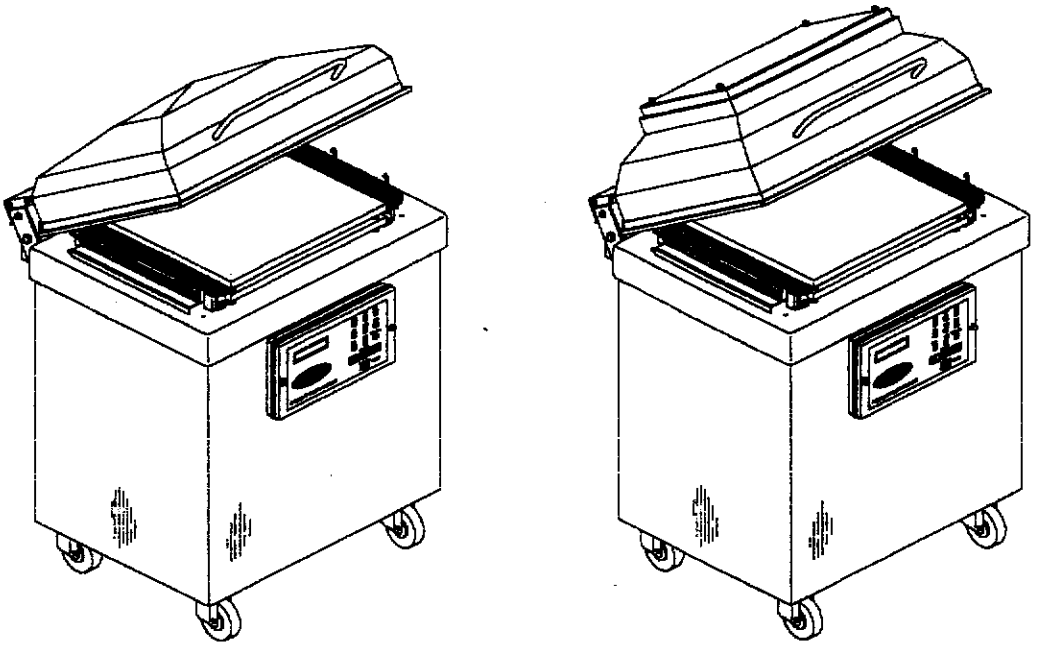
SIPROMAC

MODEL
450A MC-40



OWNERS MANUAL
(MANUEL D'UTILISATION)
(MANUAL DE UTILIZACIÓN)

Safe Operation Practices

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 vacuum 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 instruction regarding this machine in the owners manual.

VACUUM PACKAGING MACHINE

MODEL 450A

GENERAL TABLE OF CONTENTS

VACUUM PACKAGING MACHINES

OPERATION INSTRUCTIONS

TABLE OF CONTENTS

SIPROMAC INC.

VACUUM PACKAGING MACHINES

1. SETTING UP THE MACHINE:

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

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

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

Due to the oil viscosity, the machine is hard to start when temperatures are very low. Therefore the pump should be put in a room with an air temperature of at least 50°F (+10°C). On the other hand, there must be free access of air to the pump to allow for cooling so that operation temperature of 160°F (70°C) is not exceeded.

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.

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.

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

3. OPERATION:

3.1 Working principles:

A vacuum packaging cycle is made of 3 stages. First the vacuum is made, the air is completly taken out of the chamber and from bag containing the product. (See figure 1). Then it is possible to inject neutral gas from the nozzles, if the product is delicate. Finally, a mecanism 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 2" (50 cm) 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.

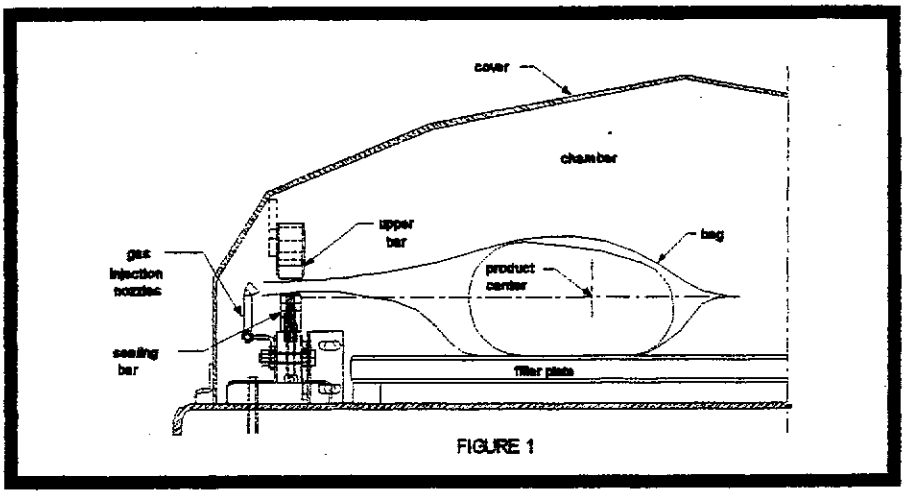


FIGURE 1

3.2 Special packaging:

3.2.1 Gas flushing (option):

There is an atmospheric pressure of 14 lbs/sq. inch (= 1 kg/ sq. cm) 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 couterbalanced 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 level (%) can be set in the program menu.

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

3.2.2 Electrical bag cut (optional):

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

3.3 Vacuum packaging operation:

Note: Refer to the menus structure on page 8 and the keyboard detail on page 9.

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 menu:

3.3.2.1 Create a program:

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

3.3.2.2 Delete a program:

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

3.3.2.3 Select operating mode:

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

3.3.3 Programs menu:

3.3.3.1 Program identification:

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

Example: EXAMPLE 1 (9 characters) →
keys 2, 2, ENTER → E
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 sequencally displayed on LCD screen, except for the parameters established to zero, which are not displayed:

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

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

3.3.5 System monitor:

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

-MENUS STRUCTURE-

- Functions menu:

  "F1 CREATE A PRGM"
  "F2 DELETE A PRGM"
  "F3 SELECT OPMODE" (automatic units only)

- Programs menu:

  "Pxx NAME"

  Program submenu:

	"VACUUM: xx.x%"	(10.0% - 99.5%)
	"VACUUM PLUS: xxs"	(0s - 99s)
(units with gas option)	"GAS FLUSH: xx.x%"	(0.0% - 10% below the vacuum level)
	"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 LOADING TIME" (automatic units only)

  "D8 UNLOADNG TIME" (automatic units only)

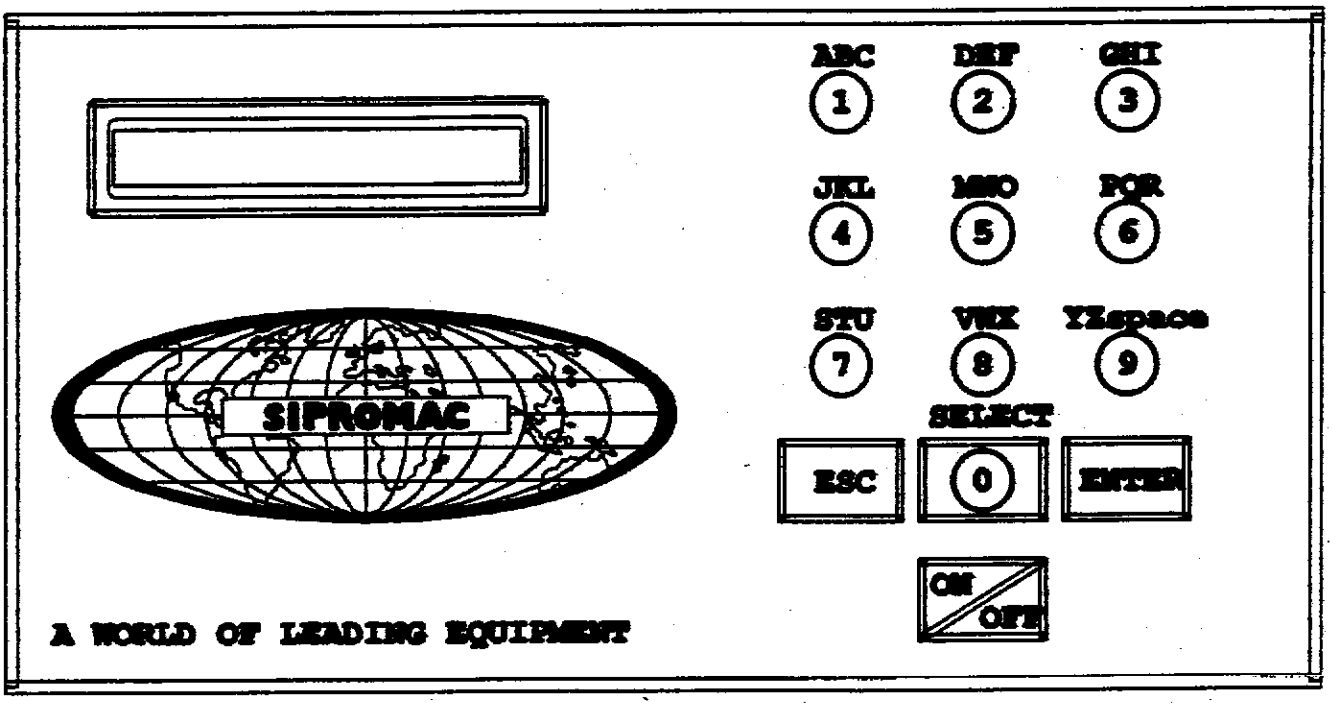
  "SYSTEM MONITOR" (no access code required)

  "SOFTWARE: R x.xx"

  "WORK HRS: xxxxx"

  "CYCLES: xxxxxxx"

-KEYBOARD DETAILS-



WARNING: ALL ELECTRICAL WORK DESCRIBED IN THIS BROCHURE SHOULD BE DONE BY A QUALIFIED AND AUTHORIZED TECHNICIAN.

3.4 Daily cleaning:

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

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 duringthe 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.

Evacuation time is too short:

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.

Warning:Verify connections of measuring equipment before verifing machine.

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

4.3 Faulty seal:

4.3.1 Insufficient seal:

Damaged teflon or silicone rubber.

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

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

4.3.2 No seal:

Sealing wire burnt.

Faulty contact in sealing circuit.

Sealing transformer burnt through.

Contactor does not work.

4.3.3 Permanent sealing current:

Contactor is jammed check sealing transformer for damage through overload.

4.3.4 Seal does not stick:

Insufficient layer of polyethylene (inferior quality of bags).

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

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

Warning: 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 8.

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

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

Keep in mind that in most cases trouble is due to a leakage, loose electrical connection or evident dammage to the main component: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).

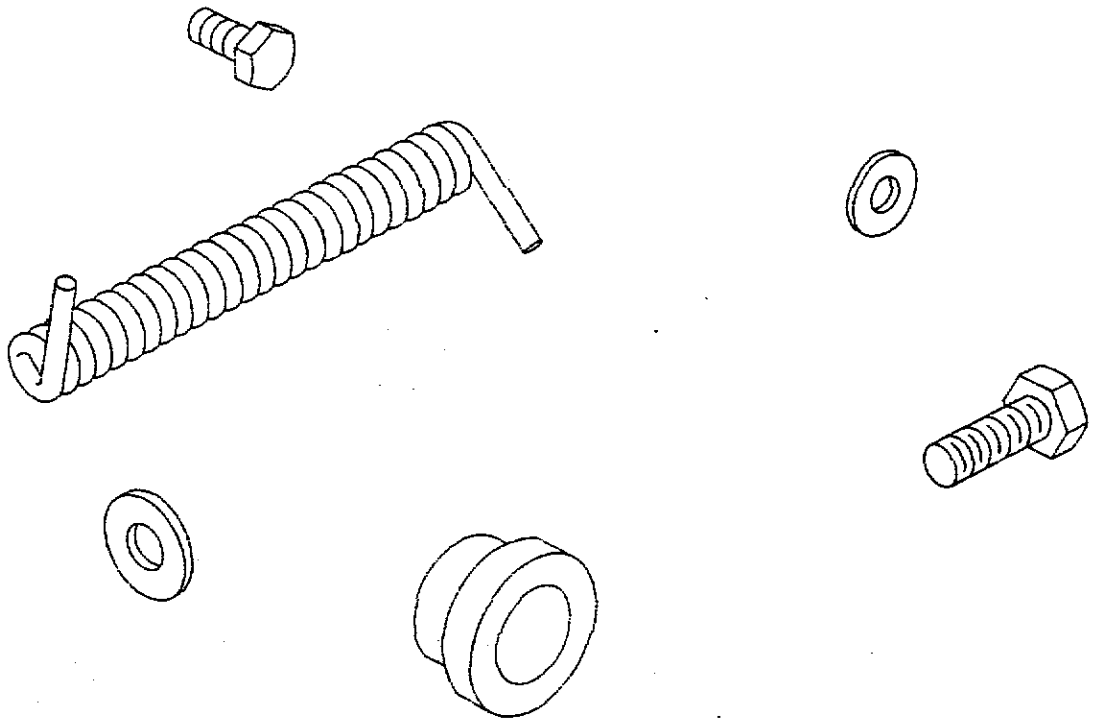
Check vacuum in chamber with precision vacuumeter.

Check function of cycle with various settings of timers.

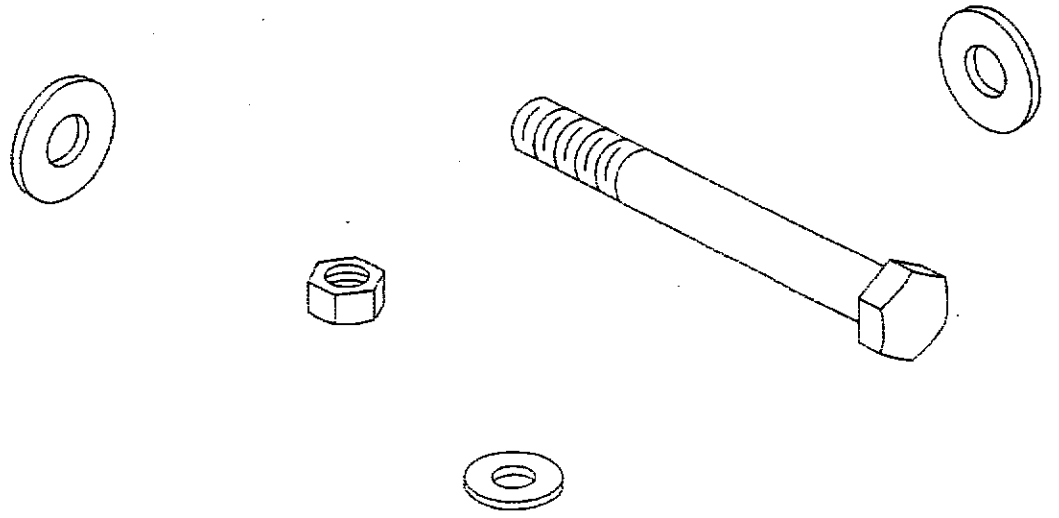
INSTALLATION NOTICE FOR MODELS:
420A,450T,450A,550A,600A,620A, 650A AND 700A

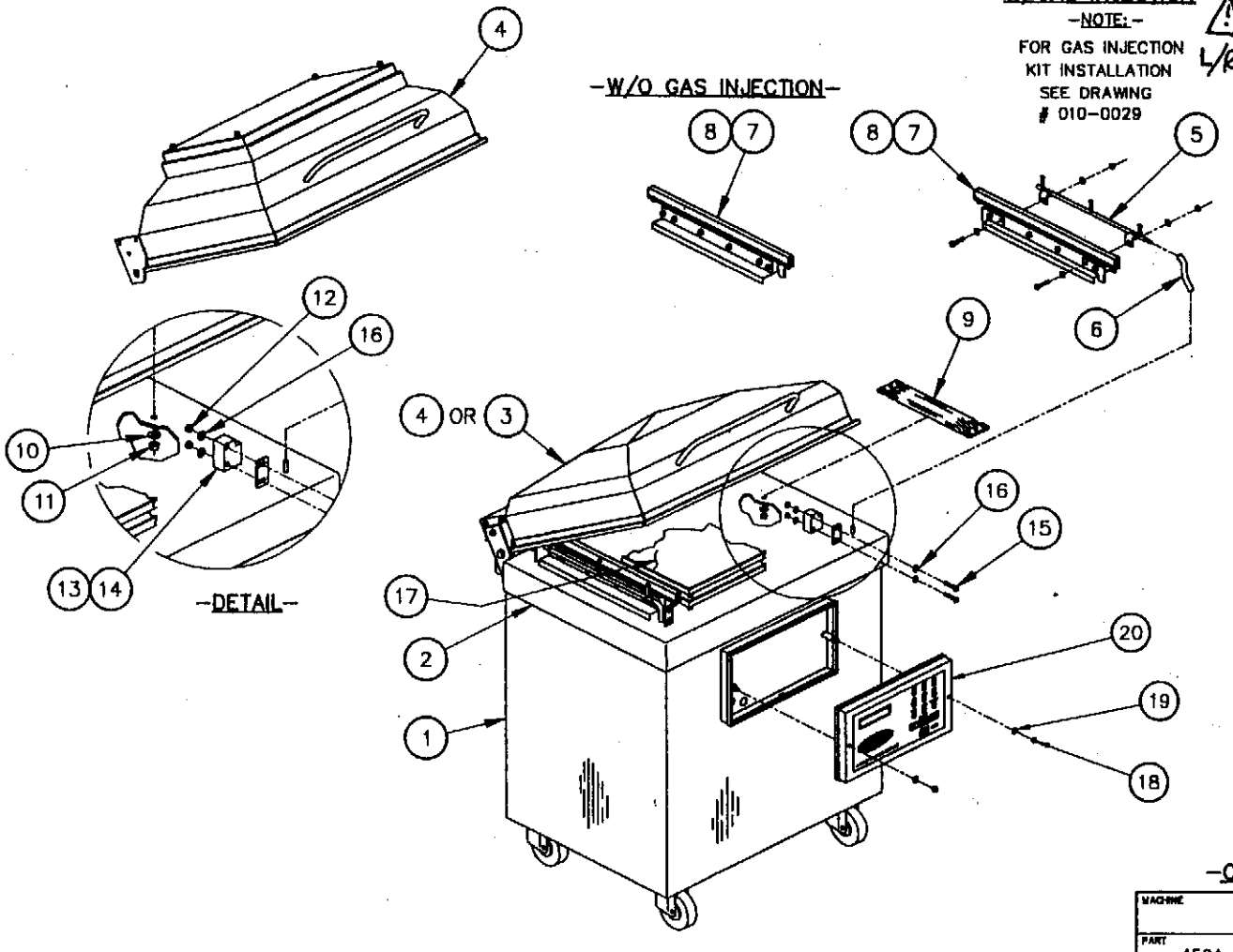
IN ORDER TO RESPECT NSF REGULATIONS:

NOTE: A PLASTIC CAP IS INSTALLED ON THE TABLE TOP VACUUM INLET USED FOR LEANING PURPOSES ONLY AND IS TO BE REMOVED PRIOR TO OPERATING THE MACHINE.



MECHANICAL DRAWING





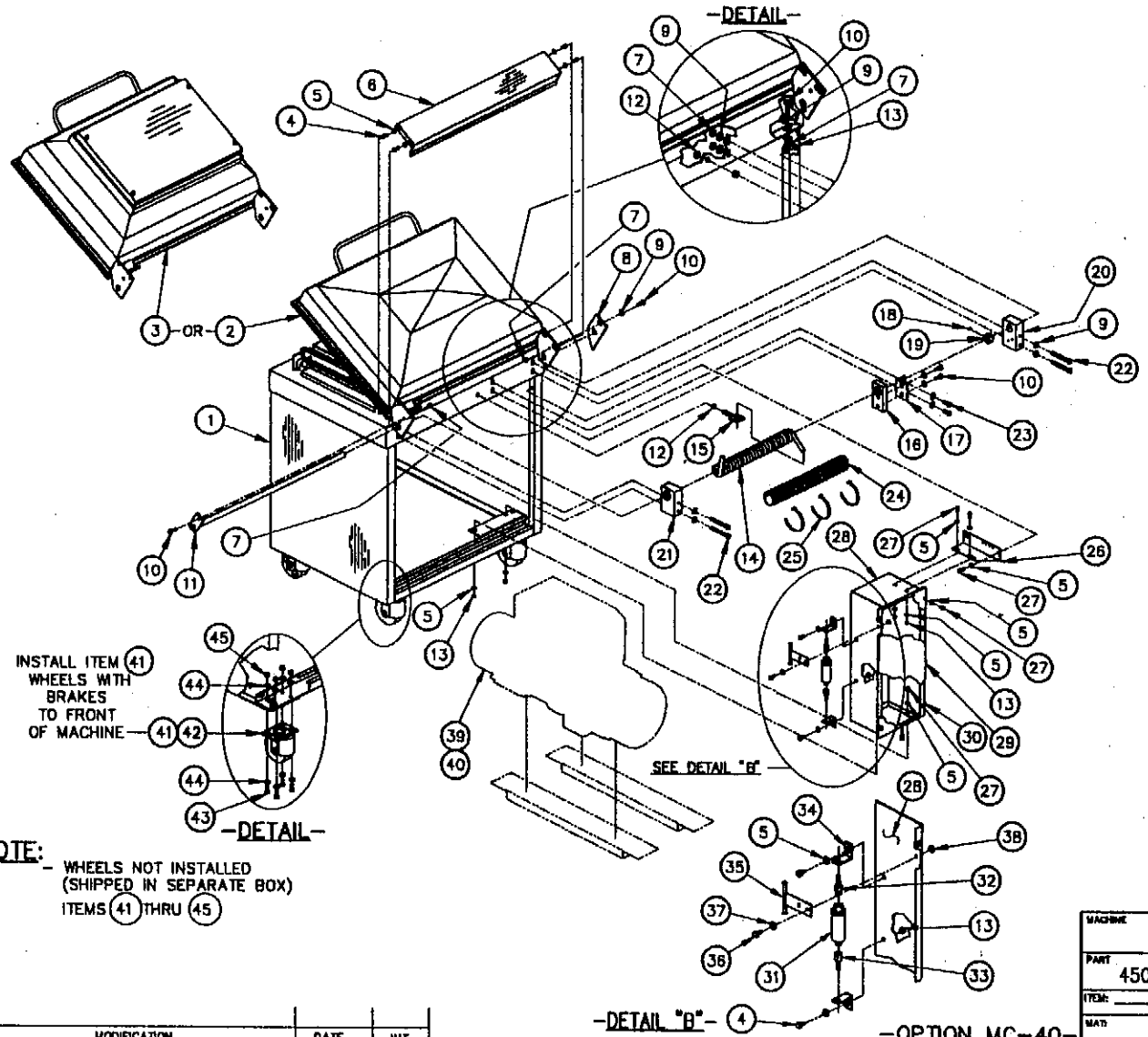
ITEM	PART #	DESCRIPTION	QT.
1	005-0602	MC-40 STRUCTURE ASSEMBLY	1
2	005-0531	TABLE ASSEMBLY	1
3	005-0540	COVER ASSEMBLY	1
4	005-0530	9 1/2" PLEXI COVER ASS'Y (OPT.)	1
5	005A0533	GAS INJECTION BAR ASS'Y (OPT.)	2
6	008-0464	GAS INJECTION CONNECTION TUBE (OPT.)	2
7	005-0564	SEAL BAR ASSEMBLY W/ SUPPORT	2
8	005-0565	SEAL BAR ASS'Y W/ SUPPORT (BAG CUT OPT.)	2
9	005-0532	BELLOWS ASSEMBLY	2
10	051-0780	FLAT WASHER 3/8" S/S	2
11	051-0620	HEX. NUT 3/8"-16 NC. S/S	2
12	051-0581	HEX. NUT 1/4"-20 NC. NYLON LOCK S/S	8
13	002-0326	LEFT/SEAL BAR GUIDE BLOCK	2
14	002-0327	RIGHT/SEAL BAR GUIDE BLOCK	2
15	051-0250	HEX. BOLT 1/4"-20 NC. X 1 1/2" S/S	8
16	051-0740	FLAT WASHER 1/4" S/S	16
17	005-0534	FILLER PLATE ASSEMBLY	2
18	051-0591	ACORN NUT 1/4"-20 NC. S/S	2
19	052-2045	FLAT WASHER 1/4" COPPER	2
20	005-0583	P.C. BOARD SUPPORT ASSEMBLY	1

-OPTION MC-40-

LET.	MODIFICATION	DATE	INT.

MACHINE: 450A	METRIC TOLERANCE: 0. ± .5 / .0 ± .02 / .00 ± .005 / .000 ± .0005 / ANGLE ± 1°	INCH TOLERANCE: .0 ± .015" / .00 ± .005" / .000 ± .0005"	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART: 450A MC-40 FRONT VIEW		N.T.S.	
ITEM:	CHD:	SCALE:	QT. 1
MAT:	DRN. ST-L.MARCOTTE DATE 98-05-27 / APP. DATE		NO. 005-0601

005-0601



ITEM	PART #	DESCRIPTION	QT.
1	005-0601	450A MC-40 FRONT VIEW	1
2	005-0540	COVER ASSEMBLY	1
3	005-0530	9 1/2" COVER ASSEMBLY (OPTION)	1
4	051-0185	SCREW 1/4"-20 NC. X 1/2" PAN PHIL. S/S	4
5	051-0740	FLAT WASHER 1/4" S/S	19
6	004-0172	SPRING COVER PRE-ASSEMBLY	1
7	051-0620	HEX. NUT 3/8"-16 NC. S/S	12
8	001-1335	CHAMBER STOPPER	1
9	051-0783	FLAT WASHER 3/8" (THICK) S/S	25
10	051-0360	HEX. BOLT 3/8"-16 NC. X 1" S/S	8
11	004-0128	COVER AXIS PRE-ASSEMBLY	1
12	051-0630	HEX. NUT 1/2"-13 NC. S/S	2
13	051-0581	HEX. NUT 1/4"-20 NC. NYLON LOCK	7
14	008-0460	COVER SPRING	1
15	005-0346	SPRING TENSION SUPPORT PRE-ASS'Y	1
16	004-0276	CENTRAL COVER AXIS SUPPORT	1
17	001-1540	CENTRAL COVER AXIS SUPPORT FIXATION	1
18	051-0178	SET SCREW 1/4"-20 NC. X 5/16" S/S	1
19	005-0348	MICRO-SWITCH COLLAR ASS'Y	1
20	004-0274	LEFT COVER AXIS SUPPORT	1
21	004-0275	RIGHT COVER AXIS SUPPORT	1
22	051-0424	HEX. BOLT 3/8"-16 NC. 3 1/2" S/S	4
23	051-0360	HEX. BOLT 3/8"-16 NC. 1 1/4" S/S	2
24	038-0350	SLIT COORUG LOOM 2" ID X 370 MM	1
25	057-0330	CABLE TIES 14" LONG BLACK	3
26	001-1384	UPPER E-BOX SUPPORT (RIGHT)	1
27	051-0180	HEX. BOLT 1/4"-20 NC. X 1/2" S/S	11
28	005-0347	ELECTRICAL BOX PRE-ASSEMBLY	1
29	004-0273	ELECTRICAL BOX COVER PRE-ASSEMBLY	1
30	056-0020	SPRING NUT 1/4"-20 NC. STEEL	4
31	114-2020	DRYER FILTER	1
32	101-0200	STRAIGHT 1/4" MNPT X 1/4" HOSE	1
33	101-0210	STRAIGHT 1/4" FNPT X 1/4" HOSE	1
34	001-2062	DRYER SUPPORT	2
35	005-0323	GAS INLET ASSEMBLY (OPTION)	1
36	051-0180	HEX BOLT 1/4"-20NC X 1/2" S/S (OPTION)	1
37	051-0740	FLAT WASHER 1/4" S/S (OPTION)	1
38	051-0581	HEX NUT 1/4"-20NC NYLON LOCK S/S (OPTION)	1
39	004-0287	"BUSH" PUMPS INSTALLATION	1
40	004-0288	"LEYBOLD" PUMPS INSTALLATION	1
41	130-4PHB	4" PL. CASTER SWIVEL W/ BRAKE	2
42	130-4PHO	4" PL. CASTER SWIVEL W/O BRAKE	2
43	052-0520	BOLT 5/16"-18 NC. X 3/4" ZINC	16
44	051-0760	FLAT WASHER 5/16"-18 NC. ZINC	32
45	052-3110	HEX. NUT 5/16"-18 NC. ZINC	16

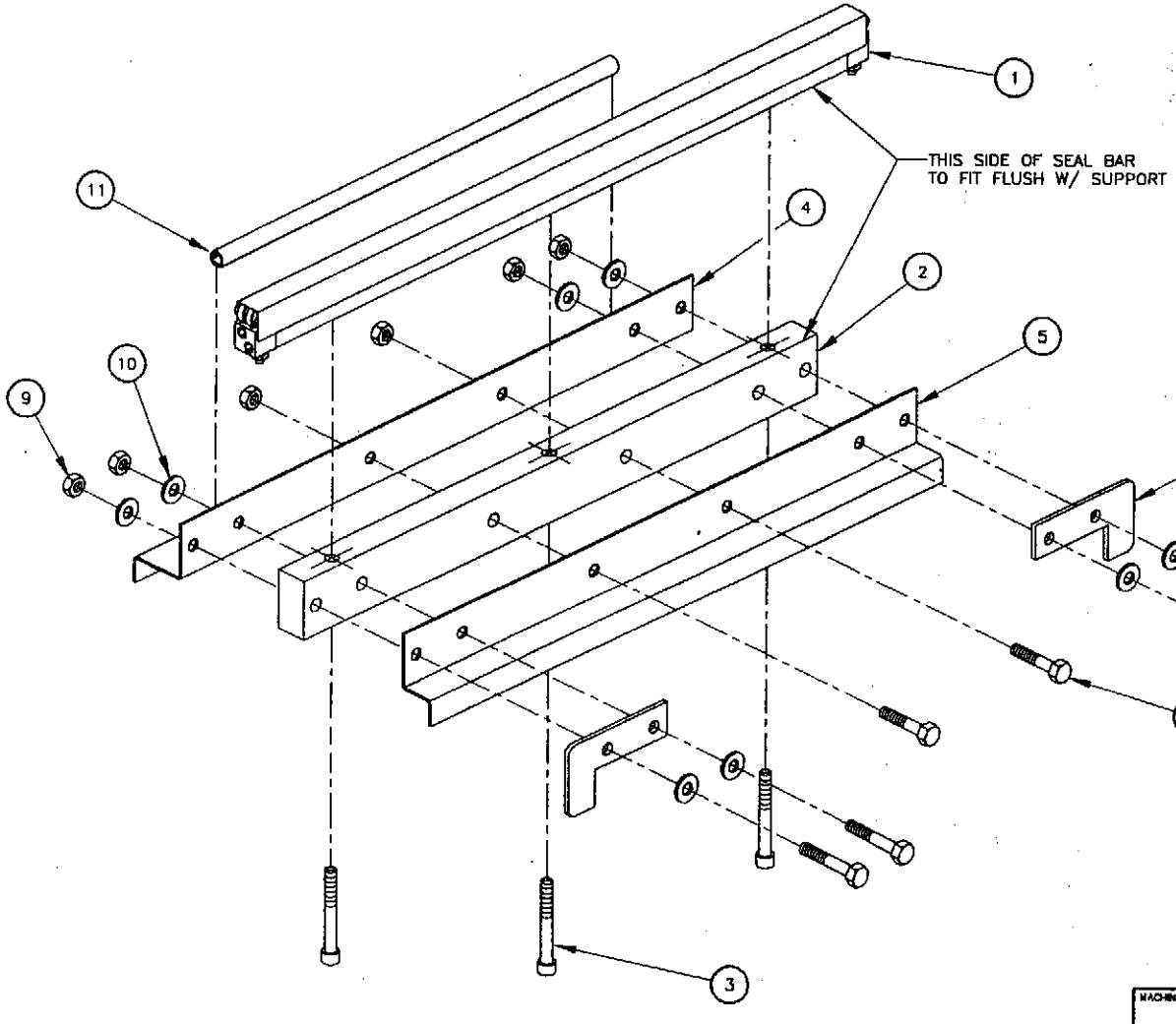
NOTE:
- WHEELS NOT INSTALLED (SHIPPED IN SEPARATE BOX) ITEMS (41) THRU (45)

LET.	MODIFICATION	DATE	INT.

MACHINE: 450A
PART: 450A MC-40 REAR VIEW
METRIC TOLERANCE: 0 ± .5, .0 ± .05, .00 ± .005, .000 ± .0005, ANGLE ± 1°
INCH TOLERANCE: .0 ± .010", .00 ± .005", .000 ± .0005"
N.T.S.
SIPROMAC
ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM:
CNC:
SCALE:
QT. 1
MAT'L
DRWN. BY L.MARCOTTE
DATE 98-05-28
APPR.
DATE
NO. 005-0607

005-0607

16

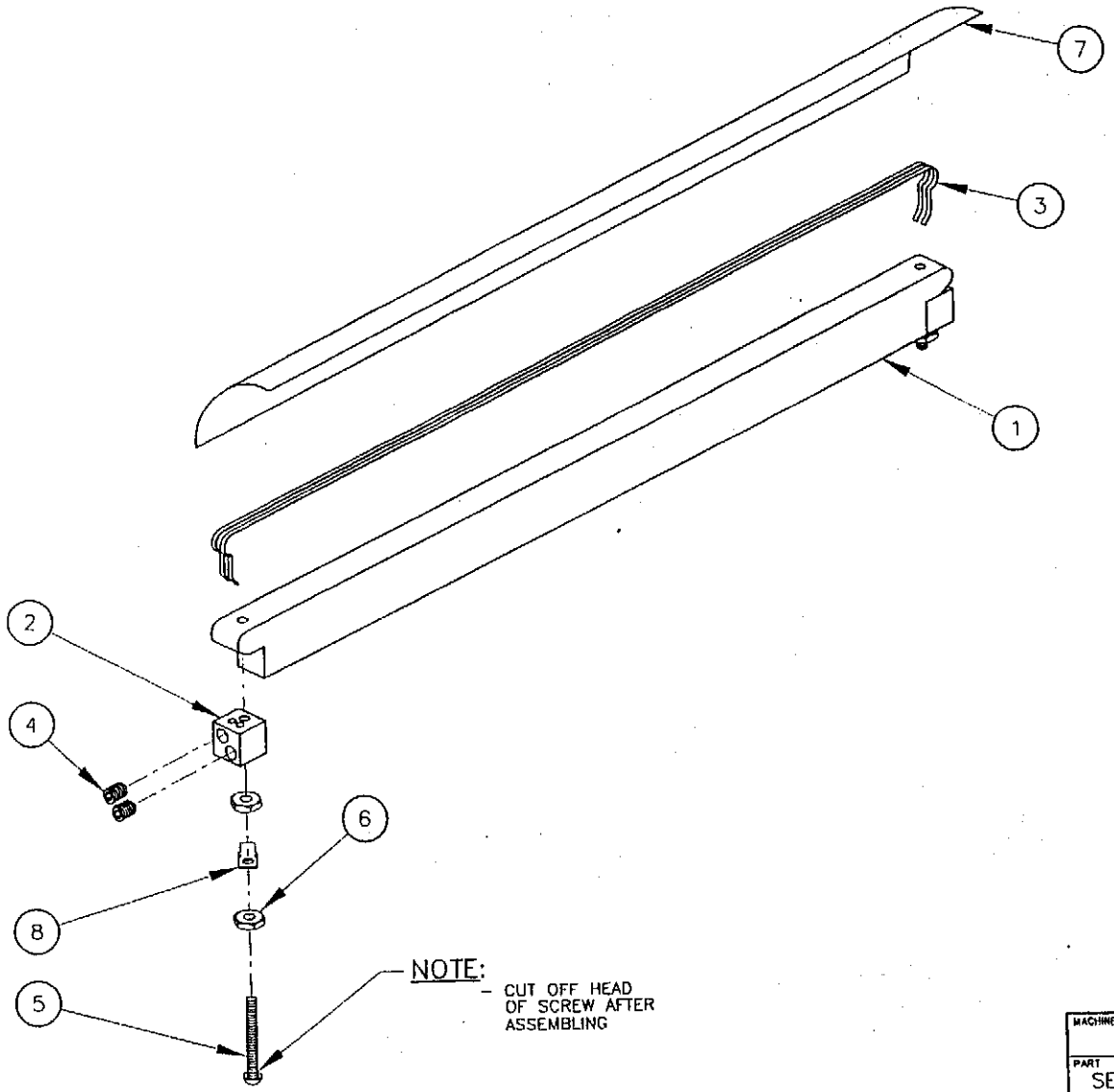


ITEM	PART #	DESCRIPTION	QT.
1	004--0352	SEAL BAR PRE-ASSEMBLY	2
2	002-0512	SEAL BAR SUPPORT (TABLE)	2
3	051-0256	CAP HEX. SKT. BOLT 1/4"-20 NC X 1 3/4" S/S	6
4	001-1960	EXTERIOR BELLOWS COVER	2
5	001-1856	INTERIOR BELLOWS COVER	2
6	001-1858	SEAL BAR GUIDE	4
7	051-0250	HEX. BOLT 1/4"-20 NC. X 1 1/2" S/S	8
8	051-0230	HEX. BOLT 1/4"-20 NC. X 1 1/4" S/S	4
9	051-0581	HEX. NUT 1/4"-20 NC. NYLON LOCK S/S	12
10	051-0740	FLAT WASHER 1/4" S/S	16
11	038-0230	WRING DUCT W/ ADHESIVE BACKING (0.35" X 0.5" X 300) PVC	2

LET.	MODIFICATION	DATE	INT.
B	ADDED 400	99-05-06	S.L.
A	REDRAWN/ WAS 004-0353/ MODIF. NO. A-0226	97-10-20	A.P.

MACHINE: 400 & 450A
PART: SEAL BAR ASSEMBLY W/ SUPPORT
METRIC TOLERANCE: 0 ± .3, .0 ± .05, .00 ± .005, .000 ± .0005, ANGLE ± 1°
INCH TOLERANCE: .0 ± .015", .00 ± .005", .000 ± .0005"
N.T.S.
SIPROMAC
ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM:
CNC:
SCALE:
QT. 2
MAT:
DWG BY A. PROVENCHER
DATE 97-10-20
APP.
DATE
NO. 005-0564

005-0564

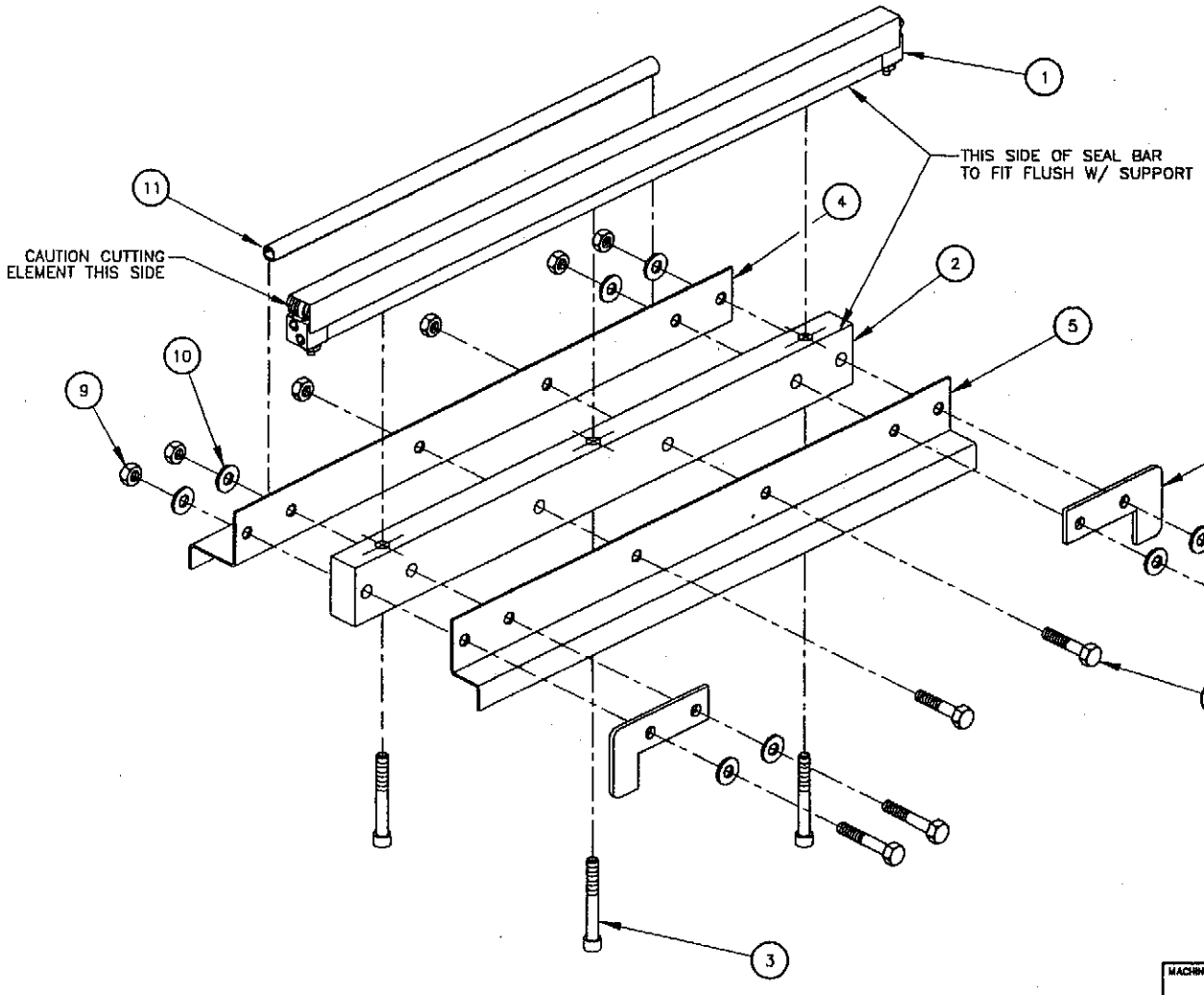


ITEM	PART #	DESCRIPTION	QT.
1	002-04B1	SEAL BAR (TABLE)	1
2	002-0031	CONNECTOR	2
3	039-0200	SEALING ELEM. STD TWIN (2x626mm EA.)	0.014
4	052-0395	SCREW 1/4"-20 NC. X 5/16" SET HEX SKT OVAL PT	4
5	052-0250	SCREW #8-32 X 1 1/2" RND SLOT BRASS	2
6	051-0550	NUT #8-32 S/S	4
7	176-0200	TEFLON TAPE 55 ADHESIVE X 2" X (496mm EA.)	0.063
8	027-0400	CONNECTOR ADAPTOR 1/4" X #10 STUD	2

LET.	MODIFICATION	DATE	INT.
C	ADDED 400	99-05-06	S.L.
B	REDRAWN	98-02-10	A.P.

MACHINE: 400 & 450A
PART: SEAL BAR PRE-ASSEMBLY
METRIC TOLERANCE: 0. ± .5, 0 ± .05, .00 ± .005, .000 ± .0005, ANGLE ± 1°
INCH TOLERANCE: .0 ± .015", .00 ± .003", .000 ± .0005"
N.T.S.
SIPROMAC
ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM:
CNC:
MAT:
DWG BY A. PROVENCHER
APP.
DATE 98-02-10
DATE
SCALE M
QT. 2
NO. 004-0352

004-0352



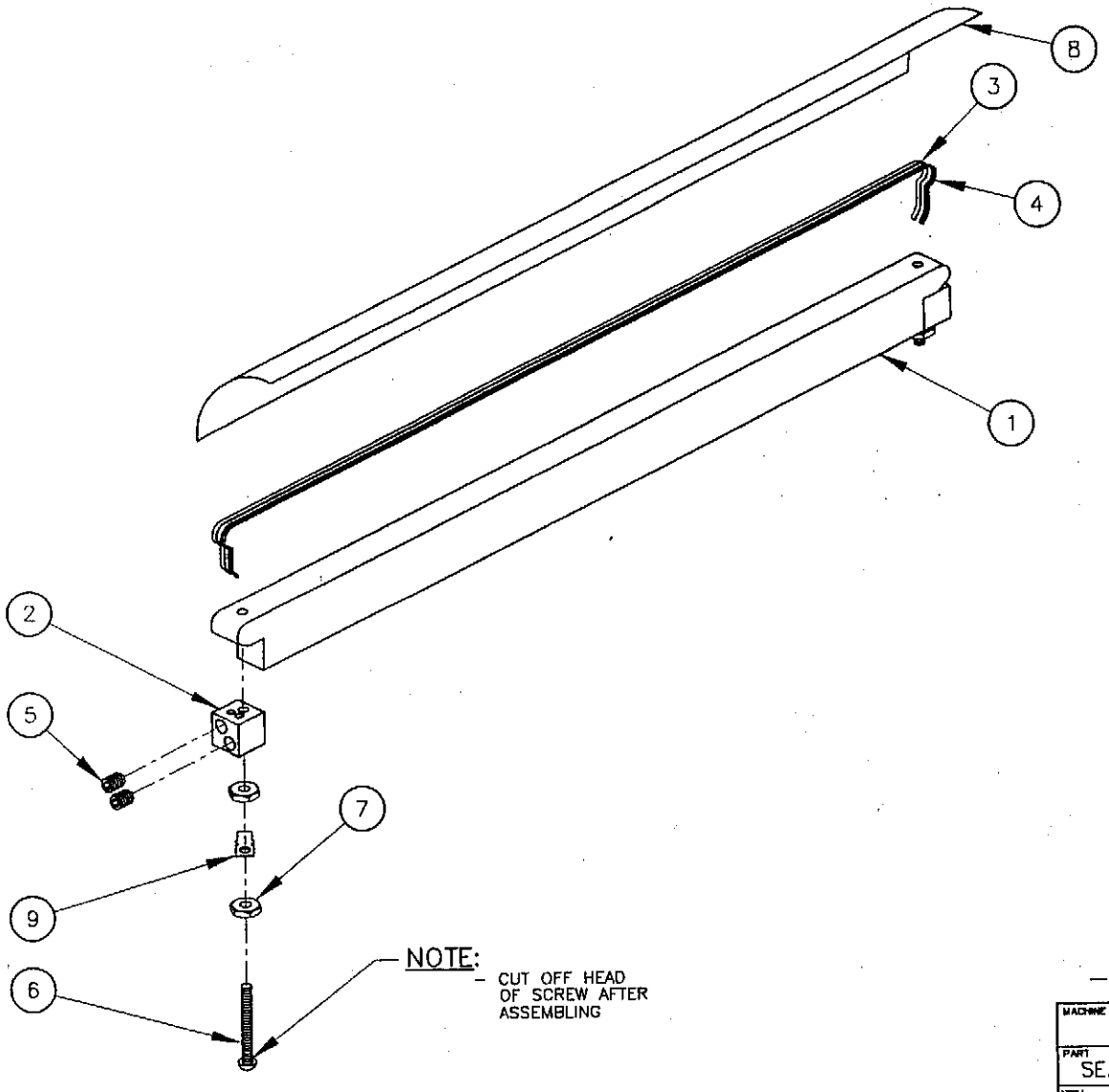
ITEM	PART #	DESCRIPTION	QT.
1	004-0355	BAG CUT SEAL BAR PRE-ASSEMBLY	2
2	002-0512	SEAL BAR SUPPORT (TABLE)	2
3	051-0256	CAP HEX. SKT. BOLT 1/4"-20 NC X 1 3/4" S/S	6
4	001-1960	EXTERIOR BELLOWS COVER	2
5	001-1856	INTERIOR BELLOWS COVER	2
6	001-1858	SEAL BAR GUIDE	4
7	051-0250	HEX. BOLT 1/4"-20 NC. X 1 1/2" S/S	8
8	051-0230	HEX. BOLT 1/4"-20 NC. X 1 1/4" S/S	4
9	051-0581	HEX. NUT 1/4"-20 NC. NYLON LOCK S/S	12
10	051-0740	FLAT WASHER 1/4" S/S	16
11	038-0230	WRNG DUCT W/ ADHESIVE BACKING (0.35" X 0.5" X 300) PVC	2

-BAG CUT OPTION-

MACHINE: 400 & 450A	METRIC TOLERANCE: X ± .5, .X ± .05, .XX ± .008, .XXX ± .0005, ANGLE ± 1°	INCH TOLERANCE: .0 ± .015", .00 ± .005", .000 ± .0005"	SIPROMAC ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART: SEAL BAR ASSEMBLY W/ SUPPORT	N.T.S.		
ITEM:	CNC:	SCALE:	QT. 2
MAT:	DWG BY: A. PROVENCHER DATE: 97-10-20 APP. DATE		NO. 005-0565

LET.	MODIFICATION	DATE	INT.
A	ADDED 400	99-05-06	S.L.

005-0565



ITEM	PART #	DESCRIPTION	QT.
1	002-0481	SEAL BAR	1
2	002-0031	CONNECTOR	2
3	039-0230	REFLEX BAND 2.5MM (626mm EA.)	0.063
4	039-0270	"T" PROFILE CUT. ELEM. (626mm EA.)	0.063
5	052-0395	SCREW 1/4"-20 NC. X 5/16" SET HEX SKT OVAL PT	4
6	052-0250	SCREW #8-32 X 1 1/2" RND SLOT BRASS	2
7	051-0550	NUT #8-32 S/S	4
8	176-0200	TEFLON TAPE 5S ADHESIVE X 2" X (496mm EA.)	0.063
9	027-0400	CONNECTOR ADAPTOR 1/4" X #10 STUD	2

NOTE:
- CUT OFF HEAD OF SCREW AFTER ASSEMBLING

-BAG CUT OPTION-

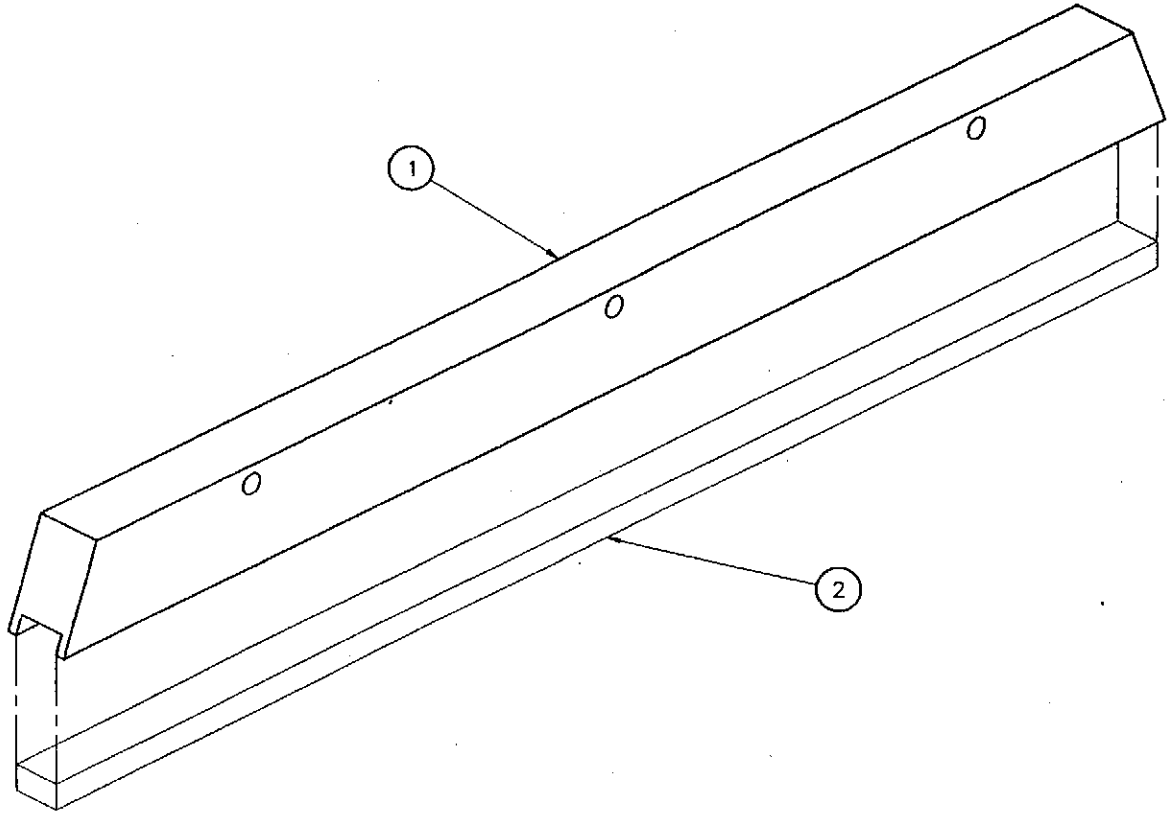
LET.	MODIFICATION	DATE	INT.
C	ADDED 400	99-05-06	S.L.
B	REDRAWN	98-02-10	A.P.

MACHINE: 400 & 450A	METRIC TOLERANCE: 0. ± .5, .0 ± .05, .00 ± .005, .000 ± .0005, ANGLE ± 1°	INCH TOLERANCE: .0 ± .015", .00 ± .005", .000 ± .0005"	SIPROMAC ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
PART: SEAL BAR PRE-ASSEMBLY		N.T.S.	
ITEM:	CNC:	SCALE: M	QT. 2
MAT:	DWG BY: A. PROVENCHER, APP.	DATE: 98-02-10, DATE	NO. 004-0355

2 0

004-0355

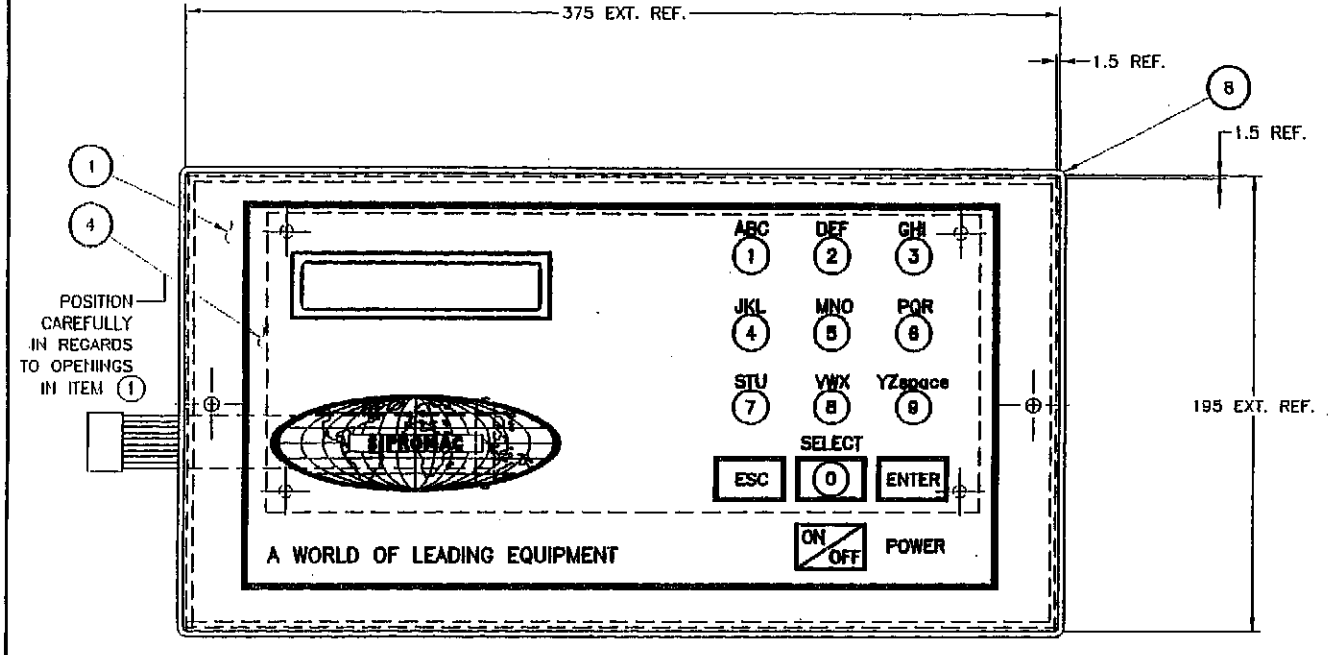
ITEM	PART #	DESCRIPTION	QT.
1	002A0480	UPPER SEAL BAR SUPPORT	1
2	008-0450	UPPER SEAL BAR RUBBER	1

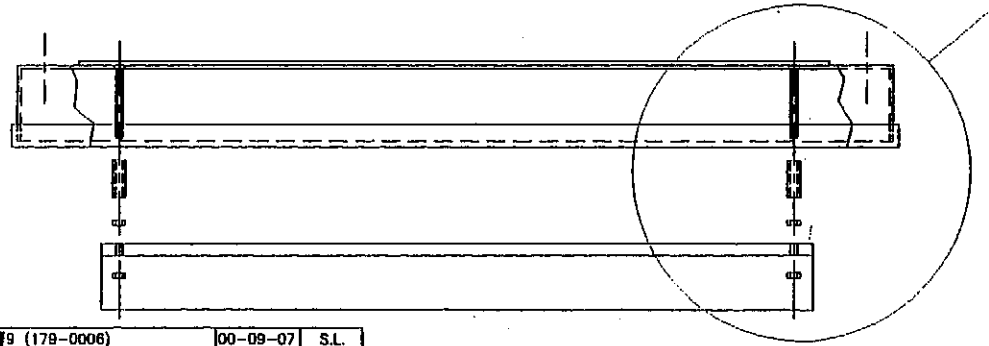


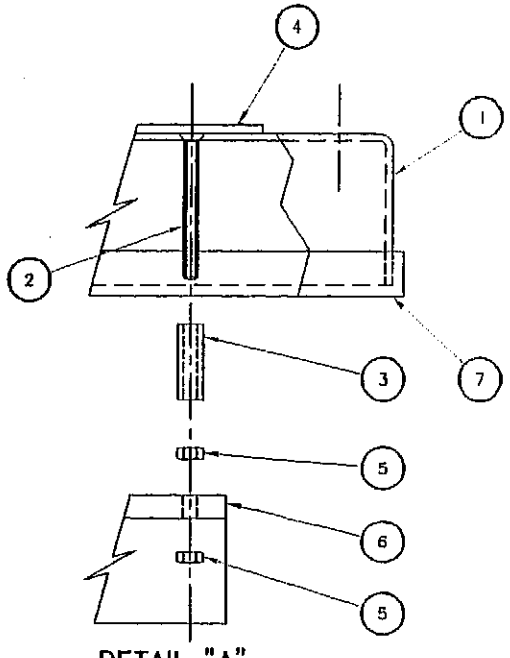
C	REDRAWN	99-08-02	S.L.
LET.	MODIFICATION	DATE	INT.

MACHINE: 400 & 450A
PART: UPPER SEAL BAR PRE-ASS'Y
METRIC TOLERANCE: .0 ± .5 / .00 ± .05 / .000 ± .005 / ANGLE ± 1°
INCH TOLERANCE: .0 ± .015" / .00 ± .005" / .000 ± .0005"
N.T.S.
SIPROMAC
ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM: ____ QNC: _____ SCALE: ____ QT. 2
MAT: ____ DWG BY: S. LAROUCHE DATE: 99-08-02
APP. ____ DATE ____
NO. 004A0351

004A0351







-DETAIL "A"-

ITEM	PART #	DESCRIPTION	QT.
1	004-0425	FRONT MC-40 SUPPORT PRE-ASS'Y	1
2	051-0092	SCREW 4-40 X 1 1/4" FLAT SLOT S/S	4
3	058-0120	CPVC SPACER 0.120" X 1/4" X 5/8"	4
4	033-0015	MC-40 KEYBOARD "SIPROMAC"	1
5	051-0540	NUT #4-40 S/S	8
6	033-3003	MC-40 DIGITAL P.C. BOARD	1
7	178-0014	RUBBER 1/4" X 3/8" X 1/16" "U SHAPED"	3.7

NOTE:

- OPTIONAL FOR 420A, 450T, 450A & 550A

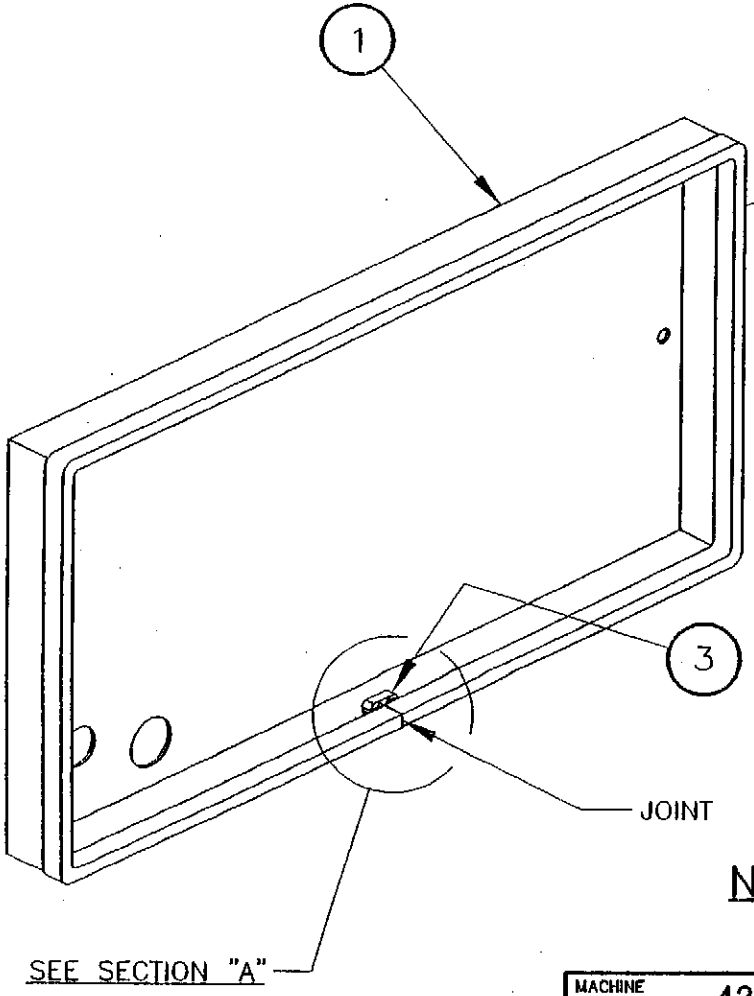
LET.	MODIFICATION	DATE	INT.
D	REMOVED ITEM #9 (178-0006)	00-09-07	S.L.
C	ADDED 420A, 450T, 450A & 550A	98-05-25	L.M.
B	ADDED 600A & 620A / WAS 005-0319	98-05-15	L.M.
A	WAS 005-0318/ MODIF. NO. A-0258	98-04-28	A.P.

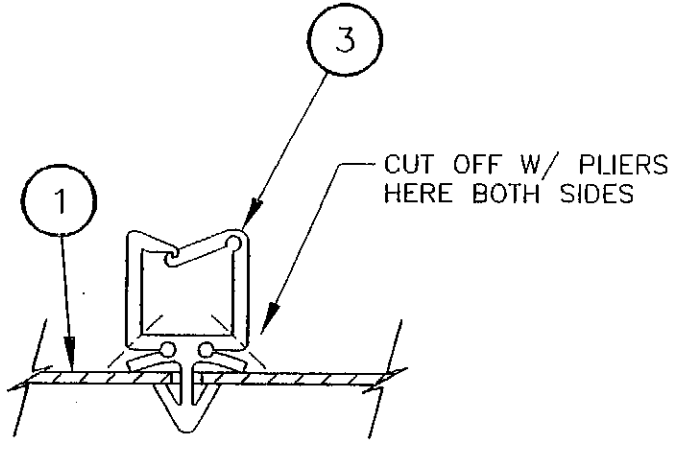
MACHINE	420A, 450T, 450A 550A, 600A, 620A & 650A
PART	FRONT MC-40 SUPPORT ASS'Y
METRIC TOLERANCE	0. ± .5 .0 ± .05 .00 ± .005 .000 ± .0005 ANGLE ± 1°
INCH TOLERANCE	.0 ± .015" .00 ± .005" .000 ± .0005"
	N.T.S.
ITEM	
CHG	
SCALE	
QT.	1
MAT'L	
DWG BY	A. PROVENCHER
DATE	98-04-28
APP.	LT
DATE	
NO.	005-0583

005-0583

005-0584

ITEM	PART #	DESCRIPTION	QT.
1	004-0426	REAR MC-40 SUPPORT PRE-ASS'Y	1
2	179-0014	RUBBER 1/4" X 3/8" X 1/16" ("U" SHAPED)	3.9
3	057-0002	CABLE TIE HOLDER	1





-SECTION "A"-

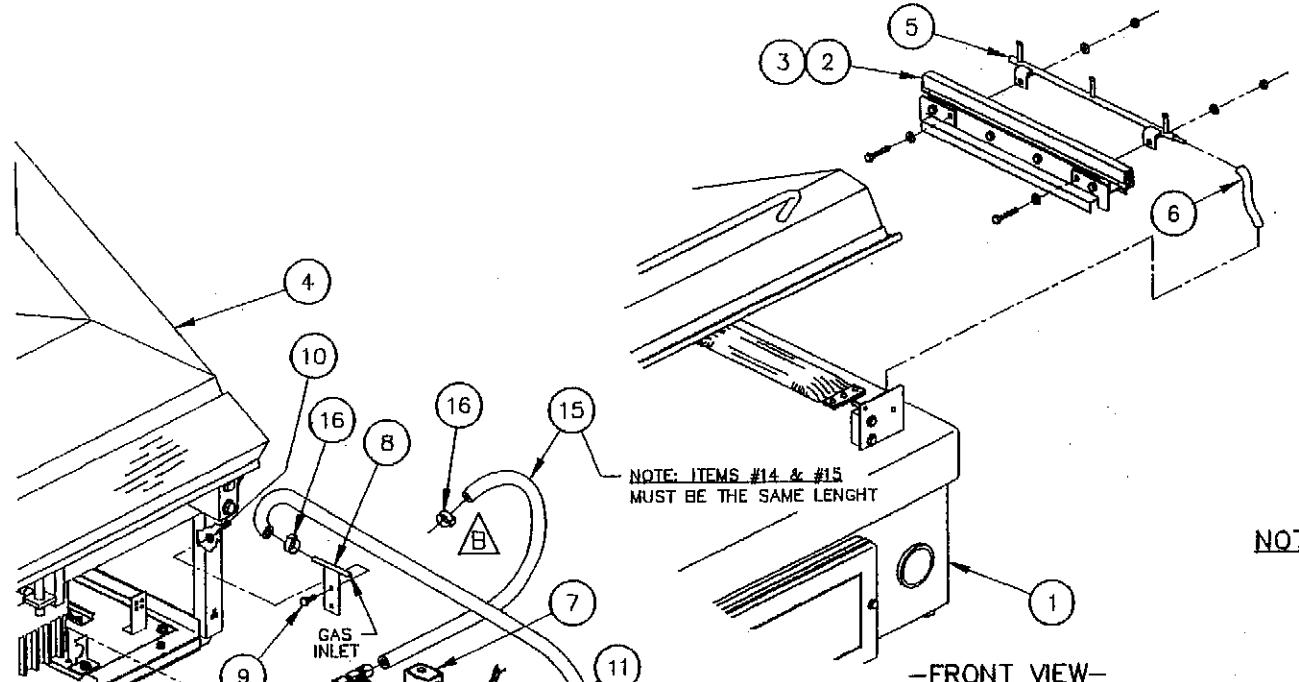
NOTE:

- OPTIONAL FOR 420A, 450T, 450A & 550A

MACHINE	420A, 450T, 450A 550A, 600A, 620A & 650A	METRIC TOLERANCE	INCH TOLERANCE
PART	REAR MC-40 SUPPORT ASS'Y	0. ± .5 .0 ± .05 .00 ± .005 .000 ± .0005 ANGLE ± 1°	.0 ± .015" .00 ± .005" .000 ± .0005" N.T.S.

LET.	MODIFICATION	DATE	INT.
B	ADDED 420A, 450T, 450A & 550A	98-05-25	L.M.
A	ADDED 600A & 620A / WAS 005-0585	98-05-15	L.M.

ITEM:	CNC:	SCALE	QT.
			1
MAT:	DWG BY A. PROVENCHER DATE 98-05-05	NO.	
	APP. LT DATE	005-0584	



-FRONT VIEW-

-GAS INJECTION BAR INSTALLATION-

-REAR VIEW-

-VALVE INSTALLATION-

TO GAS INJECTION TUBES UNDER TABLE
REMOVE THE TWO EXISTING CAPS
& CONNECT HOSES A & B

ITEM	PART #	DESCRIPTION	QT.
1	005-0538	MACHINE ASSEMBLY FRONT VIEW	1
2	005-0566	SEAL BAR ASS'Y W/ SUPPORT	2
3	005-0567	SEAL BAR ASS'Y W/ SUPPORT (BAG CUT OPT.)	2
4	005-0539	MACHINE ASSEMBLY REAR VIEW	1
5	005A0379	GAS INJECTION BAR ASS'Y (OPTION)	2
6	008-0464	GAS INJECTION CONNECTION TUBE	2
7	106-0010	SELENOID VALVE 2 WAY 1/4" NPT W/ SUPP.	1
8	005-0323	GAS INLET ASSEMBLY	1
9	051-0190	HEX. BOLT 1/4"-20 NC X 3/4" S/S	2
10	051-0580	HEX. NUT 1/4"-20 NC S/S	3
11	101-0036	STRAIGHT 1/4" MNPT X 3/8" T.P.COMP.	1
12	101-0085	T 3/8" T.P.COMP. X 1/4" MNPT X 3/8" T.P.COMP.	1
13	104-0060	TUBE 3/8" O.D. X 1/4" I.D. (POLY.) X mm LG.	1
14	104-0060	TUBE 3/8" O.D. X 1/4" I.D. (POLY.) X mm LG.	1
15	104-0060	TUBE 3/8" O.D. X 1/4" I.D. (POLY.) X mm LG.	1
16	105-0200	COLLARS 3/8"ø	3
17	051-0740	FLAT WASHER 1/4" S/S	1

NOTE:

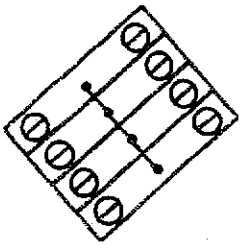
- PARTS (1) THRU (4) ARE EXISTING PARTS
- PARTS (5) THRU (17) ARE PARTS SUPPLIED W/ KIT

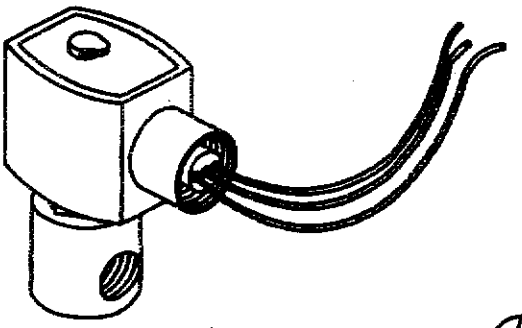
--GAS INJECTION OPTION--

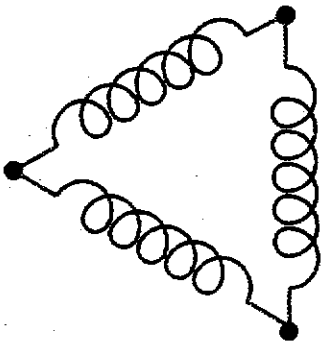
LET.	MODIFICATION	DATE	INT.
D	REDRAWN/ MODIF. NO. A-0228	97-10-23	A.P.

MACHINE	450T	METRIC TOLERANCE .0 ± .5 / .5 ± .05 / .00 ± .005 / .000 ± .0005 ANGLE ± 1°	INCH TOLERANCE .0 ± .015" / .00 ± .005" / .000 ± .0005"
PART	GAS INJECTION KIT INSTALLATION	N.T.S.	
ITEM:	CNC:	SCALE	QT. 1
MAT:	DWG APP. A. PROVENCHER	DATE 97-10-23	NO. 010-0012
	APP.	DATE	

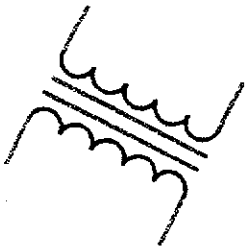
1010-0012

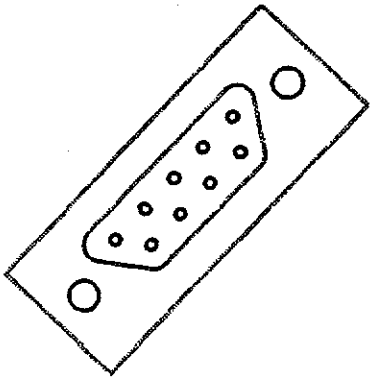




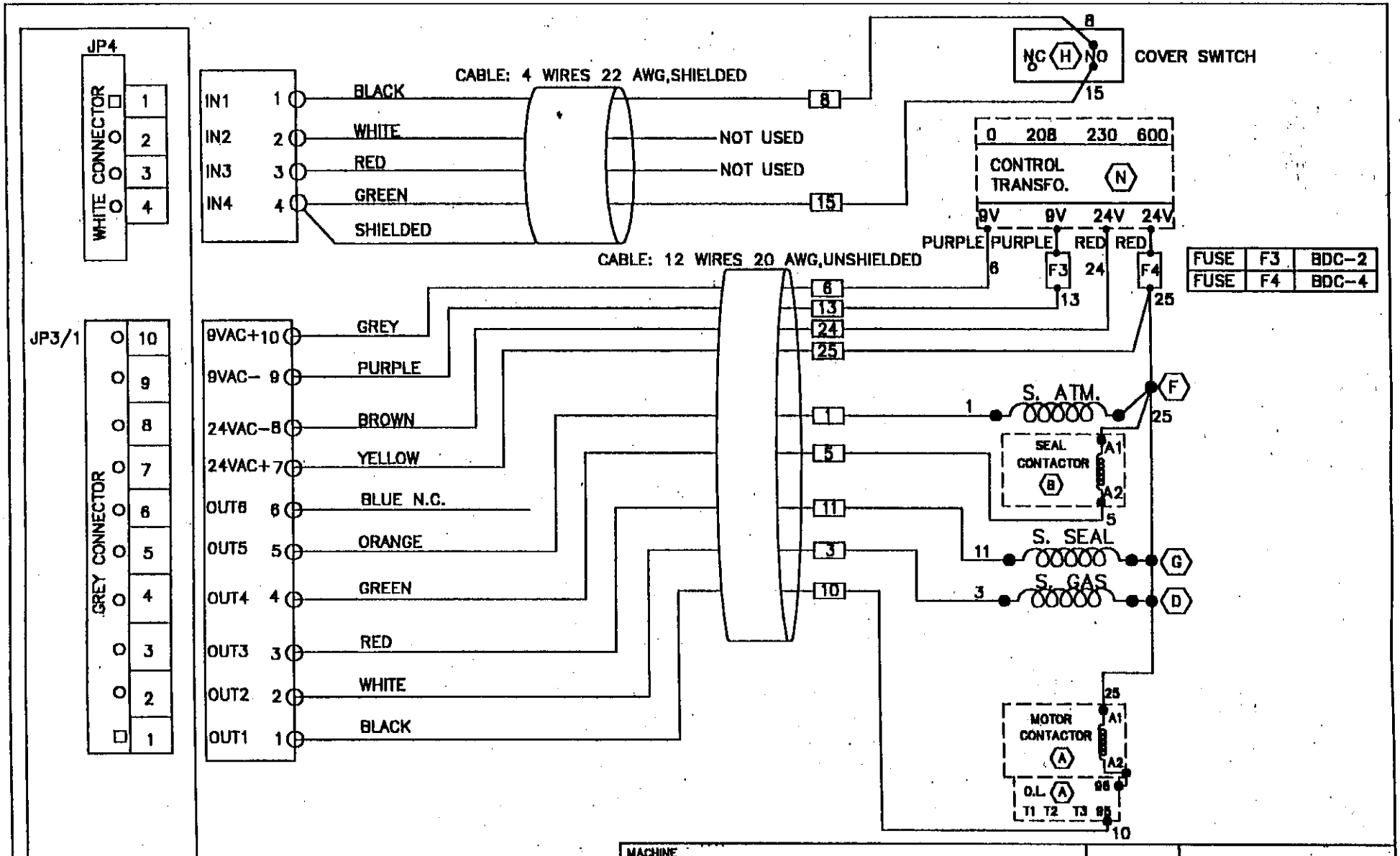


ELECTRICAL DRAWING





006-0115



MC-40

FOR PART NUMBERS FOR LETTERS (A) THRU (N) SEE FOLLOWING LIST

LET.	MODIFICATION	DATE	INT.

MACHINE
VACUUM SINGLE CHAMBER

LOW VOLTAGE WITH MC-40

MAT:

DESS. D.LETOURNEAU

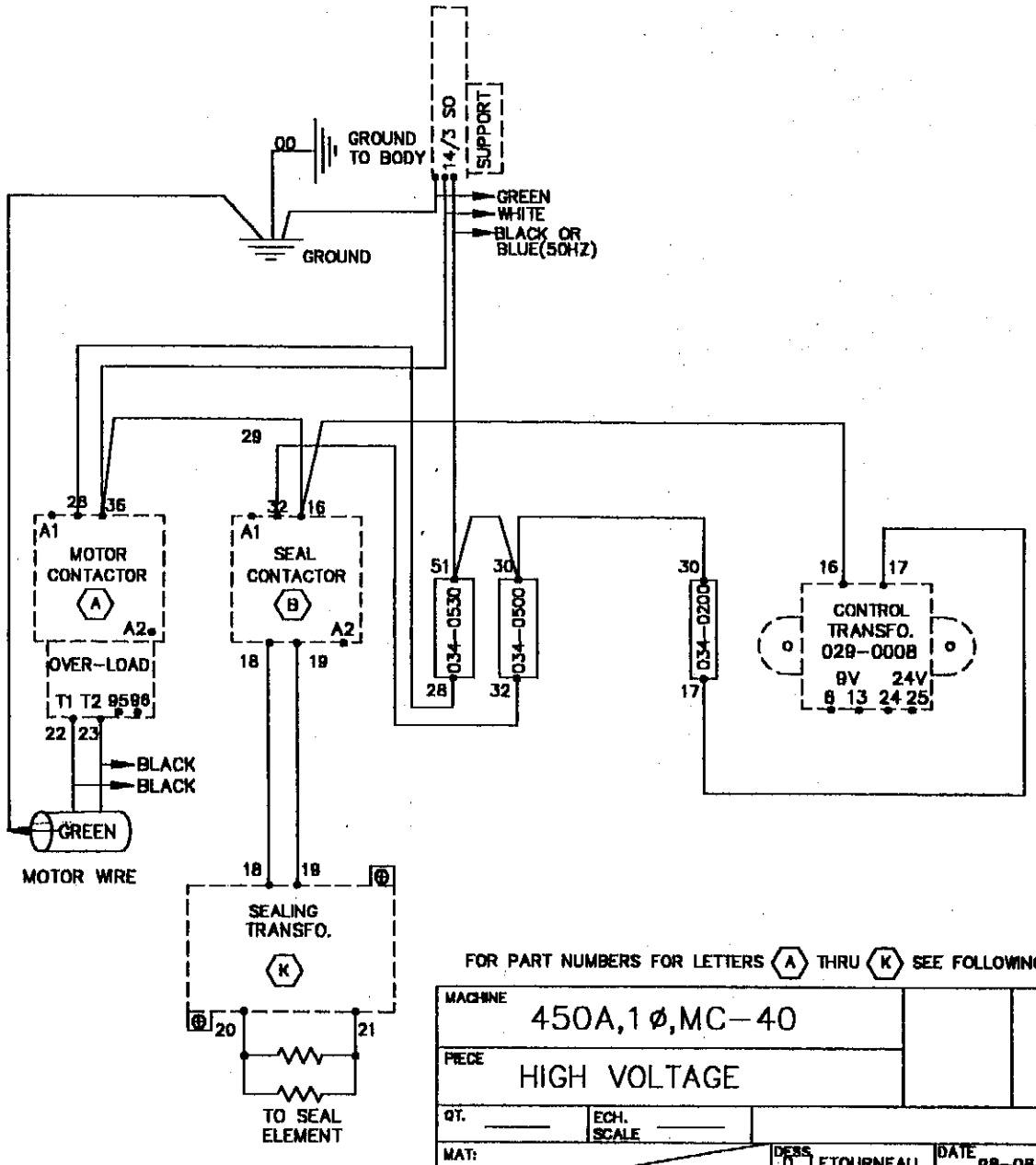
APP.

DATE 15 MAY 98

DATE

SIPROMAC
ST-GERMAIN DE GRANTHAM, QUEBEC CANADA

NO. 006-0115



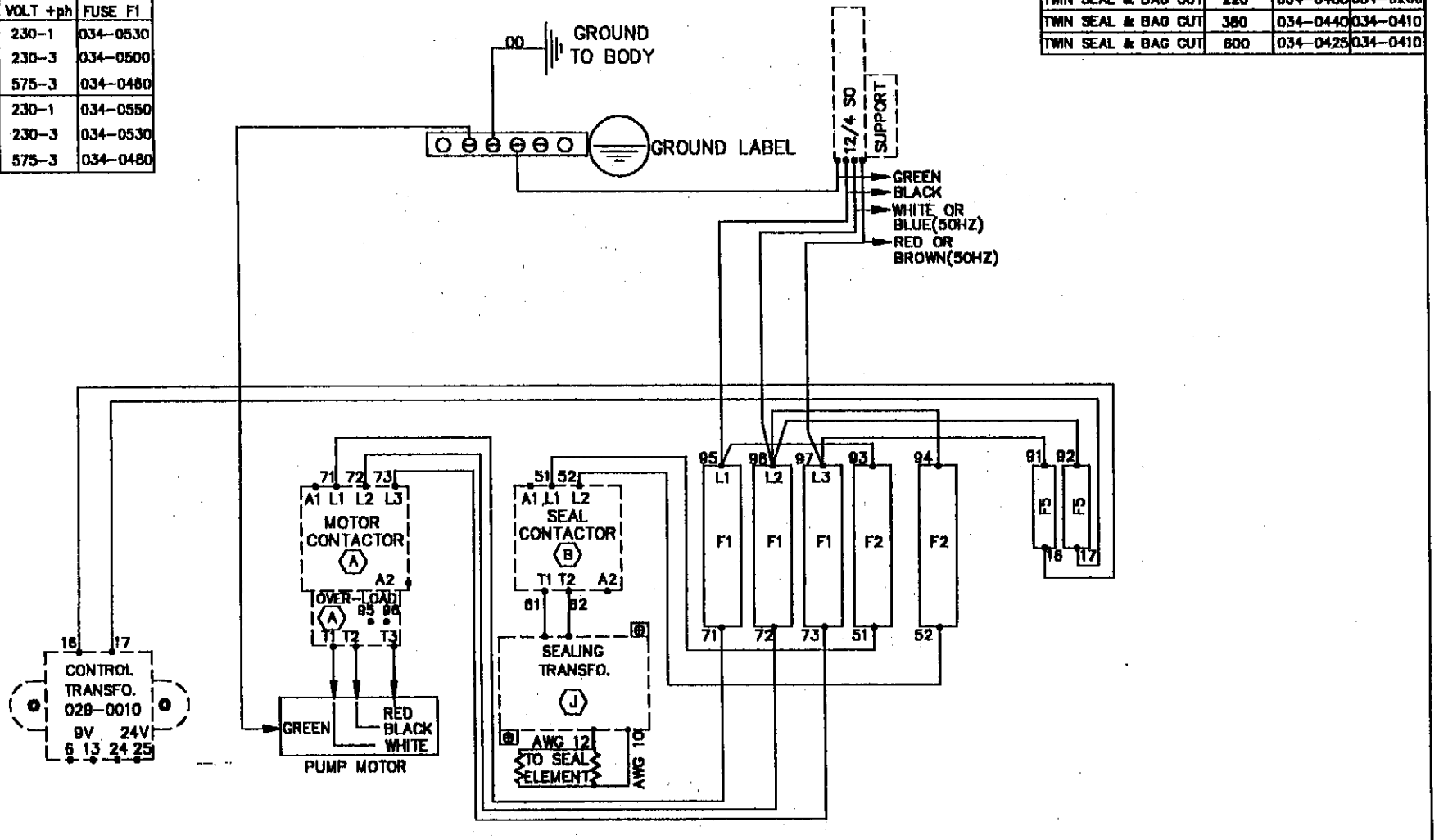
FOR PART NUMBERS FOR LETTERS (A) THRU (K) SEE FOLLOWING LIST

MACHINE: 450A,1 ø,MC-40			SIPROMAC
PIECE: HIGH VOLTAGE			ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
QT. ———	ECH. SCALE ———		
MAT:	DESS. D. LETOURNEAU	DATE 98-08-19	NO. 006-0071
	APP.	DATE	

006-0079

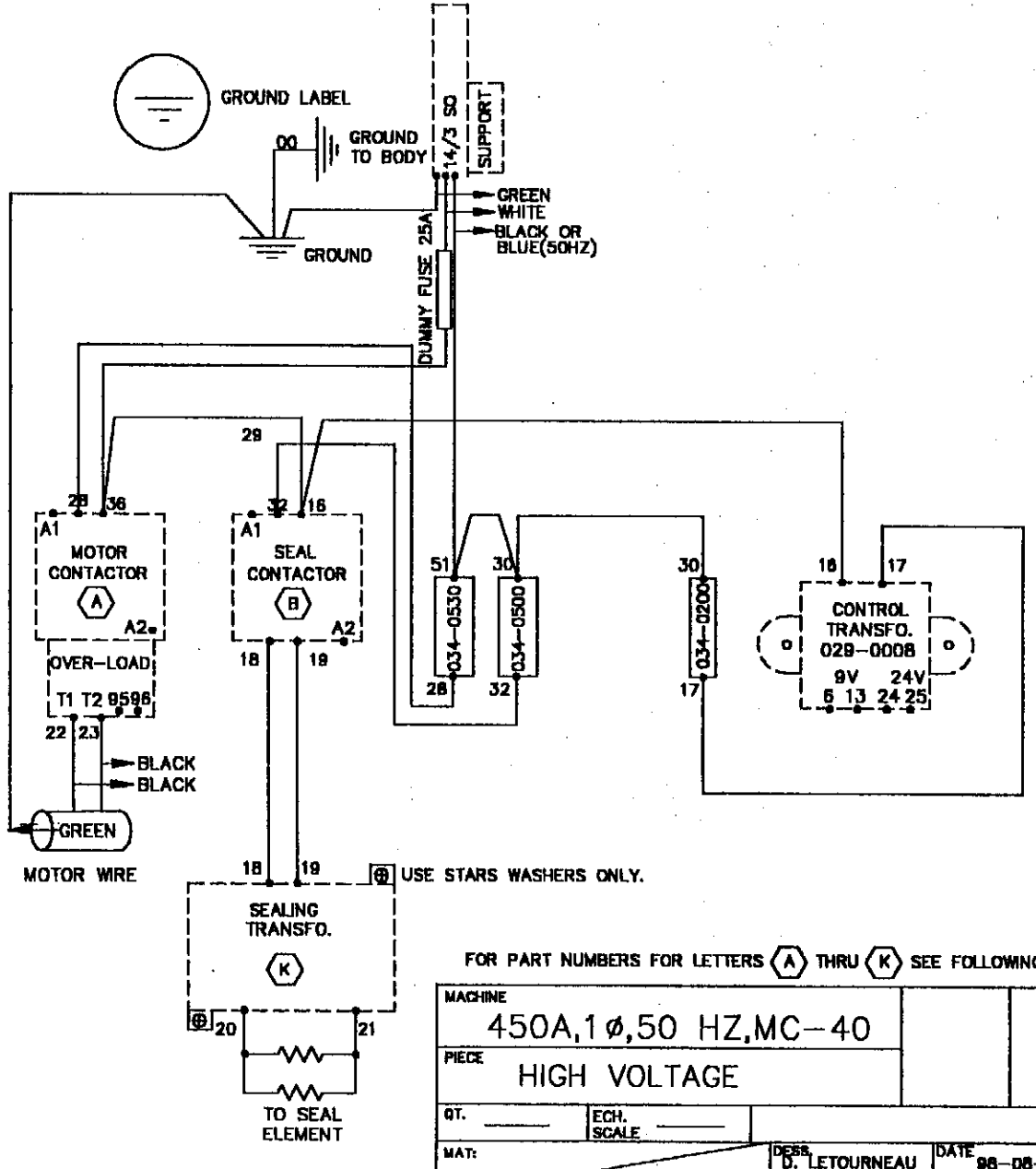
PUMP		
MOTOR (HP)	VOLT +ph	FUSE F1
2	230-1	034-0530
2	230-3	034-0500
2	575-3	034-0480
3	230-1	034-0550
3	230-3	034-0530
3	575-3	034-0480

OPTION	VOLTAGE	FUSE F2	FUSE F5
TWIN SEAL & BAG CUT	220	034-0450	034-0200
TWIN SEAL & BAG CUT	380	034-0440	034-0410
TWIN SEAL & BAG CUT	600	034-0425	034-0410



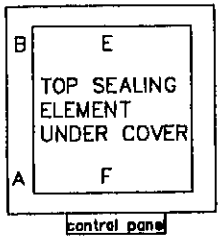
FOR PART NUMBERS FOR LETTERS (A) THRU (K) SEE FOLLOWING LIST

MACHINE	450A ,3ø,MC-40		SIPROMAC
PIECE	HIGH VOLTAGE		ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
QT. ———	ECH. SCALE ———	NE PAS MESURER /N.T.S.	
MAT:	DESS. D.LETOURNEAU	DATE 98-05-19	NO. 006-0079
	APP.	DATE	

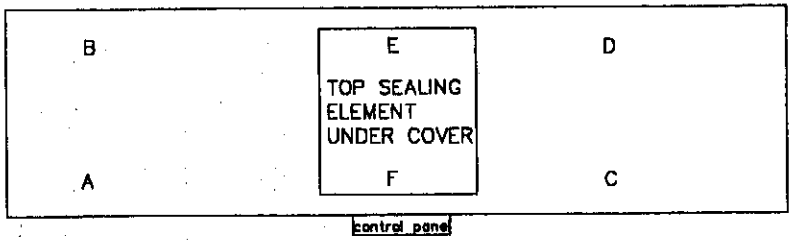


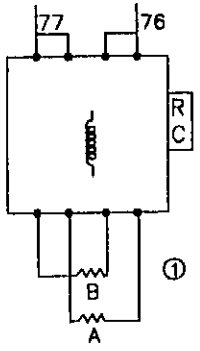
MACHINE: 450A,1ø,50 HZ,MC-40			SIPROMAC
PIECE: HIGH VOLTAGE			ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
QT. ———	ECH. SCALE ———		
MAT:	DESS. D. LETOURNEAU	DATE 96-06-19	NO. 006-0130
	APP.	DATE	

SINGLE CHAMBER

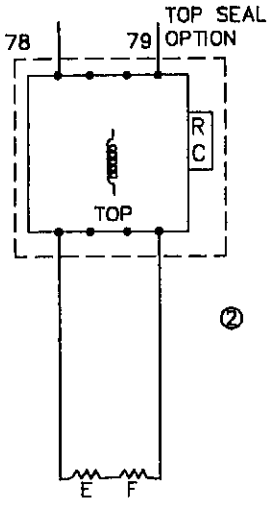


DOUBLE CHAMBER

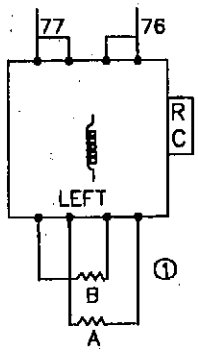




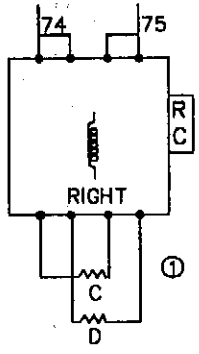
SEALING BAR



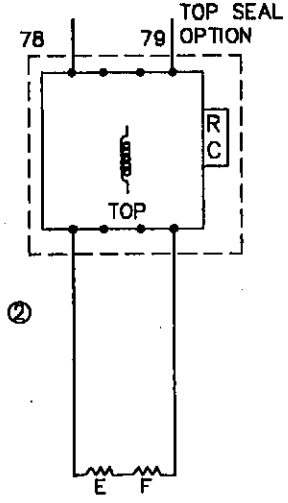
SEALING BAR



SEALING BAR



SEALING BAR



SEALING BAR

① WIRE TEW 12 AWG SIPROMAC # 030-0420

② WIRE CABTIRE 12/3 SJ SIPROMAC # 030-0120
CONNECTOR CD-13 SIPROMAC # 036-0409

MACHINE: ALL MODEL			SIPROMAC
PIECE: WIRING FOR SEALING BAR			ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
QT. ———	ECH. SCALE ———	NE PAS MESURER /N.T.S.	
MAT:	DESS. ERIC J. T.P.	DATE 12 DEC 2000	NO. 006-0131
	APP.	DATE	

ELECTRICAL DRAWINGS PARTS LIST

MODEL 450A

A : VOLT	PHASE	PUMP HP	CONTACTOR	OVERLOAD
220	1	2	025-0020	025-0190
220	3	2	025-0010	025-0170
380	3	2	025-0020	025-0150
575	3	2	025-0010	025-0140
220	1	3	025-0040	025-0190
220	3	3	025-0020	025-0180
575	3	3	025-0010	025-0150
220	1	4	025-0050	025-0200
220	3	4	025-0030	025-0190
460	3	4	025-0010	025-0170
575	3	4	025-0010	025-0160

B,C & O: SEALING CONTACTOR: 025-0020

D: OPTIONAL GAZ SOLENOID VALVE: 106-0010

E: VACUUM SOLENOID VALVE: 106-0030

F: ATMOSPHERE SOLENOID VALVE: 106-0030 WITH PUMPS: 2 HP, 3HP & 4HP

G: BELLOWS SOLENOID VALVE: 106-0070

H, I, J: COVER SWITCH: 026-0610

K: SEALING TRANSFO.:

TWIN SEAL & BAG CUT: 029-0040, 029-0050
TOP & BOTTOM SEALING: 029-0080

L: RELAY & BASE:

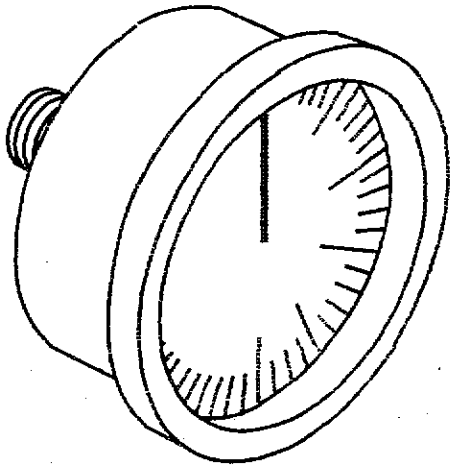
RELAY: 025-0600
BASE: 025-0610

M: OPTIONAL TOP SEALING CONTACTOR: 025-0020

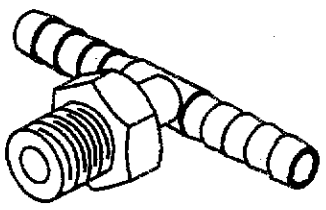
N: CONTROL TRANSFO.: 029-0007, 029-0008, 029-0009, 029-0250

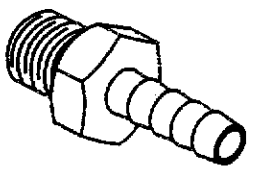
DA/88

NOTES

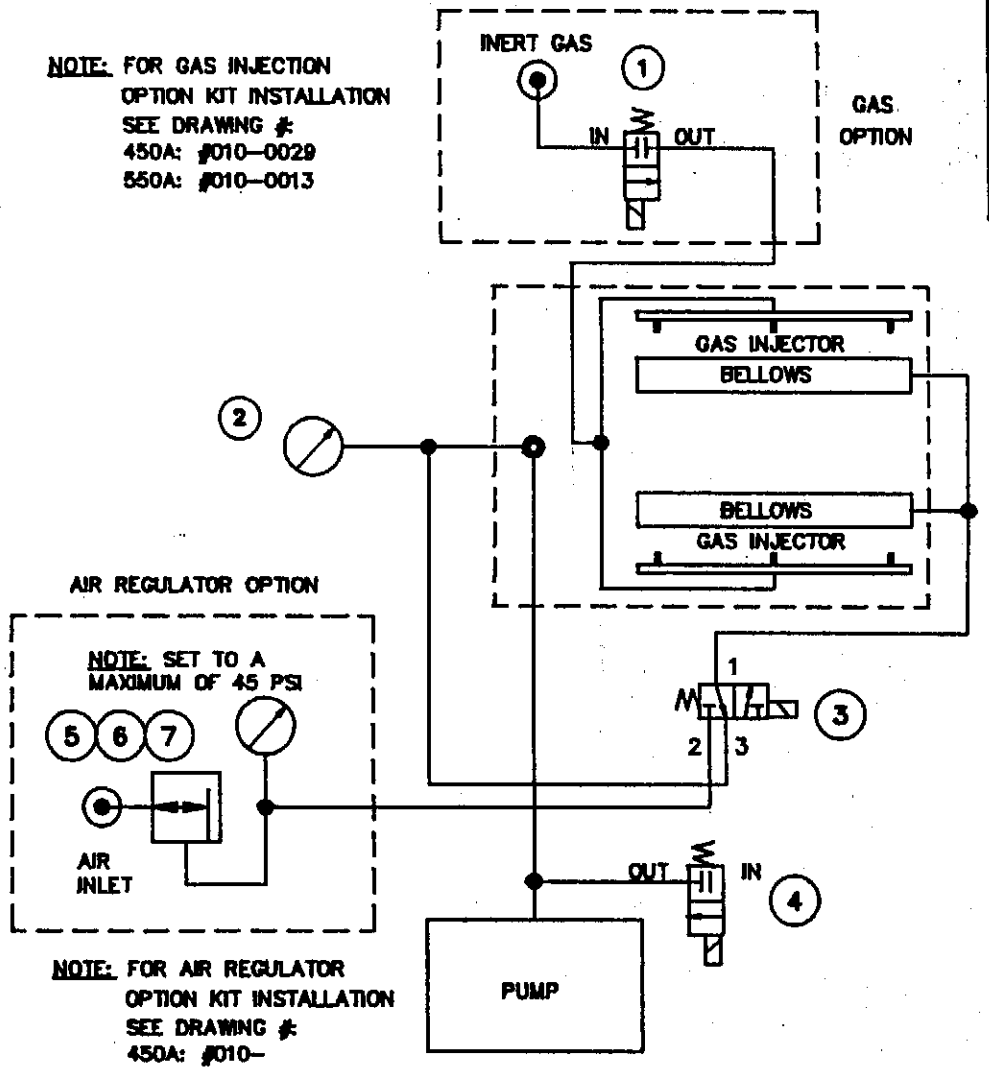


PNEUMATIC DRAWING





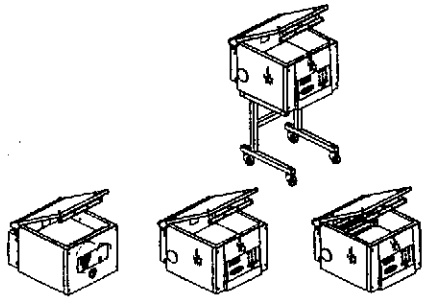
ITEM	PART #	DESCRIPTION	QT.
1	106-0010	GAS VALVE	1
2	114-0260	VACUUM GAUGE	1
3	106-0070	BELLOWS VALVE	1
4	106-0030	ATMOSPHERE VALVE	1
5	114-0147	PRESSURE REGULATOR	1
6	114-0245	PRESSURE GAUGE	1
7	114-0170	PRESSURE REGULATOR SUPPORT	1



LET.	MODIFICATION	DATE	INT.
B	RE-DRAWN	97-03-12	M.L.

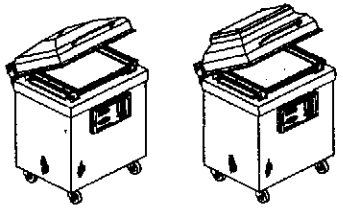
MACHINE: 450A & 550A
PART: PNEUMATIC DRAWING
N.T.S.
SIPROMAC
ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM:
CNC:
SCALE
QT. 1
MAT:
DWG BY M.LAVIGNE
DATE 97-03-12
APP.
DATE
NO. 007-0018

NOTES

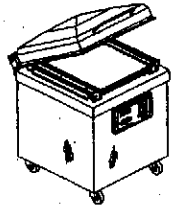


250 350/350D

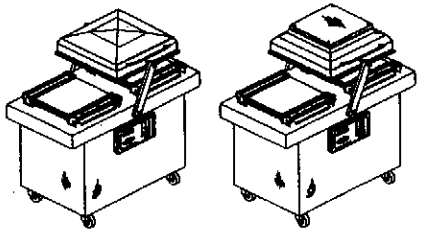
450T



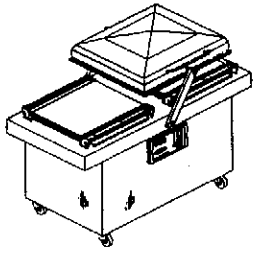
450A



550A



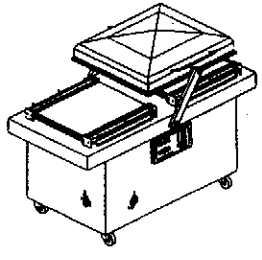
420A



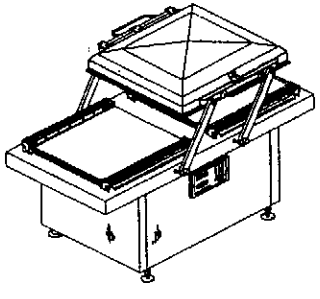
600A

SIPROMAC

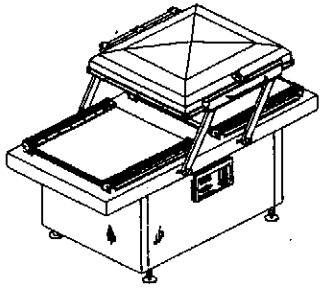
VACUUM PACKAGING MACHINES



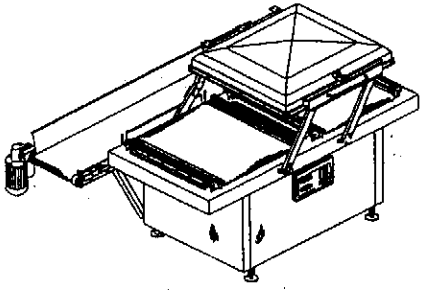
620A



650A



650A AUTOMATIC



700A