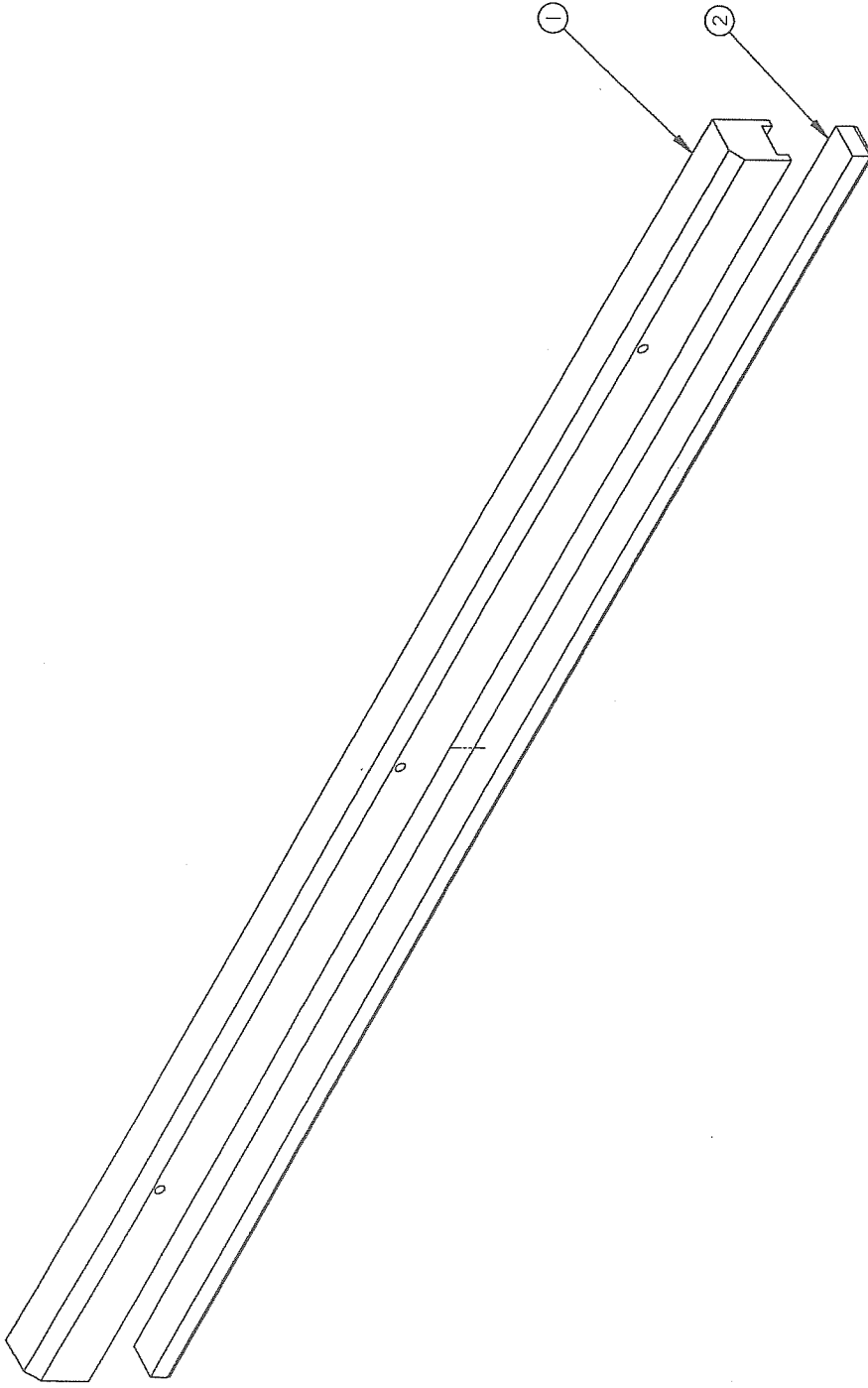
**-BAG CUT OPTION & TWIN-**

MACHINE	620A	DEPT.	COL	METRIC	INCH	SIPROMAC
PART	UPPER SEAL BAR ASSEMBLY (E.C.O.) & (TWIN)	NO	08-04-30	DATE	08-04-30	ST-GERMAIN DE GRANTHAM
ITEM		DEPT.	M-I	QTY.	2	QUEBEC CANADA
CNC		DWG BY	J.G.	NO	004A1125	
MAT.		APP BY	J.G.	DATE	10-10-01	

B	MODIF. #A-0444 / AJOUTER TWIN / ETAIT 005A0572	10-10-01	J.G.
A	REDESSINE VOIR AUSSI 004A2559 & 004A2560	08-04-30	J.G.
LET.	MODIFICATION	DATE	INT.

004A2559

ITEM	PART #	DESCRIPTION	QT.
1	002A2124	UPPER SEAL BAR SUPPORT	1
2	004A2560	SHRINKABLE BAG TEFLON PRE-ASSY	1



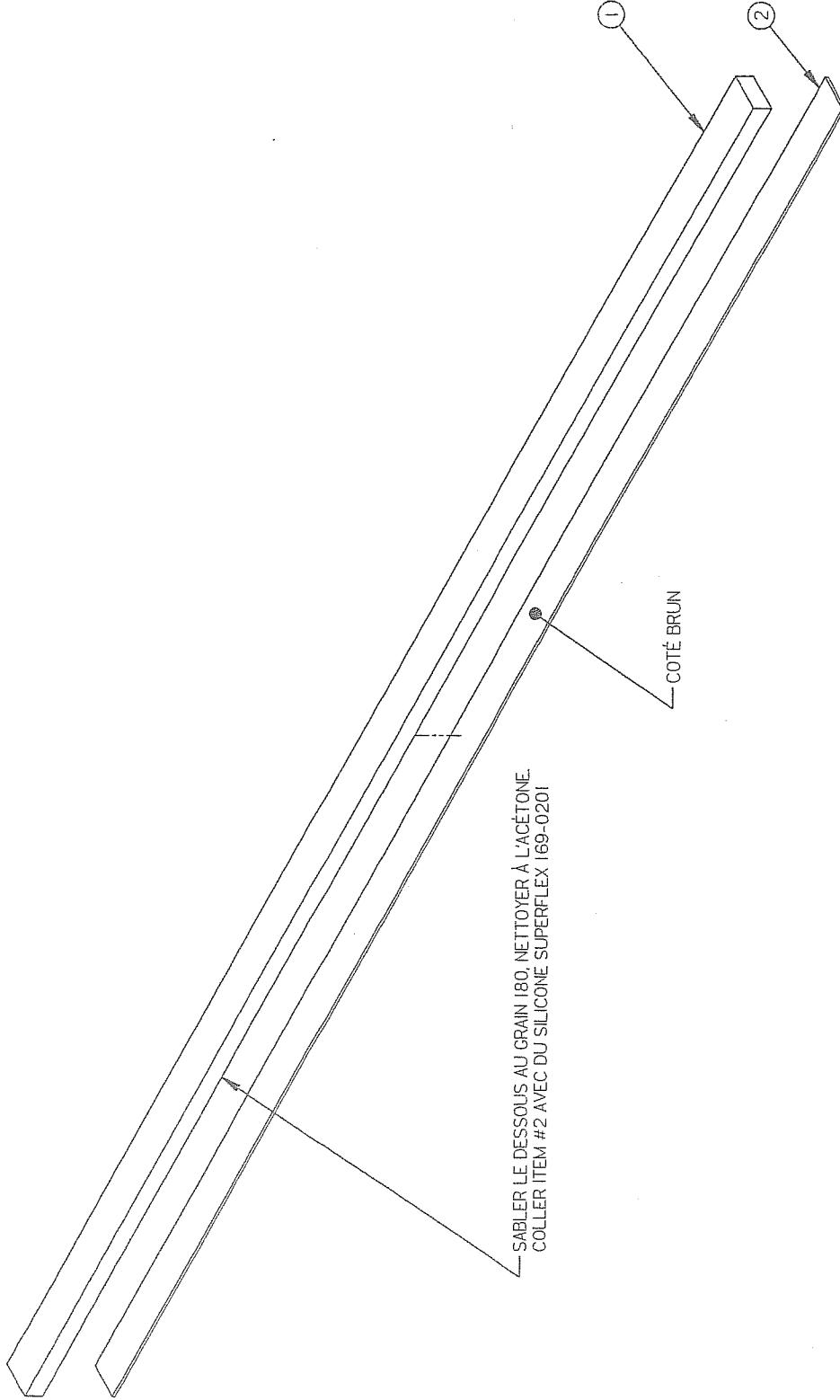
**-SHRINKABLE BAG CUT OPTION-**

MACHINE		DEPT. TOL. METRIC INCH		SIPROMAC	
620A		USINAGE ± 0.1 ± 0.0001		ST-GERMAIN DE GRANTHAM	
PART		SERRAGE ± 0.5 ± 0.002		QUEBEC CANADA	
UPPER SEAL BAR ASSY (SHRINKABLE)		SOLDAISE ± 0.5 ± 0.002		N.T.S.	
ITEM		CNC		DEPT. M-1	
DRAWN BY J.G.		DATE 08-04-30		NO. 004A2559	
APP. BY		DATE 27-02-23		QTY. 2	

A	ETAIT 004A1125	08-04-30	J.G.
LET.	MODIFICATION	DATE	INT.

004A2560

ITEM	PART #	DESCRIPTION	QT.
1	008-0402	UPPER SEAL BAR RUBBER	1
2	008A0843	TEFLON CUTTING STRIP	1



SABLER LE DESSOUS AU GRAIN 180, NETTOYER À L'ACÉTONE.  
COLLER ITEM #2 AVEC DU SILICONE SUPERFLEX 169-0201

COTÉ BRUN

**-SHRINKABLE BAG CUT OPTION-**

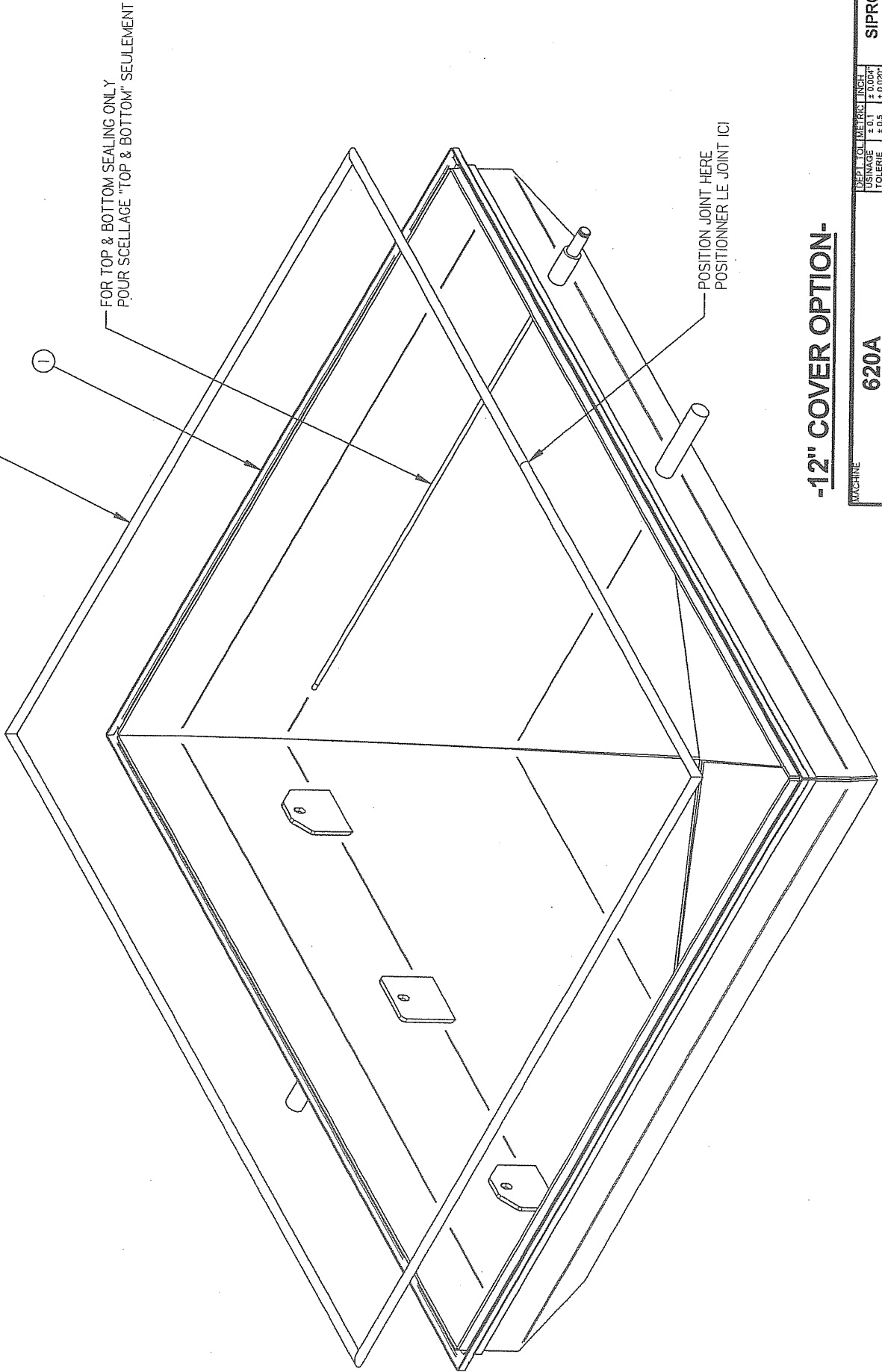
MACHINE	620A	DEPT. 101	LINE 1	TRIC	1	INCH	1	SIPROMAC	QTY. 2
PART	SHRINKABLE BAG TEFLON PRE-ASS'Y	UNITÉ	1	0.5	1	0.0001	1	ST-GERMAIN DE GRANTHAM	
ITEM		TOURNE	1	0.5	1	0.0020	1	QUEBEC CANADA	
MAT.		SOUDEUSE	1	0.5	1	0.0020	1		
			N.T.S.						
		DATE	08-04-30	NO	004A2560				
		APP. BY	J.G.	DATE	08-05-07				

LET.	A	ETAIT	004A1125	08-04-30	J.G.
		MODIFICATION		DATE	INT.

**005A0464**

ITEM	PART #	DESCRIPTION	QT.
1	004A0228	12" COVER PRE-ASSY	1
2	179-0020	NEOPRENE SPONGE 1/2" x 14.5'	1

USE PERMATAX RUBBER ADHESIVE 169-0010 TO GLUE ① UTILISER PERMATAX RUBBER ADHESIVE 169-0010 POUR COLLER



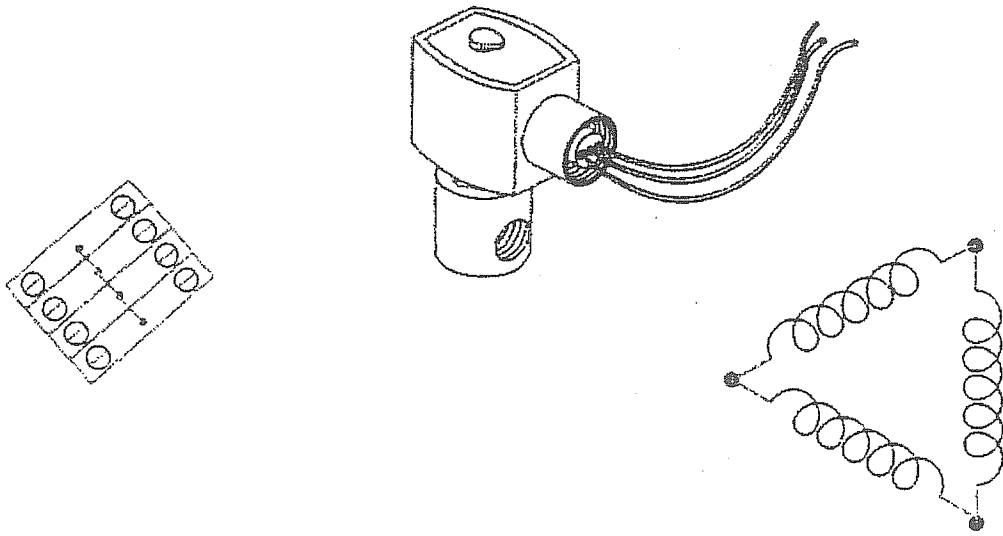
① FOR TOP & BOTTOM SEALING ONLY  
POUR SCELLAGE "TOP & BOTTOM" SEULEMENT

POSITION JOINT HERE  
POSITIONNER LE JOINT ICI

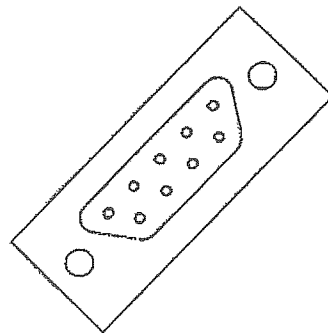
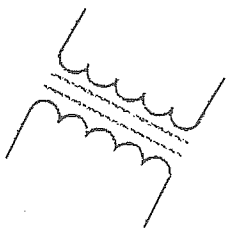
**-12" COVER OPTION-**

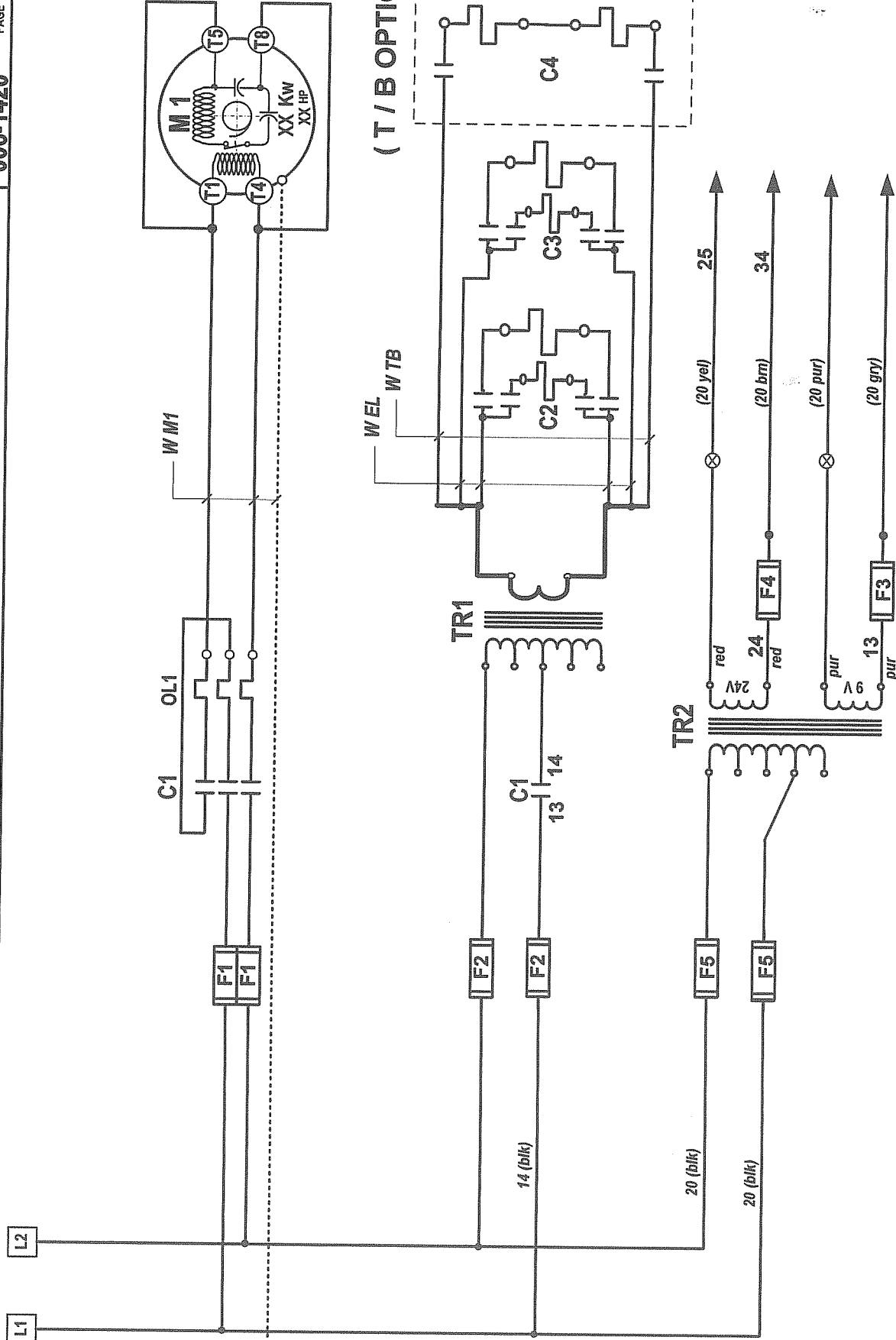
MACHINE	620A	DEPT. 101 METRIC INCH	± 0.004"	DEPT.	M-1	QTY.	1
PART	12" COVER ASSEMBLY	USINAGE	± 0.01"	DATE	10-10-01	NO	005A0464
ITEM		CHISEL	± 0.02"	DATE	10-10-01		
MAT.		SOLDAGE	± 0.025"	APP. BY	J.G.		
			± 0.025"				
			N.T.S.				

B. REDRESSINE MODIF. #A-0444 / VOIR AUSSI 0104-0066	10-10-01	J.G.
L.E.T. MODIFICATION	DATE	INT.



# ELECTRICAL DRAWING





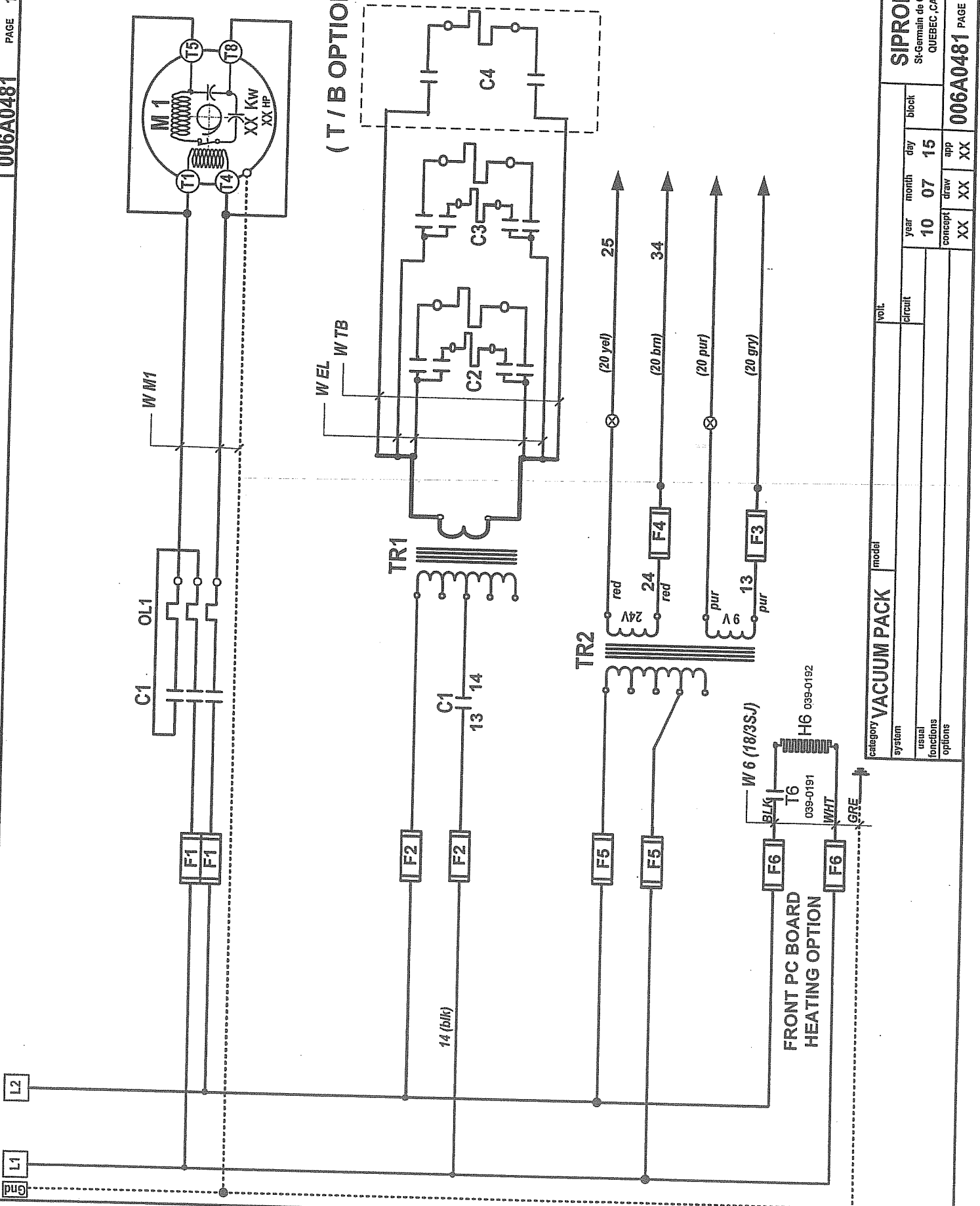
( T / B OPTION )

category		VACUUM PACK		model		620A		volL		1Ph 60Hz	
system		circuit		year		month		day		block	
usual		functions		05		01		18		app	
options		concept		PP		PP		DL		DL	
				PP		PP		PP		PP	
				006-1420		PAGE		1 de		1	

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

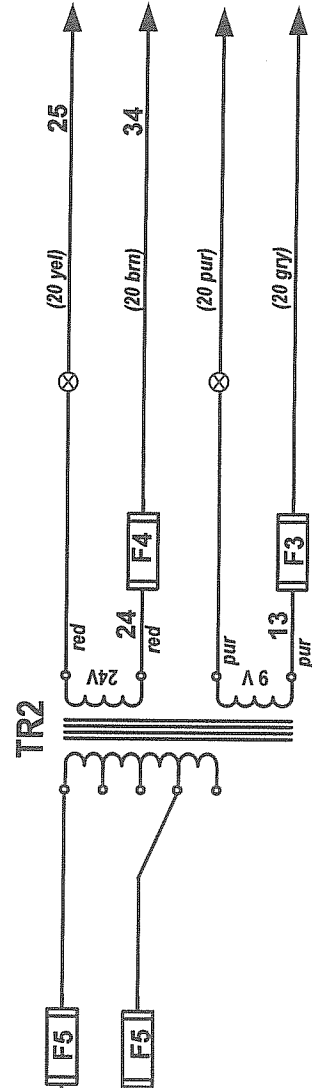
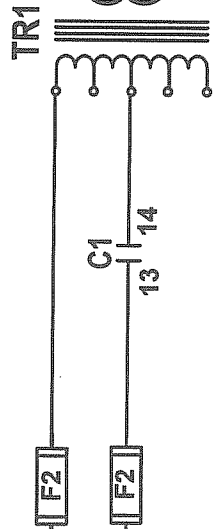
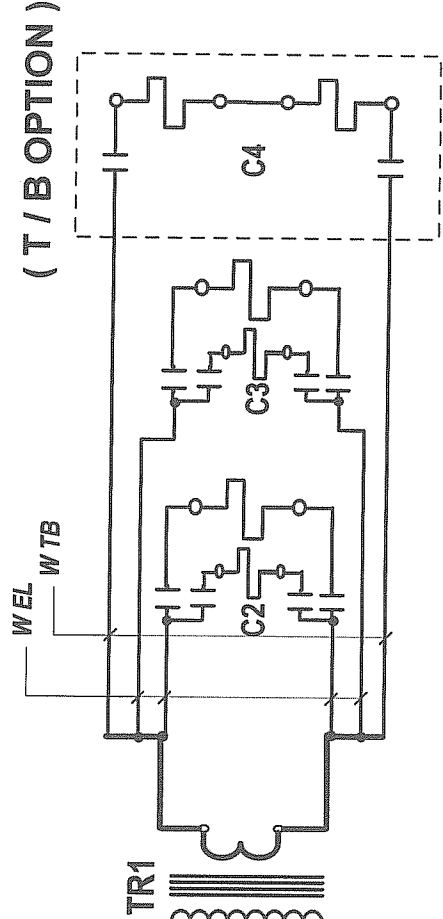
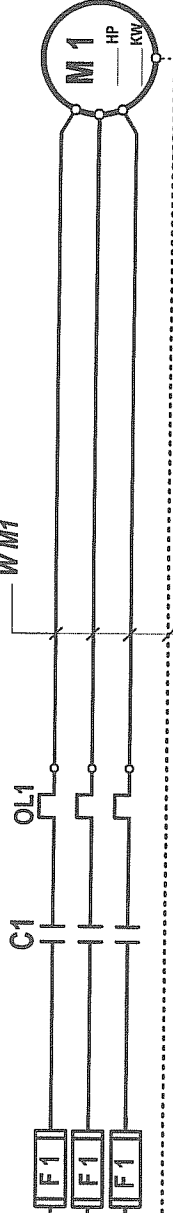
006-1420

PAGE 1 de 1



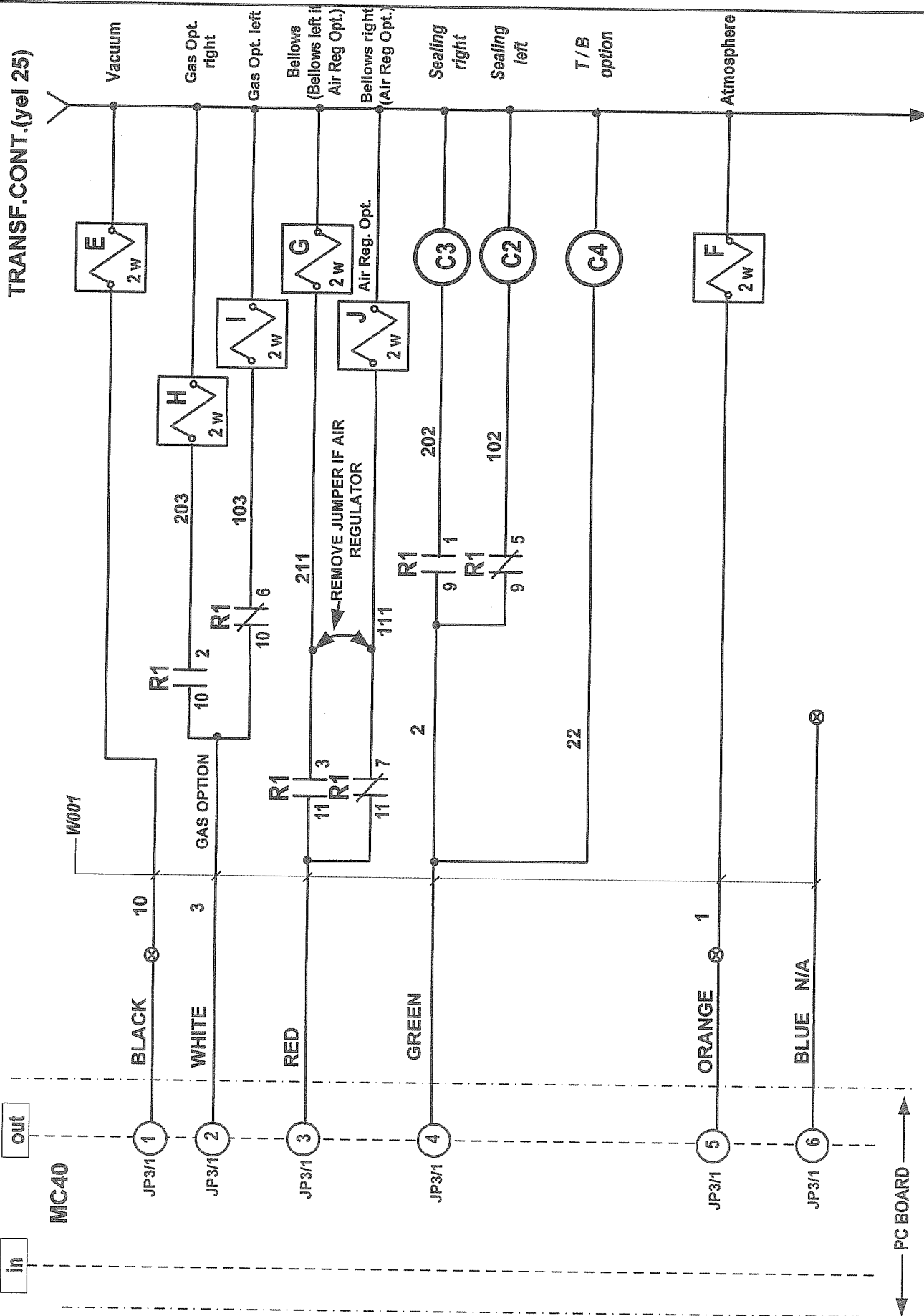
category		VACUUM PACK		model	
system		voit		circuit	
year	month	day	block		
10	07	15			
concept	draw	app	XX	XX	XX
			006A0481		
			PAGE 1 de 5		

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



category		VOL.		3Ph 60Hz		PAGE 1 de 1	
system		620A		year	month	day	block
usual				10	08	18	
fonctions				concept	draw	app	XK
options				XK	XK	XK	XK
model		VACUUM PACK		006-1430		SIPROMAC	
						St-Germain de Grantham	
						QUEBEC, CANADA	



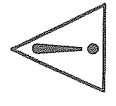


TRANSF.CONT.(yel 25)

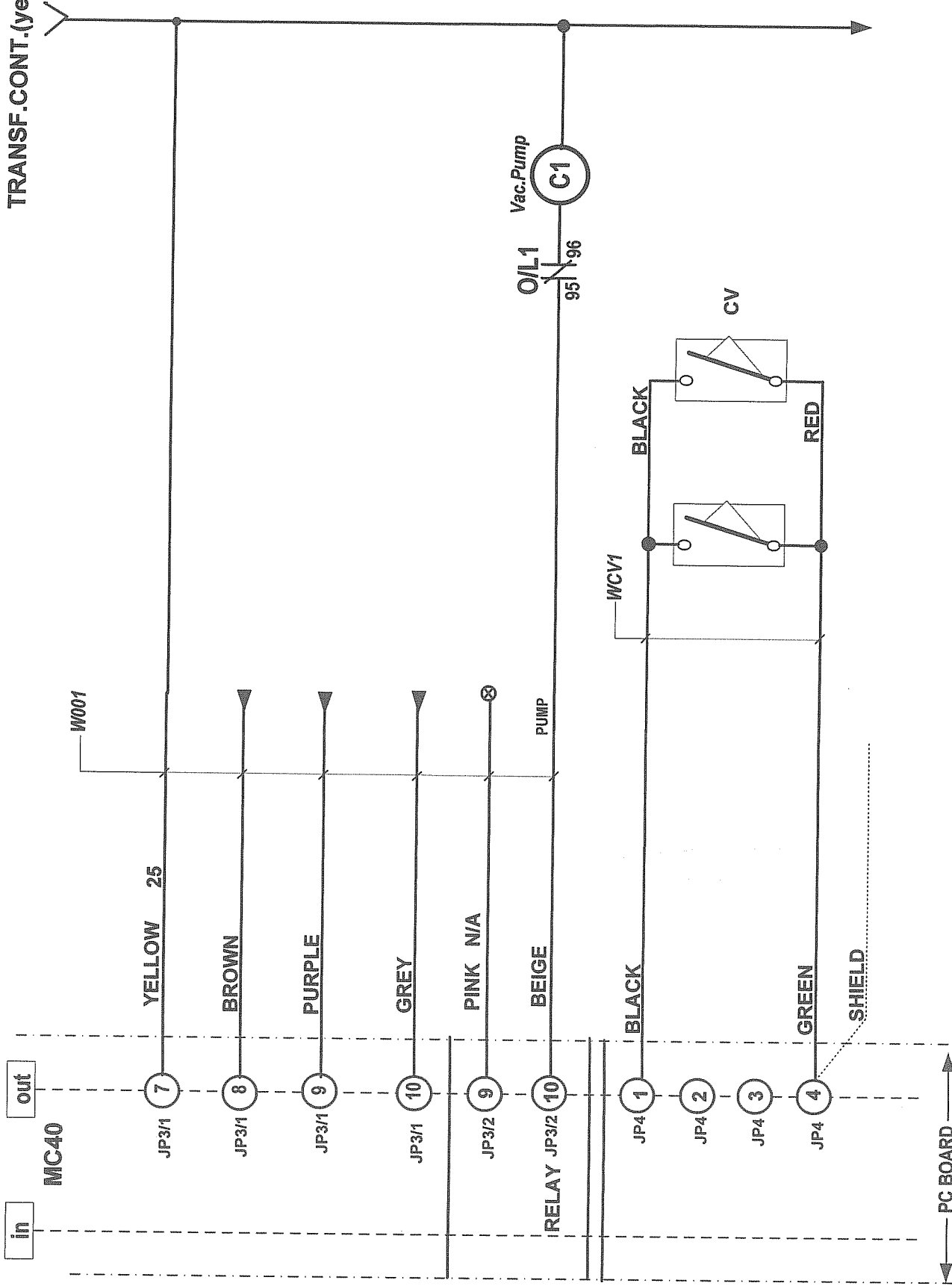
category		VACUUM PACK		model	620A	volts	ALL
system				circuit		block	
usual functions		year	10	month	08	day	18
options		concept	XX	draw	XX	app	XX
				006-1437		PAGE 1 de 3	

SIPROMAC  
St-Germain de Grantham  
QUEBEC, CANADA

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

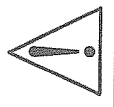


TRANSF.CONT.(yel 25)

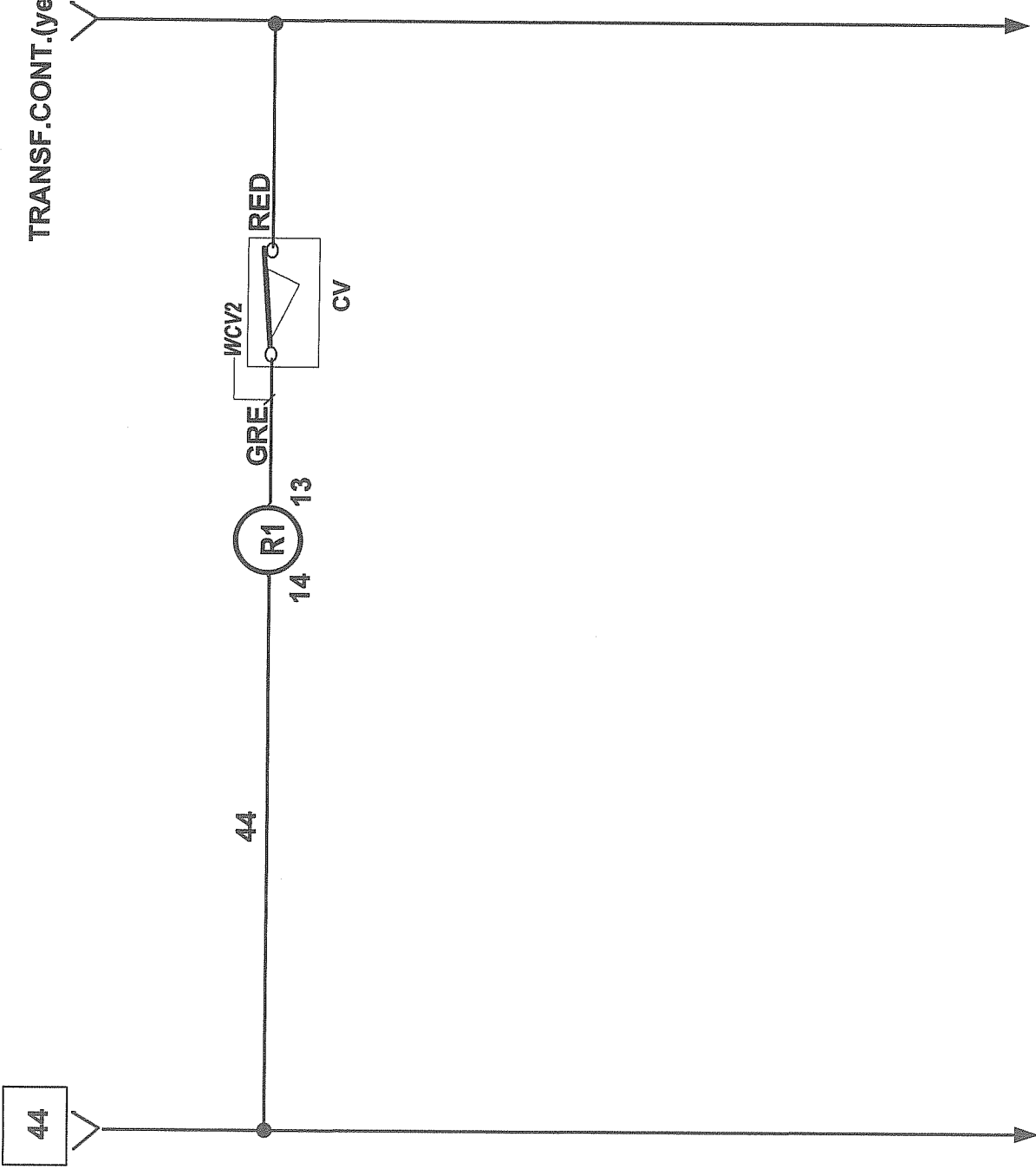


category		VACUUM PACK		model	620A	vol.		ALL	
system						year	month	day	block
usual functions						10	08	18	
options						concept	draw	app	XX
						XX	XX	XX	006-1437
								PAGE 2 de 3	

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



TRANSF.CONT.(yel 25)

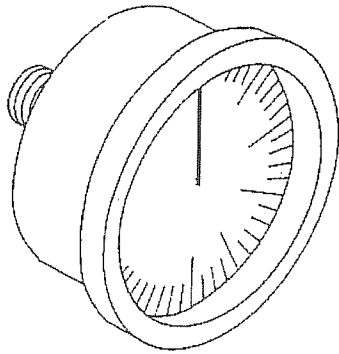


category	VACUUM PACK	model	620A	vol.	ALL	year	10	month	08	day	18	block	
system				circuit		concept	XX	draw	XX	app	XX		
usual fonctions													
options													
SIPROMAC													
St-Germain de Grantham													
QUEBEC, CANADA													
006-1437												PAGE 3 de 3	

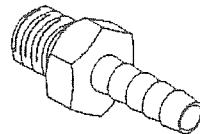
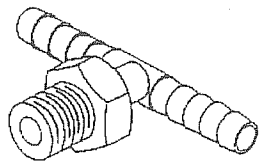
RC filters must be connected on each AC coil (not shown on diagram)

#	SIPRO	PART DESCRIPTION	PART APPLICATION	MACHINE VOLTAGE	MACHINE	REF.	OPT.	QTY
028-0022		TERMINAL BLOCK M10/10	SUPPLY	208V/3PH/60HZ	620A	L1-L2-L3		3
028-0025		GROUND TERMINAL BLOCK M16/12P	SUPPLY	208V/3PH/60HZ	620A	GND		1
028-0060		SEPARATOR M4/6	SUPPLY	208V/3PH/60HZ	620A	L1-L2-L3		3
028-0080		BAM END STOP (BUTEE D'ARRET)	SUPPLY	ALL	620A			1
028-0105		GROUND BARRIER (6 HOLES)	SUPPLY	ALL	620A	GND		1
034-0700		FUSE HOLDER 30A/600V GOULD	VACUUM	208V/3PH/60HZ	600A	F1	A1	3
034-0550		FUSE MIDGET 25A/250V TIME-DELAY	VACUUM RA-0100	208V/3PH/60HZ	600A	F1	A1	3
025-0030		MOTOR CONTACTOR 5HP IN 208V/3PH-CSA,UL	VACUUM RA-0100	208V/3PH/60HZ	600A	C1	A1	1
025-0190		THERMAL OVERLOAD 12 TO 18A-CSA,UL	VACUUM RA-0100	208V/3PH/60HZ	600A	O/L1	A1	1
030-0140		CAB TIRE	VACUUM RA-0100	208V/3PH/60HZ	600A	WM1	A1	2M.
125-0060		BUSCH RA-0100 230-460V/3PH/60HZ 5HP 13.6A	VACUUM RA-0100	208V/3PH/60HZ	600A	M1	A1	1
034-0710		FUSE HOLDER 60A/600V (HRCII)	VACUUM	208V/3PH/60HZ	620A	F1	A2	3
034-0110		FUSE MIDGET 60A/600V	VACUUM	208V/3PH/60HZ	620A	F1	A2	3
025-0040		MOTOR CONTACTOR 7.5HP IN 208V/3PH-CSA,UL	VACUUM RA-0165	208V/3PH/60HZ	620A	C1	A2	1
025-0200		THERMAL OVERLOAD 17 TO 25A-CSA,UL	VACUUM RA-0165	208V/3PH/60HZ	620A	O/L1	A2	1
030-0050		CAB TIRE	VACUUM	208V/3PH/60HZ	620A	WM1	A2	2M.
125-0070		BUSCH RA-0165 230-460V/3PH/60HZ 7.5HP 21A	VACUUM RA-0165	208V/3PH/60HZ	620A	M1	A2	1
034-0710		FUSE HOLDER 60A/600V (HRCII)	VACUUM	208V/3PH/60HZ	620A	F1	A3	3
034-0110		FUSE MIDGET 60A/600V	VACUUM	208V/3PH/60HZ	620A	F1	A3	3
025-0050		MOTOR CONTACTOR 10HP IN 208V/3PH-CSA,UL	VACUUM RA-0255	208V/3PH/60HZ	620A	C1	A3	1
025-0210		THERMAL OVERLOAD 23 TO 32A-CSA,UL	VACUUM RA-0255	208V/3PH/60HZ	620A	O/L1	A3	1
030-0050		CAB TIRE	VACUUM	208V/3PH/60HZ	620A	WM1	A3	2M.
125-0080		BUSCH RA-0255 230-460V/3PH/60HZ 10HP 27A	VACUUM RA-0255	208V/3PH/60HZ	620A	M1	A3	1
034-0700		FUSE HOLDER 30A/600V GOULD	SEALING	208V/3PH/60HZ	620A	F2		2
034-0450		FUSE MIDGET 7A/250V TIME-DELAY	SEALING TWIN SEAL	208V/3PH/60HZ	620A	F2	B1	2
029-0040		TRANSFO 500VA/208-240/24V 60HZ	SEALING TWIN SEAL	208V/3PH/60HZ	620A	TR1	B1	1
027-0220		TERMINAL ROUND STUD #10 600v 75°C	SEALING	ALL	620A			4
025-0020		CONTACTOR ITH=25A-CSA,UL	SEALING	ALL	620A	C2+C3		2
030-0410		TEW #10/104 BLACK	SEALING	ALL	620A	WEL		12M.
027-0210		TERMINAL FEMALE .250" INSULATED 600v 75°C	SEALING	ALL	620A	WEL		8
005A0560		SEAL BAR ASSY W/SUPPORT	SEALING TWIN SEAL	ALL	620A		B1	4
034-0470		FUSE MIDGET 10A/250V TIME-DELAY	SEALING BAG CUT	208V/3PH/60HZ	620A	F1	B2	2
029-0062		TRANSFO 750VA 208-240V/30V/60HZ	SEALING BAG CUT	208V/3PH/60HZ	620A	TR1	B2	1
005C0561		SEAL BAR ASSY W/SUPPORT	SEALING BAG CUT	ALL	620A		B2	4
034-0500		FUSE MIDGET 15A/250V TIME-DELAY	SEALING TOP & BOTTOM	208V/3PH/60HZ	620A	F1	B3	2
029-0079		TRANSFO 1000VA 208-240/24V 60H	SEALING TOP & BOTTOM	208V/3PH/60HZ	620A	TR1	B3	1
027-0220		TERMINAL ROUND STUD #10 600v 75°C	SEALING TOP & BOTTOM	ALL	620A		B3	2
025-0020		CONTACTOR ITH=25A-CSA,UL	SEALING TOP & BOTTOM	ALL	620A	C4	B3	1
030-0120		CAB TIRE	SEALING TOP & BOTTOM	ALL	620A	WTB	B3	3M.
027-0065		TERMINAL FLAG FEMALE YELLOW .250"	SEALING TOP & BOTTOM	ALL	620A	WTB	B3	4
005A0562		SEAL BAR ASSY W/SUPPORT	SEALING TOP & BOTTOM	ALL	620A		B3	4

#	SIPRO	PART DESCRIPTION	PART APPLICATION	MACHINE VOLTAGE	MACHINE	REF.	OPT.	QTY
005B0421		UPPER SEAL BAR ASSY W/SUPPORT	SEALING TOP & BOTTOM	ALL	620A		B3	2
034-0740		FUSE HOLDER M4/8SF	CONTROL TRANSFO	208V/3PH/60HZ	620A	F5		2
034-0200		FUSE 5X20MM 3/4A 250V T-DELAY	CONTROL TRANSFO	208V/3PH/60HZ	620A	F5		2
029-0009		TRANSFO 65VA/208-230V/24-9V	CONTROL TRANSFO	208V/3PH/60HZ	620A	TR2		1
034-0740		FUSE HOLDER M4/8SF	CONTROL 9VAC+24VAC	ALL	620A	F3+F4		2
034-0210		FUSE 5X20MM 2A/250V TIME DELAY	CONTROL 9VAC	ALL	620A	F3		1
034-0240		FUSE 5X20MM 4A/250V TIME DELAY	CONTROL 24VAC	ALL	620A	F4		1
030-0590		20AWG/12COND.PVC.UNSHIELD.300V	OUTPUT CONTROL	ALL	620A	W001		2.5M.
036-0740		12 CONTACTS CONNECTOR	OUTPUT CONTROL	ALL	620A	JP3/1-2		1
030-0631		22AWG/4COND.PVC,SHIELDED,300V.	INPUT CONTROL	ALL	620A	WCV1+WCV3		2.5M.
030-0610		PVC #22-2COND.300V CSA RED/BLK	INPUT CONTROL	ALL	620A	WCV2		0.5M.
036-0820		0.156" CENTERLINE CRIMP HOUSING	INPUT CONTROL	ALL	620A	JP4		1
036-0850		0.156" CENTERLINE CRIMP TERMINAL	INPUT CONTROL	ALL	620A	JP4		2
033-0038		MICROPROCESSOR MC-40 SENSOR VACUUM	CONTROL WITH SENSOR	ALL	620A	MC-40	C1	1
033-00385		MICROPROCESSOR MC-40 NO SENSOR VAC.	CONTROL W/O SENSOR	ALL	620A	MC-40	C2	1
033-0015		MEMBRANE MC-40 SIPROMAC	CONTROL SIPROMAC	ALL	620A		D1	1
033-0018		MEMBRANE MC-40 BERKEL	CONTROL BERKEL	ALL	620A		D2	1
106-0050		VALVE 2WAY 24V 1-1/4" NPT(B60) 60HZ	VACUUM	ALL	600A	E	A1	1
106-0060		VALVE 2WAY 24V 2" NPT(B80) 60HZ	VACUUM	ALL	620A	E	A2	1
106-0060		VALVE 2WAY 24V 2" NPT(B80) 60HZ	VACUUM	ALL	620A	E	A3	1
106-0010		VALVE 2WAY 24V 1/4 NPT(G22) 60HZ	OPTION GAS	ALL	620A	H+I	E	2
106-0070		VALVE 3WAY 24V 1/4 NPT(G176)60HZ	BELLOWS	ALL	620A	G		1
106-0070		VALVE 3WAY 24V 1/4 NPT(G176)60HZ	OPTION AIR REGULATOR	ALL	620A	J	F	1
106-0030		VALVE 2WAY 24V 3/4 NPT(G95) 60HZ	ATMOSPHERE	ALL	600A	F	A1	1
106-0050		VALVE 2WAY 24V 1-1/4" NPT(B60) 60HZ	ATMOSPHERE	ALL	620A	F	A2	1
106-0050		VALVE 2WAY 24V 1-1/4" NPT(B60) 60HZ	ATMOSPHERE	ALL	620A	F	A3	1
026-0610		LIMIT SWITCH LONG ROLLER 15A 250V	COVER POSITION	ALL	620A	CV1+CV2+CV3		3
025-0600		4PDT RELAY 24VAC (55.34-24VAC)	COVER POSITION	ALL	620A	R1		1
025-0610		4PDT RELAY SOCKET 24VAC	COVER POSITION	ALL	620A	R1		1
025-0611		RELAY SOCKET RETAINING CLIP	COVER POSITION	ALL	620A	R1		1

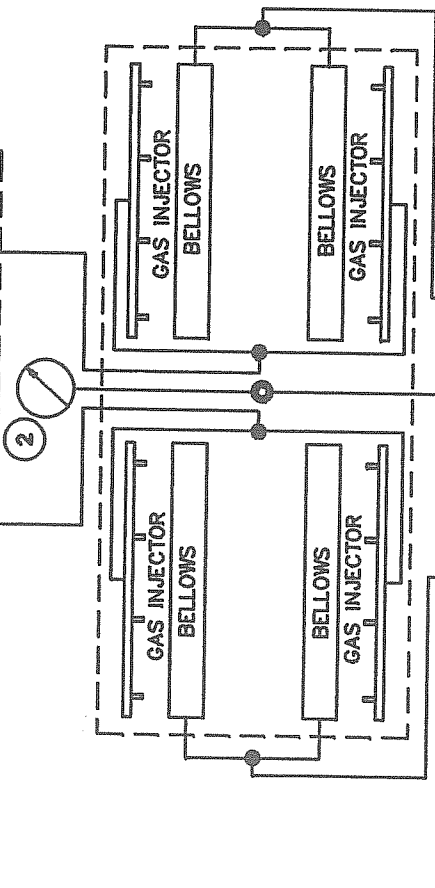
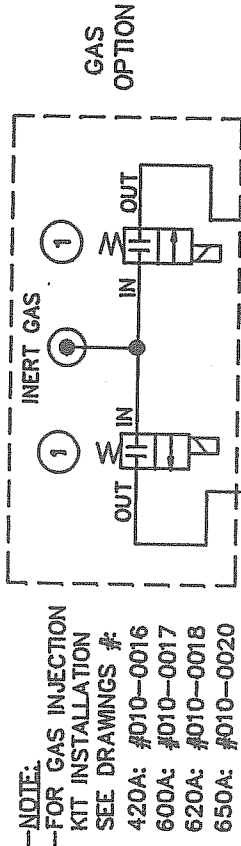


# PNEUMATIC DRAWING

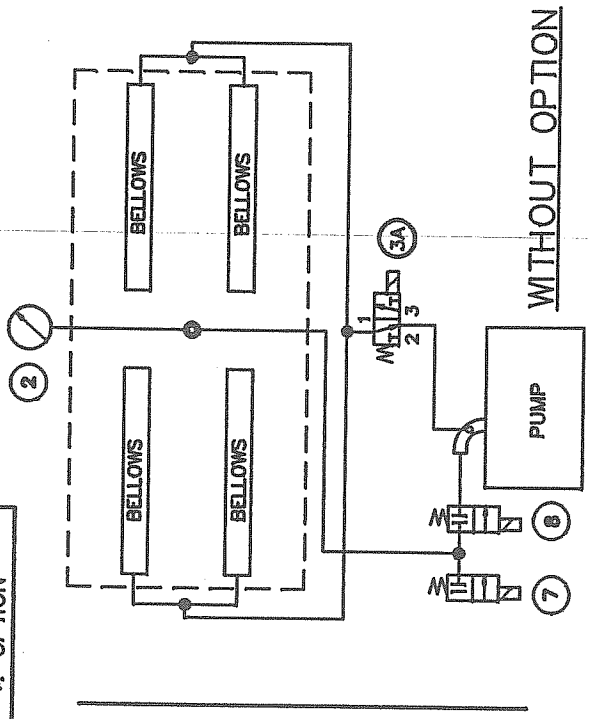


007-0019

ITEM	PART #	DESCRIPTION	QT.
1	106-0010	GAS VALVE	2*
2	114-0260	VACUUM GAUGE	1
3A	106-0070	BELLOWS VALVE	1
3B	106-0070	BELLOWS VALVE	1*
4	114-0147	PRESSURE REGULATOR	1*
5	114-0245	PRESSURE GAUGE	1*
6	114-0170	PRESSURE REGULATOR SUPPORT	1*
7	106-0030	ATMOSPHERE VALVE FOR 420A	1
	106-0030	ATMOSPHERE VALVE FOR 600A, 663M <sup>3</sup> AND 100 M <sup>3</sup>	
	106-0050	ATMOSPHERE VALVE FOR 800A & 620A; 160 M <sup>3</sup> AND 250 M <sup>3</sup>	
8	106-0050	ATMOSPHERE VALVE FOR 650A & 700A	1
	106-0030	VACUUM VALVE FOR 420A	
	106-0050	VACUUM VALVE FOR 600A & 620A	
*: OPTION			



-NOTE:  
-FOR AIR REGULATOR  
OPTION KIT INSTALLATION  
SEE DRAWINGS #: 010-0019  
& 650A: #010-0027  
(FOR EXISTING MACHINES)



WITH OPTIONS

WITHOUT OPTION

MACHINE <b>420A, 600A, 620A &amp; 650A</b>		ST-GERMAIN DE GRANTHAM, QUEBEC CANADA	
PART <b>PNEUMATIC</b>		N.T.S.	
ITEM:	CNC:	SCALE:	QT. 1
MAT:	DWG. BY M.LAVIGNE	DATE: 97-03-11	NO.
APP.		DATE:	
A RE-DRAWN	MODIFICATION		
LET.			

SIPROMAC  
ST-GERMAIN DE GRANTHAM,  
QUEBEC CANADA

007-0019

# 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.

## EMBALLÉUSES 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.

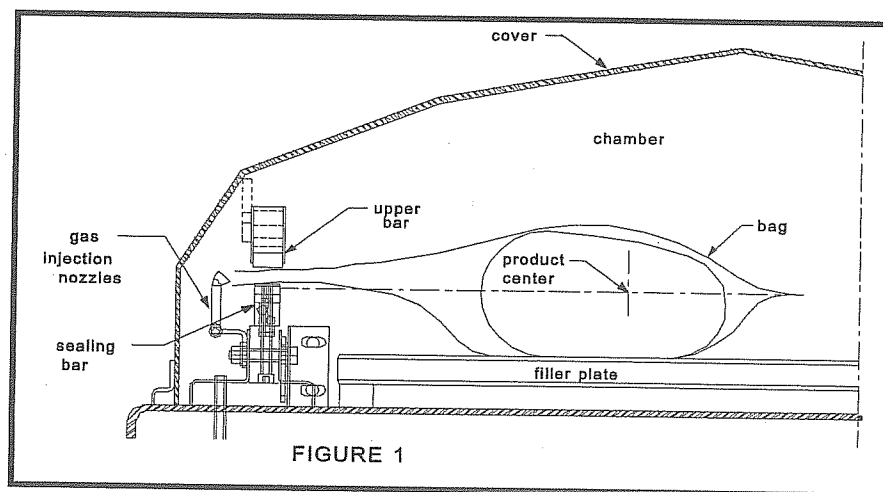
### 3. OPÉRATION:

#### 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: EXEMPLE 1 → (9 caractères)

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

Touche ENTER pour valider la chaîne de caractères

#### 3.3.3.2 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, utilisé 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.

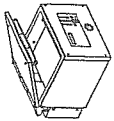
### 3.3.5 System monitor:

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.

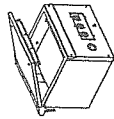




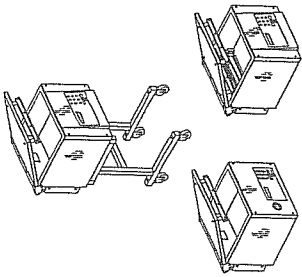




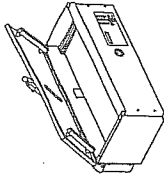
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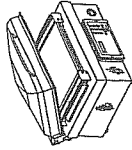
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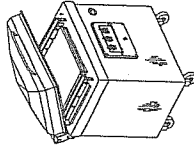
350/350D



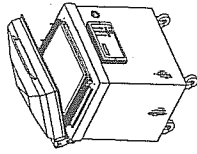
380A



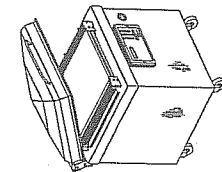
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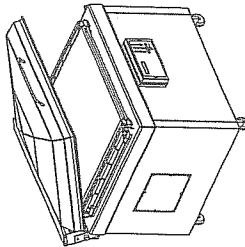
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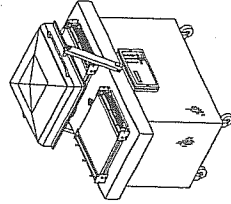
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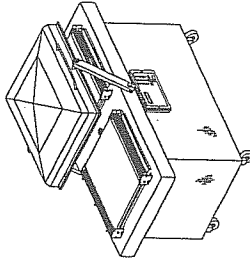
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580A

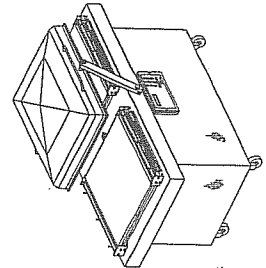


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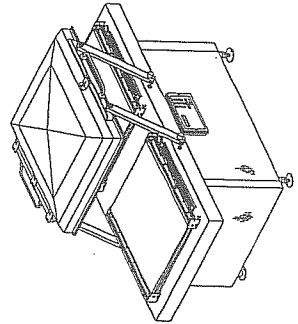


600A

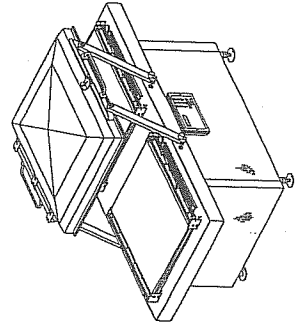
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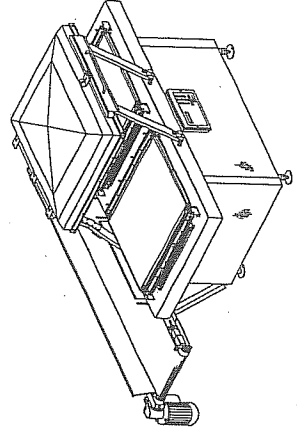
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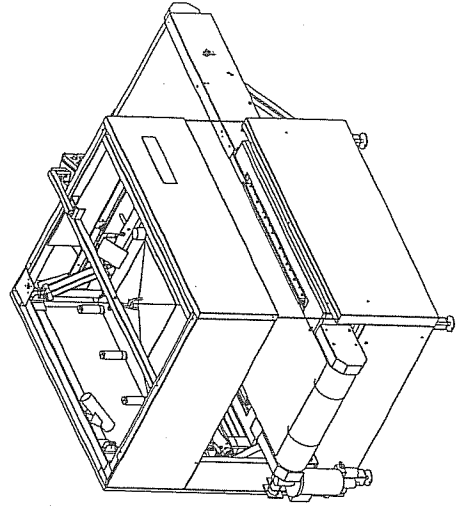
650A



680A



700A



750A