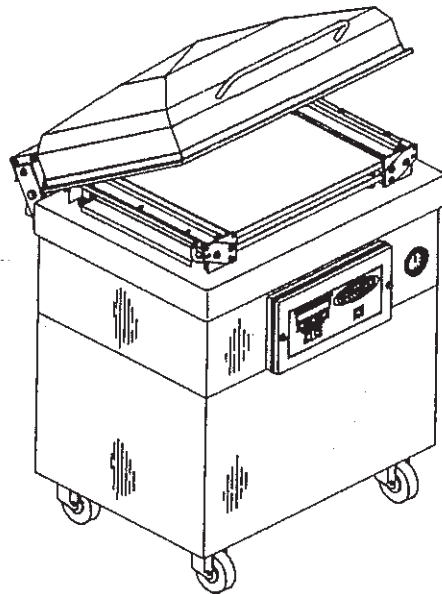
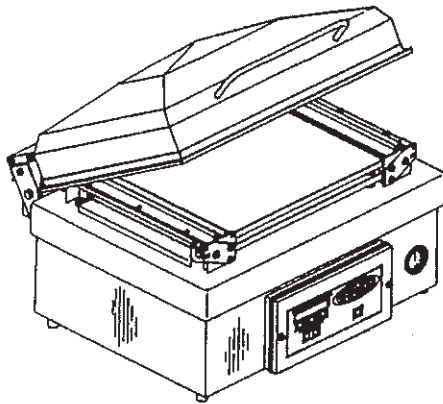




Since 1898

PRELIMINARY



MODELS

450T

450A

VACUUM PACKAGING MACHINES

OPERATION INSTRUCTIONS

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SIPROMAC INC.

VACUUM PACKAGING MACHINES

OPERATION INSTRUCTIONS

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.

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.

2. Con't

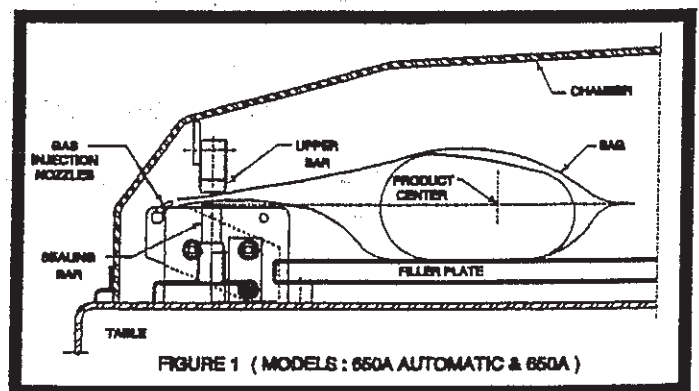
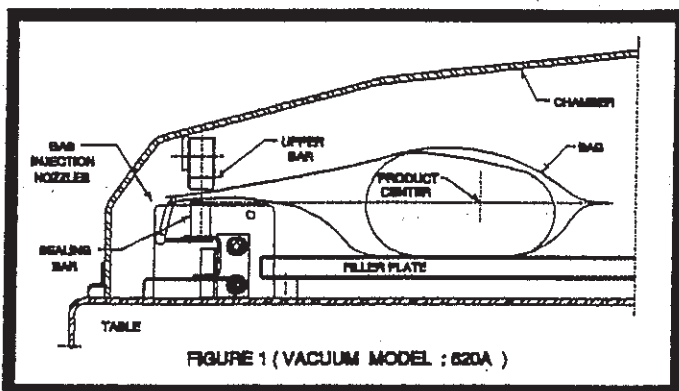
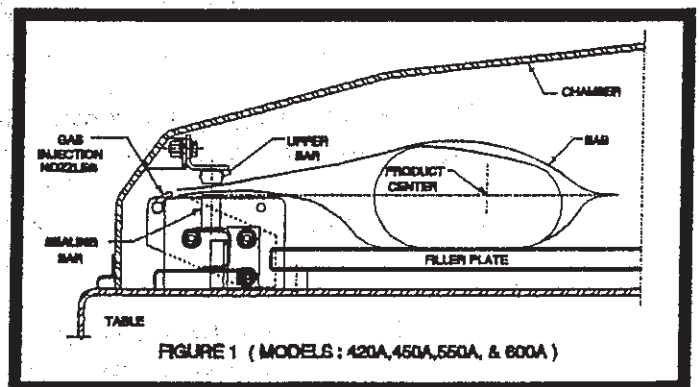
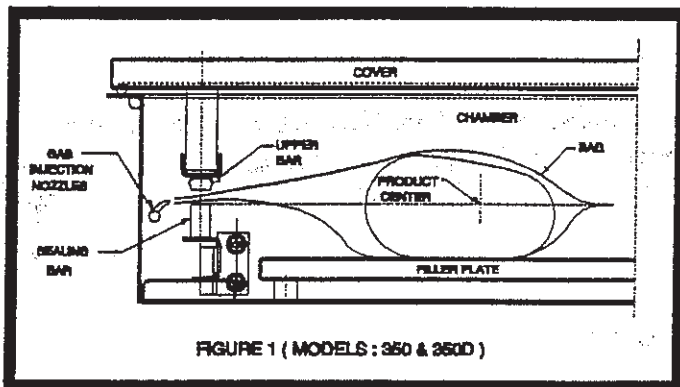
An important step in connecting the machine is to make sure that the pump turns in its correct rotation.

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 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.



3.1 Con't

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.

3.2 Special packaging:

3.2.1 Gas flushing:

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 counterbalanced 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 can be set by "G" control.

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

3.2.2 Top and bottom sealing: (bi-active sealing)

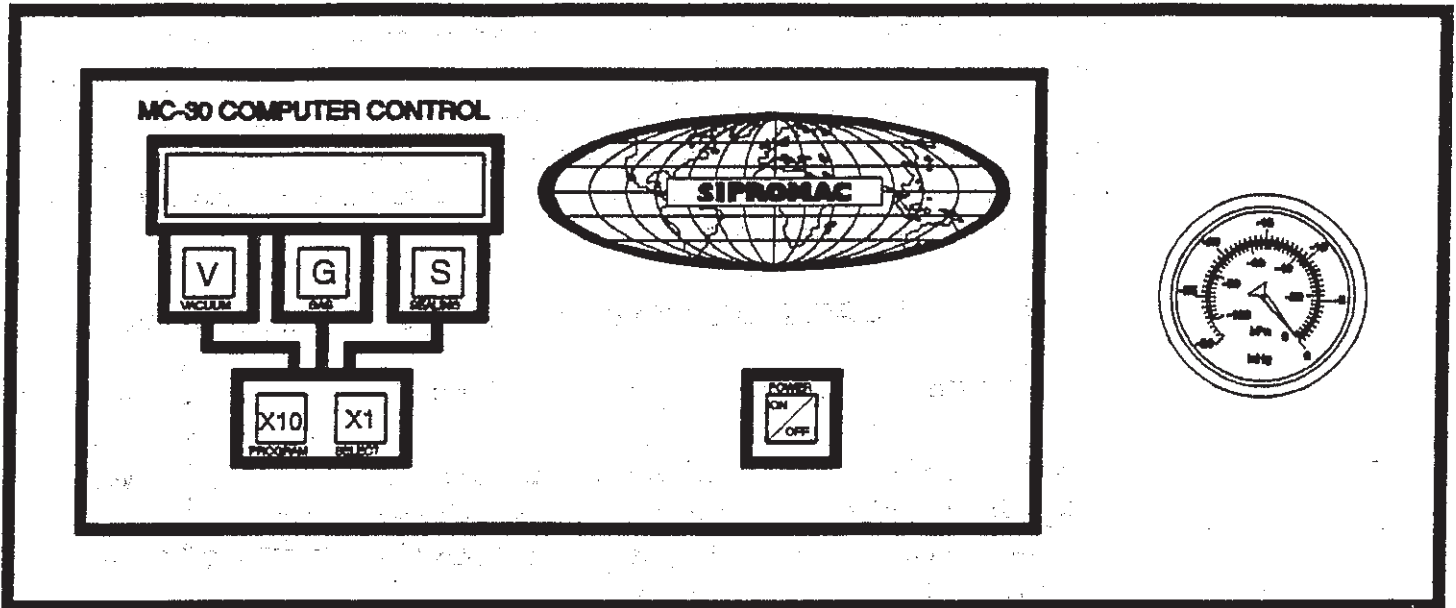
When sealing aluminium laminate bags (especially bags for e.g. coffee) it is imperative to have an upper and a lower sealing bar.

3.2.3 Electrical bag cut:

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 Setting of digital controls for MC-30E p.c. board:

Control pannel:



To turn on: Press the "Power On" key.

To turn off: Press the "Power Off" key.

How to program a complete cycle:

To enter the vacuum time (sec.):

1. Press the "V" key. The display will flash.
2. Set your desired timing by pressing on "X10" and/or "X1".
3. Press one more time on the "V" key. The display stays on.

To enter the gas time (sec.):

1. Press the "G" key. The display will flash.
2. Set your desired timing by pressing on "X10" and/or "X1".
3. Press one more time on the "G" key. The display stays on.

To enter the sealing time (sec. decimals):

1. Press the "S" key. The display will flash.
2. Set your desired timing by pressing on "X10" and/or "X1".
3. Press one more time on the "S" key. The display stays on.

3.3 Con't

The micro-processor will memorize the last program you entered. The system functions with a 5 volt Cadium Nickel battery which lasts approximately 3 years and recharges automatically if your machine remains plugged in. You may notice, during the first few days of use, that your micro-processor does not keep your program in memory, it is normal due to the fact that your battery is not yet fully charged.

BASIC PROGRAM TO MODIFY ACCORDING TO THE PRODUCTS

MACHINE	"V"	* "G"	"S"
VAC 350, 350D	20 sec.	As needed	1.3 sec.
VAC 450T, 450A	20 sec.	As needed	1.3 sec.
VAC 420A	22 sec.	As needed	1.3 sec.
VAC 550A	25 sec.	As needed	1.5 sec.
VAC 600A	25 sec.	As needed	1.5 sec.
VAC 620A	25 sec.	As needed	1.5 sec.
VAC 650A	27 sec.	As needed	1.5 sec.
VAC 650A AUTOMATIC	27 sec.	As needed	1.5 sec.
VAC 700A	27 sec.	As needed	1.5 sec.

To modify your program, increase as desired by pressing the "X1" key.

* If you do not use the gas option, you have to programme "00".

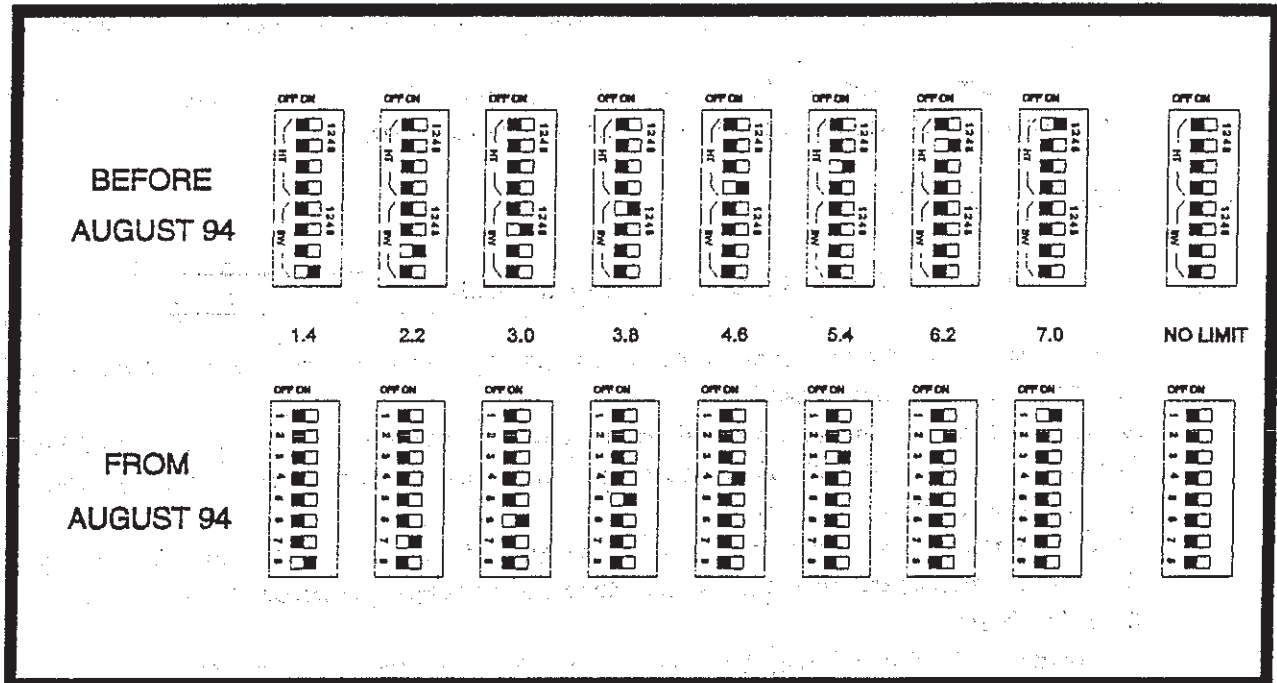
Warning: Do not increase the sealing time too much to prevent damaging the teflon.

How to use the memories of the MC-30E p.c. board:

The MC-30E p.c. board has a memory to store up to 9 different programs. To display program number, press the "X10" key. The program number will appear in the center of the display. To select the program number, press the "X1" key, then press the "X10" key to return to operating mode.

3.3 Con't
Sealing time security:

The MC-30E p.c. board also has a time limit on the sealing. This is an additional security which does not go thru the micro-processor and has a separate circuit. This is in case the computer malfunctions or the operator sets a sealing time too high. When the sealing time reaches the limit value, the machine will turn off automatically.



TIME LIMIT

Time limit factory settings:

350, 350D	3.8
420A	4.6
450D, 450A	4.6
550A	4.6
600A	4.6
620A	4.6
650A	4.6
650A AUTOMATIC	4.6
700A	4.6

NOTE: Pressing the "V" key during the vacuum cycle will stop the vacuum cycle and go to the next step (gas or sealing). This is especially useful to package liquids.

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. Regular application of talkum powder will increase working life of the lid rubber.

Check oil in the pump weekly and add if necessary. Only use oil types recommended by the producer (see pump brochure).

Check vacuum hose for damage regularly, will save a lot of avoidable trouble with machine breakdown.

4. TROUBLE SHOOTING:

4.1 Failure during a packaging cycle:

The lid is closed and cycle fails to start or stop immediately after having started:

Micro switch is actuated too late, re-set the micro switch.
Fault in supply of electricity to the timing control (power on light does not go on):

Check input voltage at transformer (faulty contact in wires);
Check secondary voltage of transformer (approx. 24 Volt AC);
Check fuse;

If none of these apply, change the PC board.

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's.

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 leak with precision vacuummeter, 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.

Verify 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 verifying machine.

Most frequent points of leakage: lid gasket, damaged vacuum hose and 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).

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 Control board failure

PROBLEM	POSSIBLE CAUSE
1. No display switch on	1.1 Programming error Press on/off membrane
	1.2 No current coming to PC board Check fuses Check voltage between pins #6 and #13 on "D" connector, the reading should be approx. 9 volts AC (if not it's due to transformer or wiring defect)
	1.3 On/off key defective membrane Disconnect flat cable between PC board and switch and jump pins 1 and 2 or 7 and 8 using a screw driver
	1.4 Defective PC board Replace PC board
2. Two digits continuously flashes on "V", "G" or "S"	2.1 Programming error Press corresponding "V", "G" or "S" key
	2.2 Defective membrane Replace membrane
	2.3 Defective PC board Replace PC board

4.5 Con't

3. All of the display continuously flashes	3.1 Cover switch remains closed	Check cover switch or continuity between pins #8 and #15 PC board connector (see dwg #006-0029)
	3.2 Defective	Replace PC board
4. Display is on but impossible to program any valves	4.1 Programming error	Press "V", "G" or "S" to be in programming mode. Only one at a time
	4.2 Defective PC board	Replace PC board
5. Impossible to program one timer ("V", "G" or "S") (the display is on) (see step 4 first)	5.1 Defective membrane	Replace membrane
	5.2 Defective PC board	Replace PC board
6. PC board doesn't keep data in memory	6.1 Battery not charged	Run the machine or leave it plugged in with switch off for a few hours to charge battery
	6.2 Defective battery	Replace battery or complete PC board (the battery is mounted on the PC board)
	6.3 Defective	Replace PC board Pc board

4.5 Con't

7. Cycle does'nt start	7.1 Poorly adjusted cover switch	Adjust
	7.2 Bad connection or defective limit switch	Verify
	7.3 Defective PC board	Replace PC board
	7.4 PC board is OK, outputs are defective (See dwg # 006-0029)	Check pump fuses, pump contactor coil, valves, etc..
8. Machine "recycling" or cycle "re-start" continuously	8.1 Poorly adjusted cover switch	Adjust
	8.2 Defective PC board	Replace
9. Double chamber: vacuum sealing or atmosphere is not done on one side only	9.1 Defective relay or connection	Replace the 4PDT (in electrical box). This relay switch fonctions from one side to the other (the PC board is good because there is one output which control's both sides)
	9.2 Defective contactor or valve	Test voltage on coil

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.

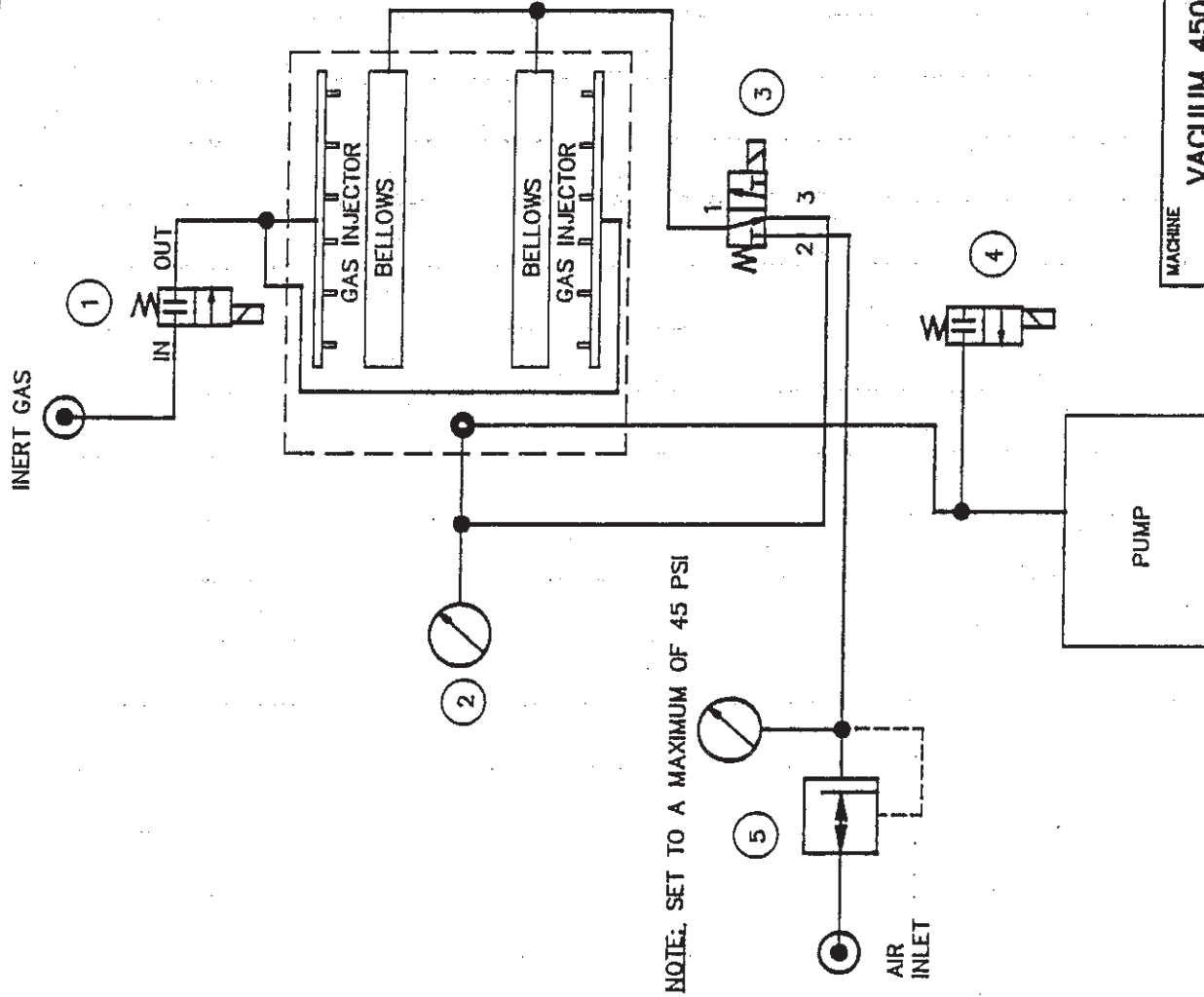
Check oil in pump (oil level in view glass; add if necessary. Regular change of oil - necessity indicated by change of color).

Check vacuum in chamber with precision vacuumeter.

Check function of cycle with various settings of timers.

007-0018

ITEM	# PIECE	DESCRIPTION	QT.
1	106-8262G22	GAS VALVE	1*
2		VACUUM GAUGE	1
3	106-8320G176	BELLOWS VALVE	1
4	106-8210G95	ATM. VALVE FOR MODEL 550A	1
5	106-8210G94	ATM. VALVE FOR MODEL 450A	1
*: OPTIONNEL			



NOTE: SET TO A MAXIMUM OF 45 PSI

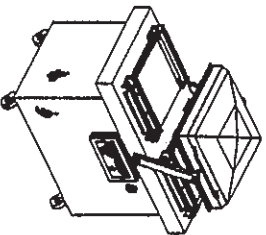
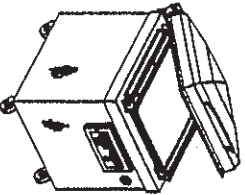
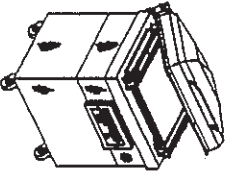
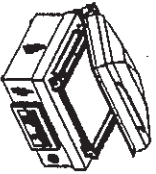
MACHINE		VACUUM 450A & 550A	
PIECE		PNEUMATIC CIRCUIT	
QT.	1	NE PAS MESURER / N.T.S.	NO.
MAT.		DATE 92-10-22	DATE
DESIGNER		D. JOIBIDON	APPRO.
DATE			
INT.			

SIPROMAC
ST-GERMAIN DE GRANTHAM
QUEBEC CANADA

007-0018

LET. _____ DATE _____ INT. _____

MODIFICATION



MODEL 350

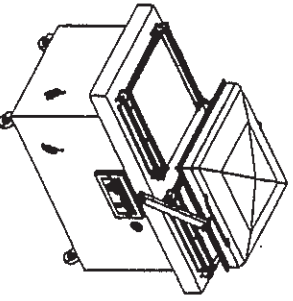
MODEL 350D

MODEL 450T

MODEL 450A

MODEL 550A

MODEL 420A

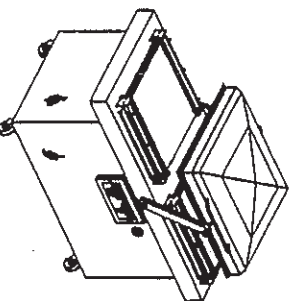


MODEL 600A

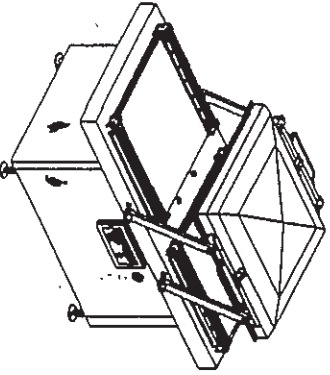


Since 1898

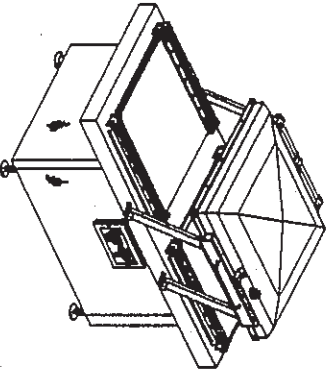
VACUUM PACKAGING MACHINES



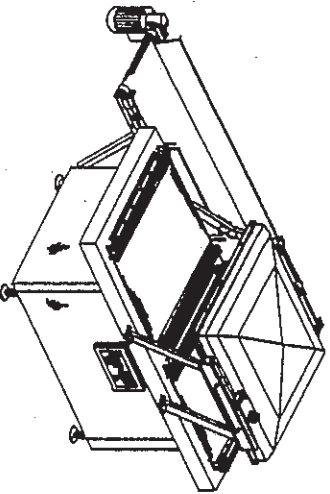
MODEL 620A



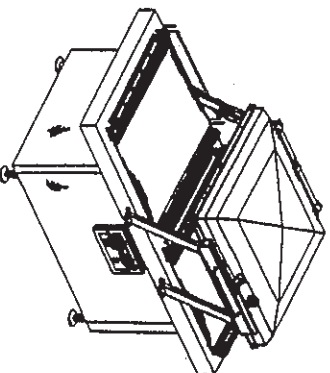
MODEL 650A

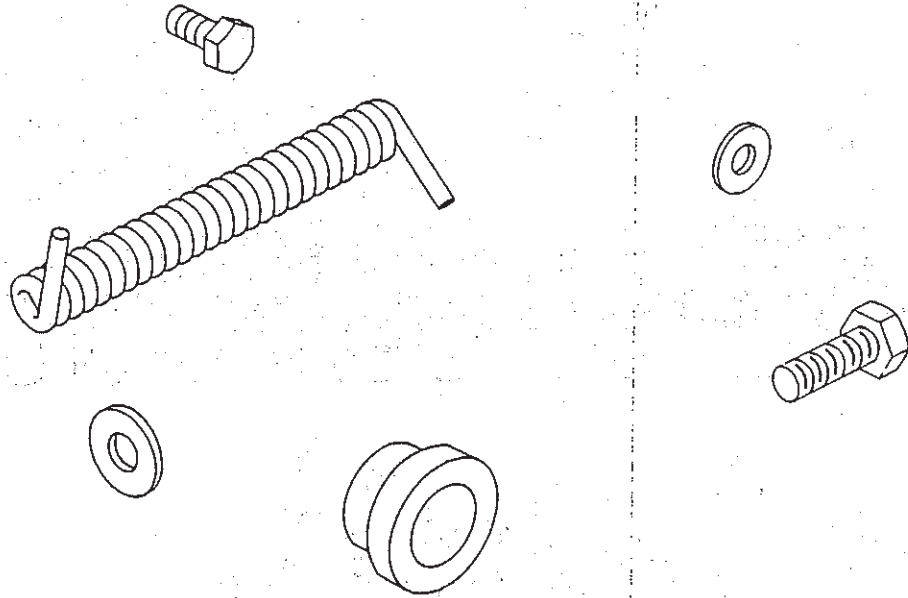


MODEL 650A AUTOMATIC

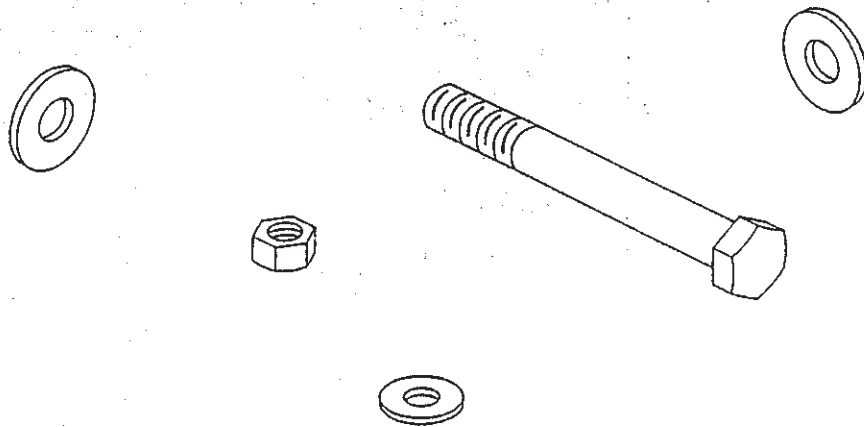


MODEL 700A

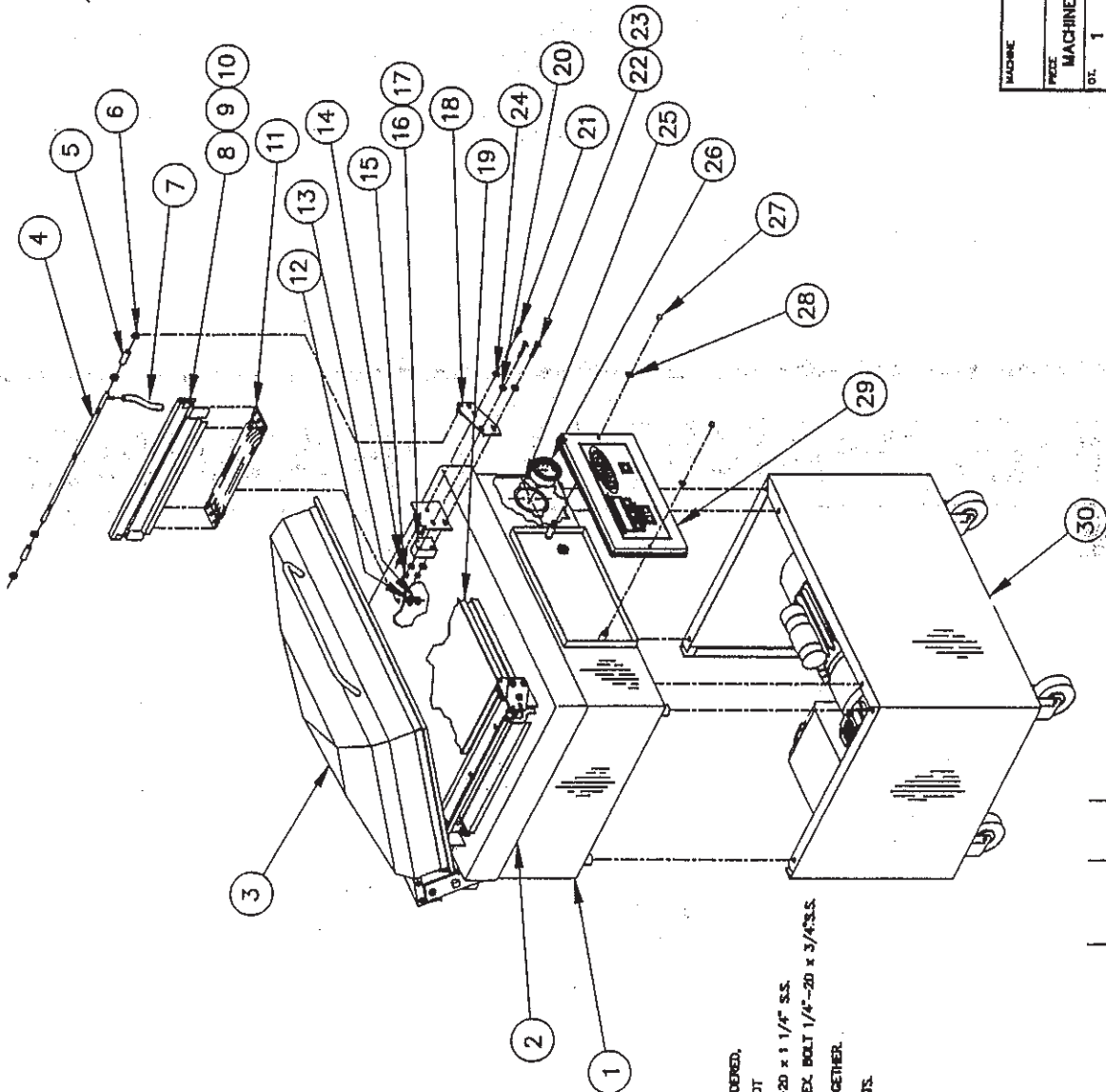




MECHANICAL DRAWING



ITEM #	PIECE	DESCRIPTION	QTY.
1	005--	BODY ASSEMBLY	1
2	005-0375	TABLE ASSEMBLY	1
3	005--	8" CHAMBER ASSEMBLY	1
4	009-0039	GAS INJECTION BAR (OPTION)	2
5	008-0295	GAS INJ. CONN. TUBE (OPTION)	4
6	105-C-133	COLLARS (OPTION)	8
7	179-0388	TUBE (OPTION)	2
8	005-0377	SEAL BAR ASSEMBLY	2
9	005-0383	BAG CUT BAR ASS'Y (OPTION)	2
10	005--	TOP & BOTTOM BAR ASS'Y (OPT.)	2
11	005-0378	BELLOWS ASSEMBLY	2
12	051-0780	FLAT WASHER 3/8" S.S.	2
13	051-0620	HEX. NUT 3/8"-16 S.S.	2
14	051-0580	HEX. NUT 1/4"-20 S.S.	4
15	051-0581	LOCK NUT 1/4"-20 S.S./NYLON	8
16	002-0326	LEFT-SEAL BAR GUIDE BLOCK	2
17	002-0327	RIGHT-SEAL BAR GUIDE BLOCK	2
18	005-0326	GAS INJ.BAR SUPP.ASS'Y (OPT.)	4
19	005-0380	FILLER PLATE ASSEMBLY	2
20	051-0740	FLAT WASHER 1/4" S.S.	16
21	051-0190	HEX. BOLT 1/4"-20 x 3/4" S.S.	4
22	051-0250	HEX. BOLT 1/4"-20 x 1 1/2" S.S.	8
23	051-0255	HEX.BOLT 1/4"-20x1 3/4"S.S.(OPT.)	8
24	051-0740	FLAT WASHER 1/4" S.S (OPT.)	4
25	114-VHF140	VACUUM GAUGE FIXATION RING	1
26	114YG6004	VACUUM GAUGE	1
27	051-0591	ACORN NUT 1/4"-20 S.S.	2
28	051-0740	FLAT WASHER 1/4" S.S.	2
29	005-0319	P.C. BOARD SUPPORT ASSEMBLY	1
30	005--	BODY SUPP.ASS'Y(OPTION STAND)	1



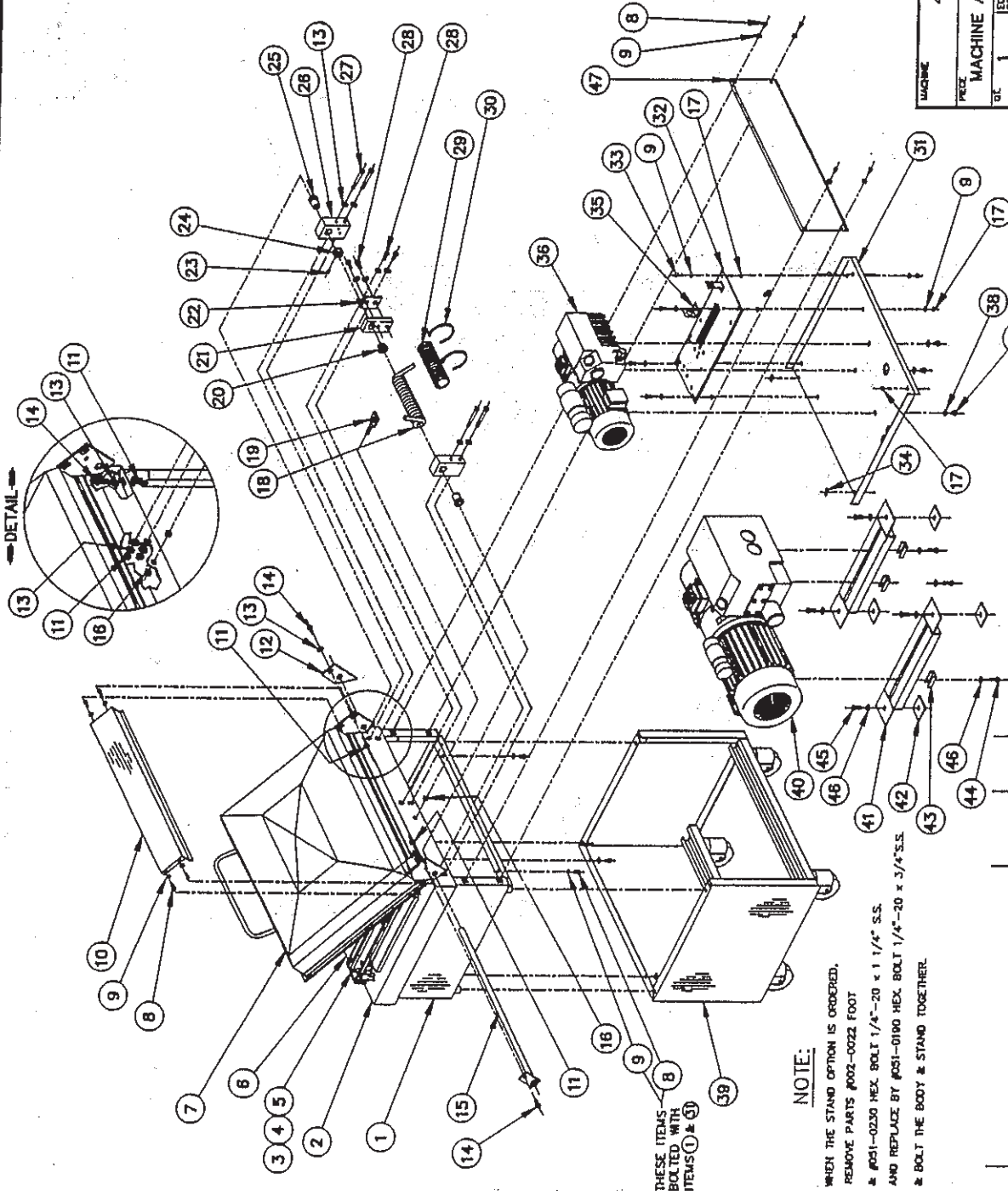
NOTE:

WHEN THE STAND OPTION IS ORDERED,
 REMOVE PARTS #002-0022 FOOT
 & #001-0030 HEX. BOLT 1/4"-20 x 1 1/4" S.S.
 AND REPLACE BY #001-0190 HEX. BOLT 1/4"-20 x 3/4" S.S.
 & BOLT THE BODY & STAND TOGETHER.
 USING EXISTING WASHERS & NUTS.

MACHINE		450A	
PIECE MACHINE ASSEMBLY FRONT VIEW			
QTY.	1	DATE	93-07-07
SCALE		APP.	
NE PAS MESURER / N.T.S.		NO. 005-0410	
METRIC TOLERANCE 0.1 & 0.2 0.05 & 0.10 0.02 & 0.05 0.01 & 0.02		INCH TOLERANCE 0.005 & 0.010 0.002 & 0.005 0.001 & 0.002	
SIPROMAC		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	

LET.	MODIFICATION	DATE	INT.

ITEM #	PIECE	DESCRIPTION	QT.
1	005-	BODY ASSEMBLY	1
2	005-0375	TABLE ASSEMBLY	1
3	005-0377	SEAL BAR ASSEMBLY	2
4	005-0383	BAG CUT BAR ASSEMBLY (OPTION)	2
5	005-	TOP & BOTTOM BAR ASSY (OPTION)	2
6	005-0380	FILTER PLATE ASSEMBLY	2
7	005-	8" CHAMBER ASSEMBLY	2
8	051-0180	HEX. BOLT 1/4" - 20 x 1 1/2" S.S.	12
9	051-0740	FLAT WASHER 1/4" S.S.	20
10	004-0172	SPRING COVER ASSEMBLY	1
11	051-0620	HEX. NUT 3/8" - 16 S.S.	12
12	001-1335	CHAMBER STOPPER	1
13	051-0780	FLAT WASHER 3/8" S.S.	26
14	051-0350	HEX. BOLT 3/8" - 16 x 3/4" S.S.	6
15	004-0129	SHAFT ASSEMBLY	1
16	051-0630	HEX. NUT 1/2" - 13 S.S.	2
17	051-0580	HEX. NUT 1/4" - 20 S.S.	10
18	008-0358	SPRING	1
19	005-0346	SPRING TORQUE SUPPORT	1
20	005-	BUSHING	1
21	002-0391	CENTRAL REAR BLOCK	1
22	001-1540	CENTRAL REAR BLOCK SUPPORT	1
23	051-0185	SET SCREW 1/4" - 20 x 5/16" S.S.	1
24	005-0348	COLLAR SWITCH	1
25	005-	BUSHING	2
26	002-0329	REAR BLOCK	2
27	051-0422	HEX. BOLT 3/8" - 16 x 3 1/4" S.S.	4
28	051-0360	HEX. BOLT 3/8" - 16 x 1" S.S.	4
29	005-	SPRING PROTECTOR	1
30	005-	TIE RAP	2
31	001-1454	PUMP SUPPORT	1
32	004-0042	ELECTRICAL ASSY SUPPORT	1
33	051-0190	HEX. BOLT 1/4" - 20 x 3/4" S.S.	4
34	058-0002	SPRING NUT 1/4" - 20 SPRING STEEL	2
35	001-1458	WIRE SUPPORT	1
36	125-RB0021	PUMP 21 M3	1
37	052-4200	HEX. BOLT M8 x 10 ZINC	3
38	051-0780	FLAT WASHER 3/8" S.S.	3
39	005-	BODY SUPP ASSY (OPTION STAND)	1
40	125-RB0040	PUMP 40 M3 (OPTION)	1
41	005-0406	PUMP SUPPORT ASSEMBLY (OPTION)	2
42	009-0088	PUMP SUPPORT PLATE ASSY (OPT.)	4
43	001-0199	SUPPORT (OPTION)	3
44	052-4220	HEX. BOLT M8 x 30 ZINC (OPTION)	3
45	051-0350	HEX. BOLT 3/8" - 16 x 3/4" S.S. (OPT.)	4
46	051-0780	FLAT WASHER 3/8" S.S. (OPTION)	7
47	001-1457	REAR PANEL	1



THESE ITEMS BOLTED WITH ITEMS ① & ②

NOTE:

WHEN THE STAND OPTION IS ORDERED, REMOVE PARTS #002-0022 FOOT & #051-0250 HEX. BOLT 1/4"-20 x 1 1/4" S.S. AND REPLACE BY #051-0190 HEX. BOLT 1/4"-20 x 3/4" S.S. & BOLT THE BODY & STAND TOGETHER.

450A

MACHINE: **450A**

PREZ: **MACHINE ASSEMBLY REAR VIEW**

EQ: **1**

SCALE: **1**

DATE: **10-22**

INT. **INT.**

MODIFICATION: _____

DATE: _____

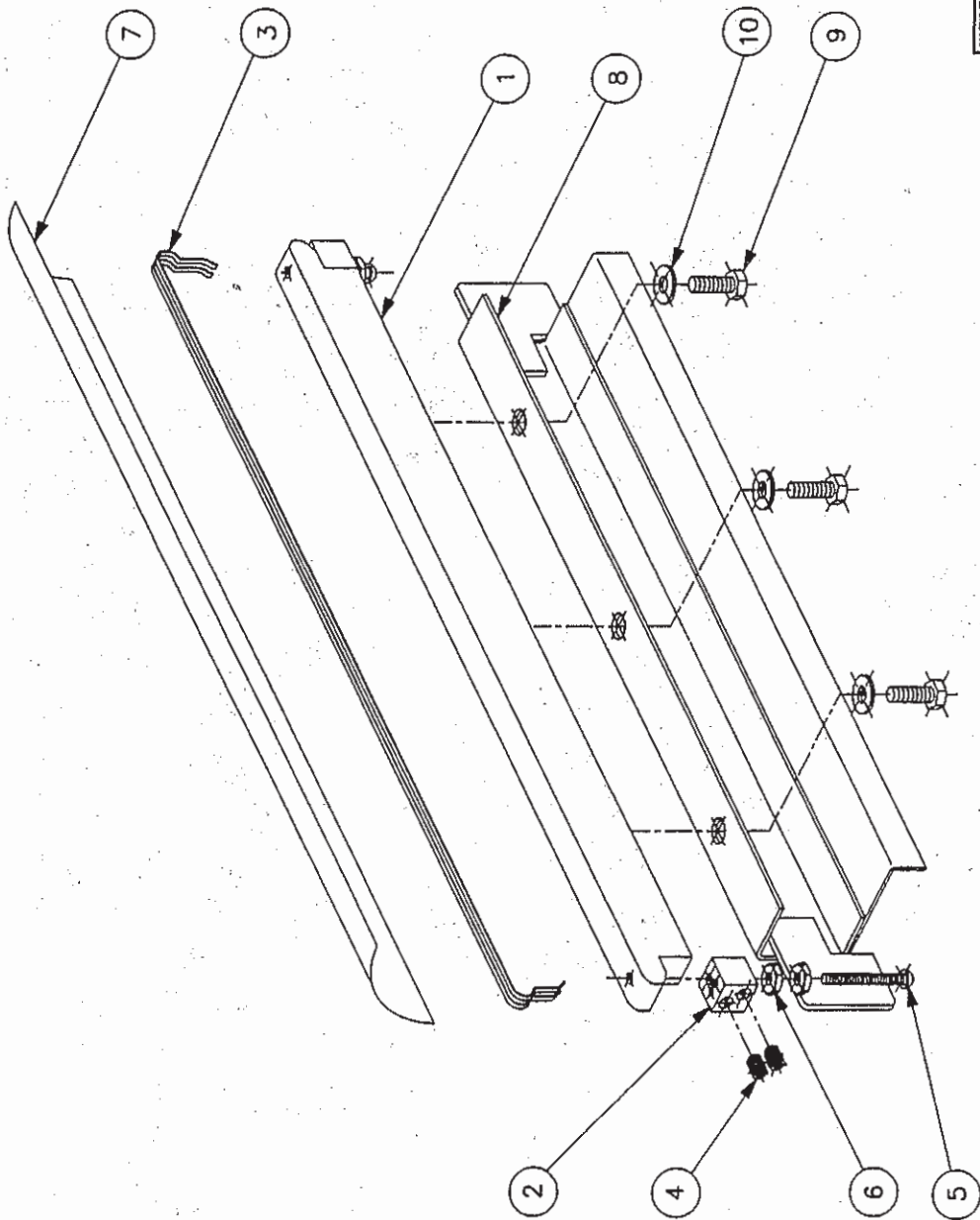
NE PAS MESURER / N.T.S.

ST-GERMAIN DE GRANTRIAM
QUEBEC CANADA

SIPROMAC

005-0411

ITEM	#	PIECE	DESCRIPTION	QTY
1	002-0352	SEAL BAR (TABLE)		2
2	002-0031	CONNECTOR		4
3	039-085015	SEALING ELEMENT		4
4	052-0395	SET SCREW 1/4"-20 x 5/16" (OVAL POINT)		8
5	052-0250	ROUND HEAD SCREW #8-32 x 1 1/2"		4
6	051-0550	HEX NUT #8-32 STAINLESS STEEL		8
7	176-9100-SS	SELF STICK TEFLON TAPE		2
8	005-0376	SEAL BAR SUPPORT ASSEMBLY		2
9	051-0180	HEX BOLT 1/4"-20 x 1 1/2" S.S.		6
10	051-0740	FLAT WASHER 1/4" STAINLESS STEEL		6



450A		MICH TOLEANCE		METRIC TOLEANCE	
SEAL BAR ASSEMBLY (with seal)		0.005		0.005	
GT. 2		0.005		0.005	
MATERIAL		0.005		0.005	
NE PAS MESURER / N.T.S.		DATE 94-12-15		DATE 94-12-15	
APP. DANE		DATE 94-12-15		DATE 94-12-15	

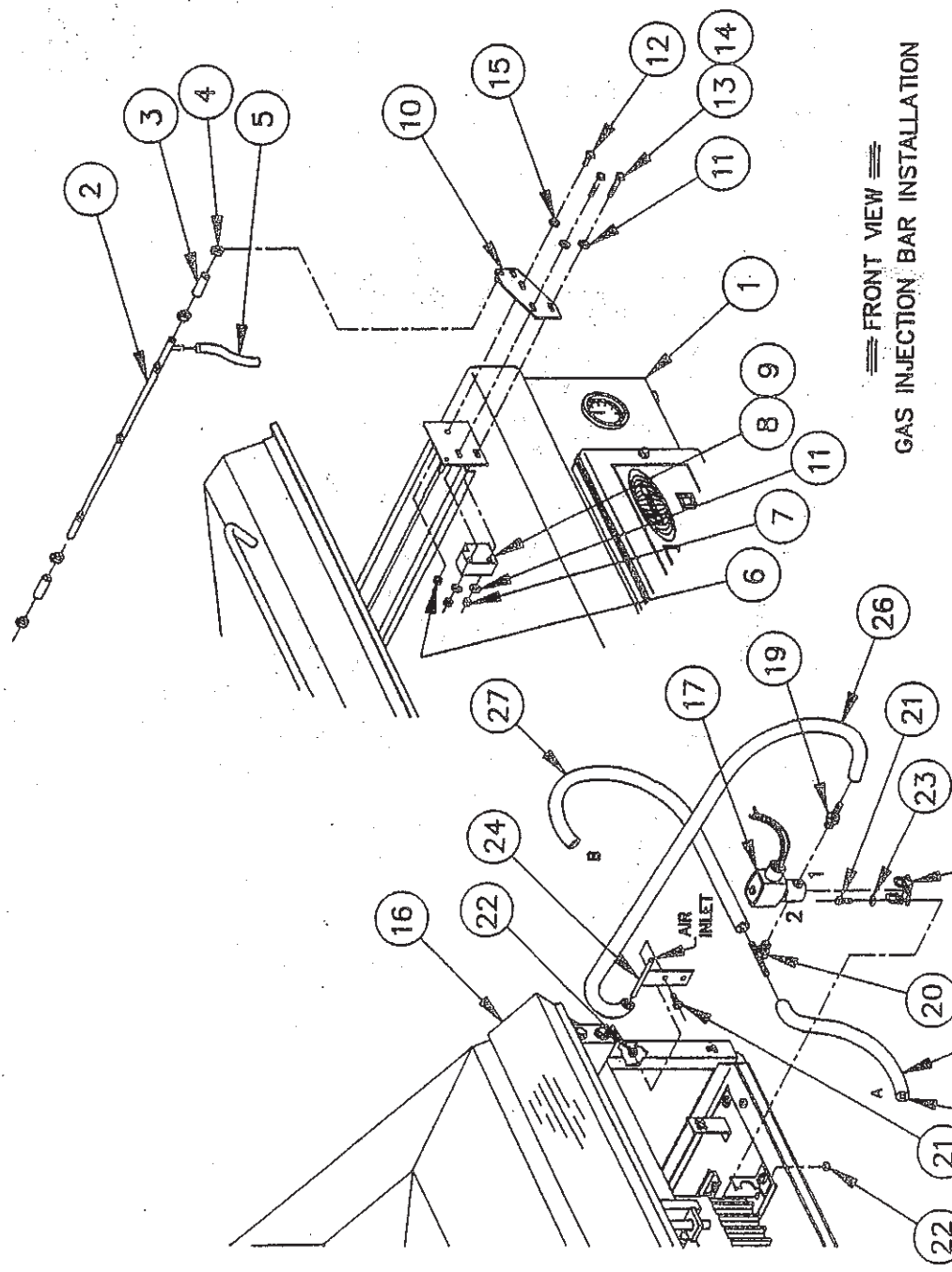
SIPROMAC

ST-GERMAIN DE GRANTHAM
QUEBEC CANADA

005-0377

A	REDESSINE	94-12-15	M.L.
LET	MODIFICATION	DATE	INT.

ITEM	#	PIECE	DESCRIPTION	QTY.
1	005-0410		MACHINE ASSEMBLY FRONT VIEW	1
2	009-0039		GAS INJECTION BAR (OPTION)	2
3	008-0295		GAS INJ. CONN. TUBE (OPTION)	4
4	105-P-425		GAS INJ. COLLARS (OPTION)	8
5	179-0388		GAS INJECT.TUBE (OPTION)	2
6	051-0580		HEX. NUT 1/4"-20 S.S.	4
7	051-0581		LOCK NUT 1/4"-20 S.S./NYLON	8
8	002-0326		LEFT/SEAL BAR GUIDE BLOCK	2
9	002-0327		RIGHT/SEAL BAR GUIDE BLOCK	2
10	005-0326		GAS INJ.BAR SUPP.ASS'Y (OPT.)	4
11	051-0740		FLAT WASHER 1/4" S.S.	16
12	051-0190		HEX. BOLT 1/4"-20 x 3/4" S.S.	4
13	051-0250		HEX. BOLT 1/4"-20 x 1 1/2" S.S.	8
14	051-0255		HEX.BOLT 1/4"-20x1 3/4"S.S(OPT.)	8
15	051-0740		FLAT WASHER 1/4" S.S (OPT.)	4
16	005-0411		MACHINE ASSEMBLY REAR VIEW	1
17	106-6262622		SELENOID VALVE 2 WAY 1/4"NPT	1
18	6V-206-525-1		SELENOID VALVE SUPPORT	1
19	102-TN-22		ADAPTER 1/4"MNPT x 1/4" HOSE	1
20	102-TSST-222		T 1/4"HOSEx1/4"MNPTx1/4"HOSE	1
21	051-0190		HEX. BOLT 1/4"-20 x 3/4" S.S.	2
22	051-0580		HEX. NUT 1/4"-20 S.S.	2
23	051-0740		FLAT WASHER 1/4" S.S (OPT.)	1
24	005-0323		GAS INLET ASSEMBLY	1
25	104-TP38		POLY. TUBING 1/4" I.D.x LG	1
26	104-TP38		POLY. TUBING 1/4" I.D.x LG	1
27	104-TP38		POLY. TUBING 1/4" I.D.x LG	1



FRONT VIEW
GAS INJECTION BAR INSTALLATION

REAR VIEW
VALVE INSTALLATION

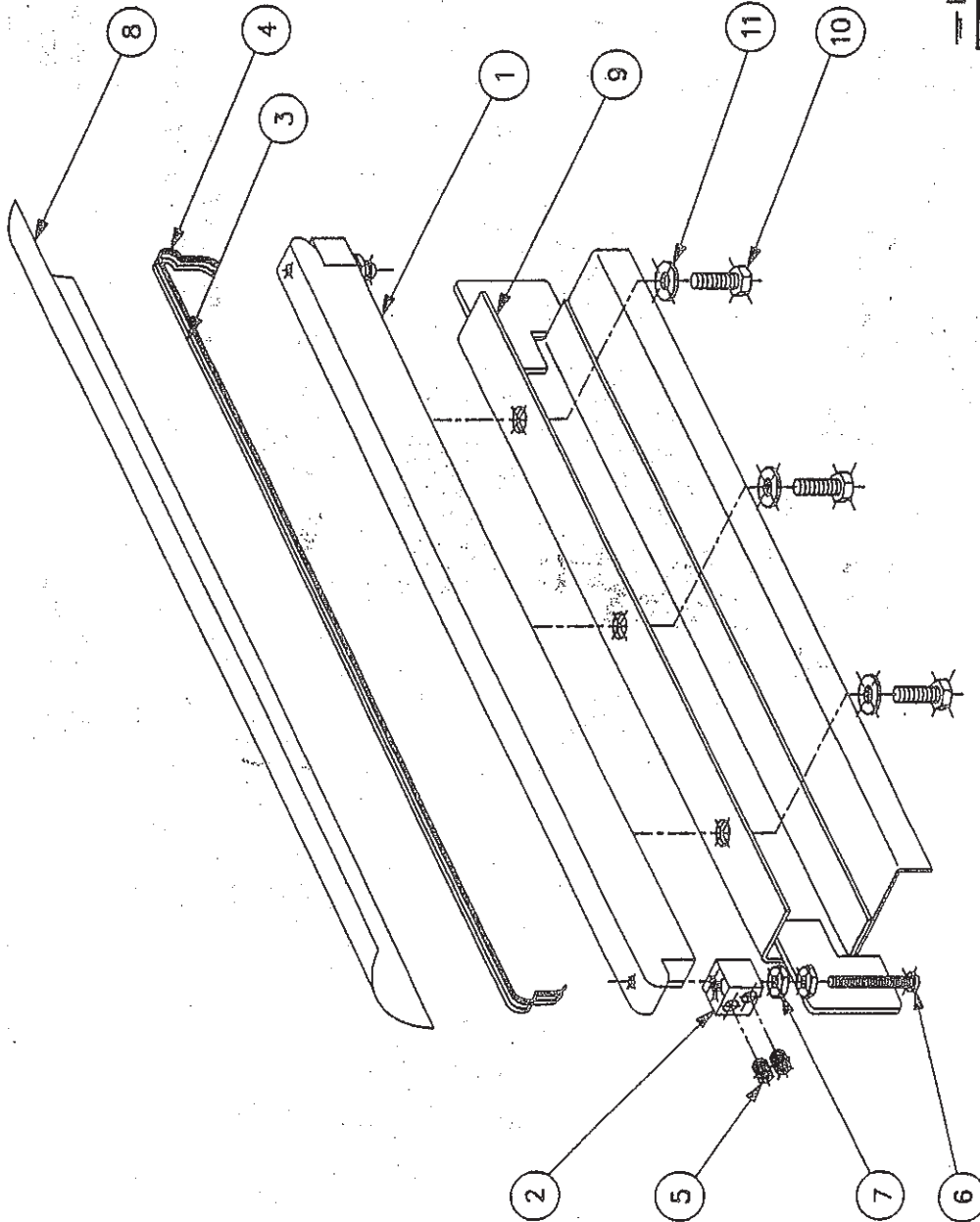
OPTION GAS INJECTION

450A		SIPROMAC	
GAS INJECTION KIT INSTALLATION		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
QTY. 1	EXCH. SCALE	NE PAS MESURER / N.T.S.	010-0012
DATE	MODIFICATION	DATE 93-11-20	REV.

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

DATE	INT.

ITEM	#	PIECE	DESCRIPTION
1	002-0352	SEAL BAR (TABLE)	
2	002-0031	CONNECTOR	
3	039-2502	SEALING ELEMENT	
4	039128	CUTTING ELEMENT	
5	052-0395	SET SCREW 1/4" - 20 x 5/16" (OVAL POINT)	2
6	052-0250	ROUND HEAD SCREW #8 - 32 x 1 1/2"	8
7	051-0550	HEX NUT #8 - 32 STAINLESS STEEL	4
8	178-9100-SS	SELF STICK TEFLON TAPE	8
9	005-0378	SEAL BAR SUPPORT ASSEMBLY	2
10	051-0180	HEX BOLT 1/4" - 20 x 1/2" S.S.	2
11	051-0740	FLAT WASHER 1/4" STAINLESS STEEL	6



BAG CUT OPTION

MACHINE	450A
PRICE	
QTY	2
DATE	94-12-15
SCALE	
UNIT	
REVISION	
MODIFICATION	
DATE	94-12-15
M.L.	
INT.	

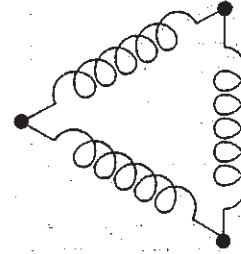
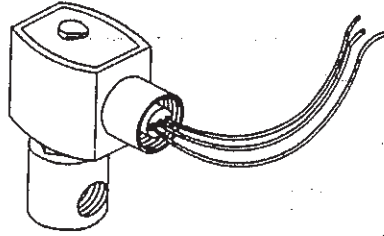
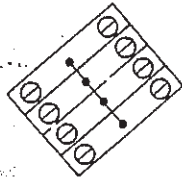
SIPROMAC
ST-CERMAIR DE GRANBY
QUEBEC CANADA

005-0383

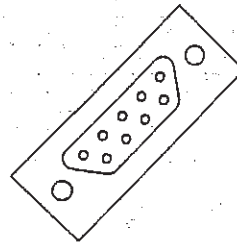
NETRIC
METRIC
INCHES
SCALE & T.

NE PAS MESURER / N.T.S.

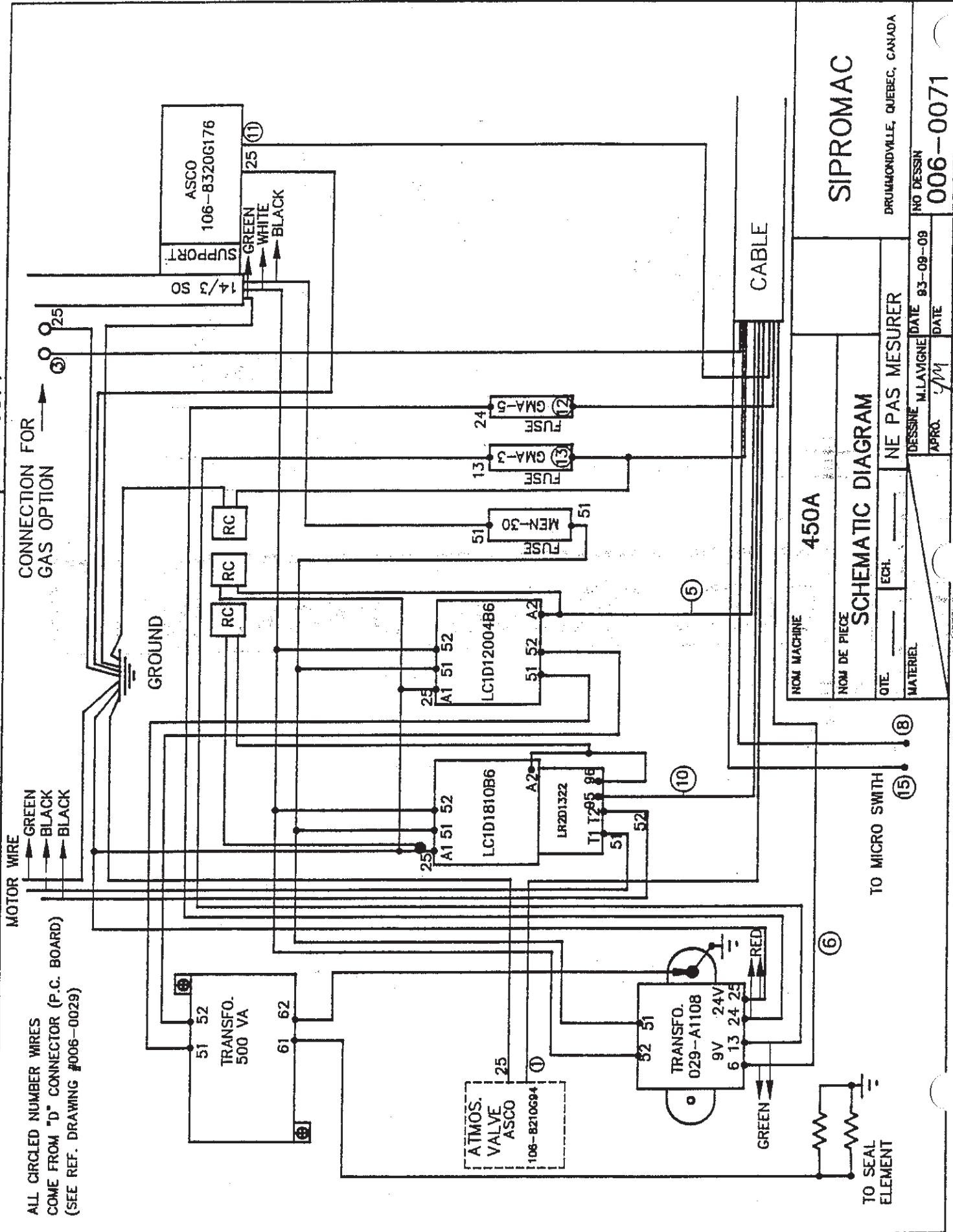
DATE 94-12-15
DAME



ELECTRICAL DRAWING



006-0071



ALL CIRCLED NUMBER WIRES
 COME FROM "D" CONNECTOR (P.C. BOARD)
 (SEE REF. DRAWING #006-0029)

SIPROMAC

DRUMMONDVILLE, QUEBEC, CANADA

450A

SCHMATIC DIAGRAM

NE PAS MESURER

NO DESSIN

006-0071

DATE 93-09-09

M.LAVIGNE

APPRO.

DATE

APPRO.

DATE

APPRO.

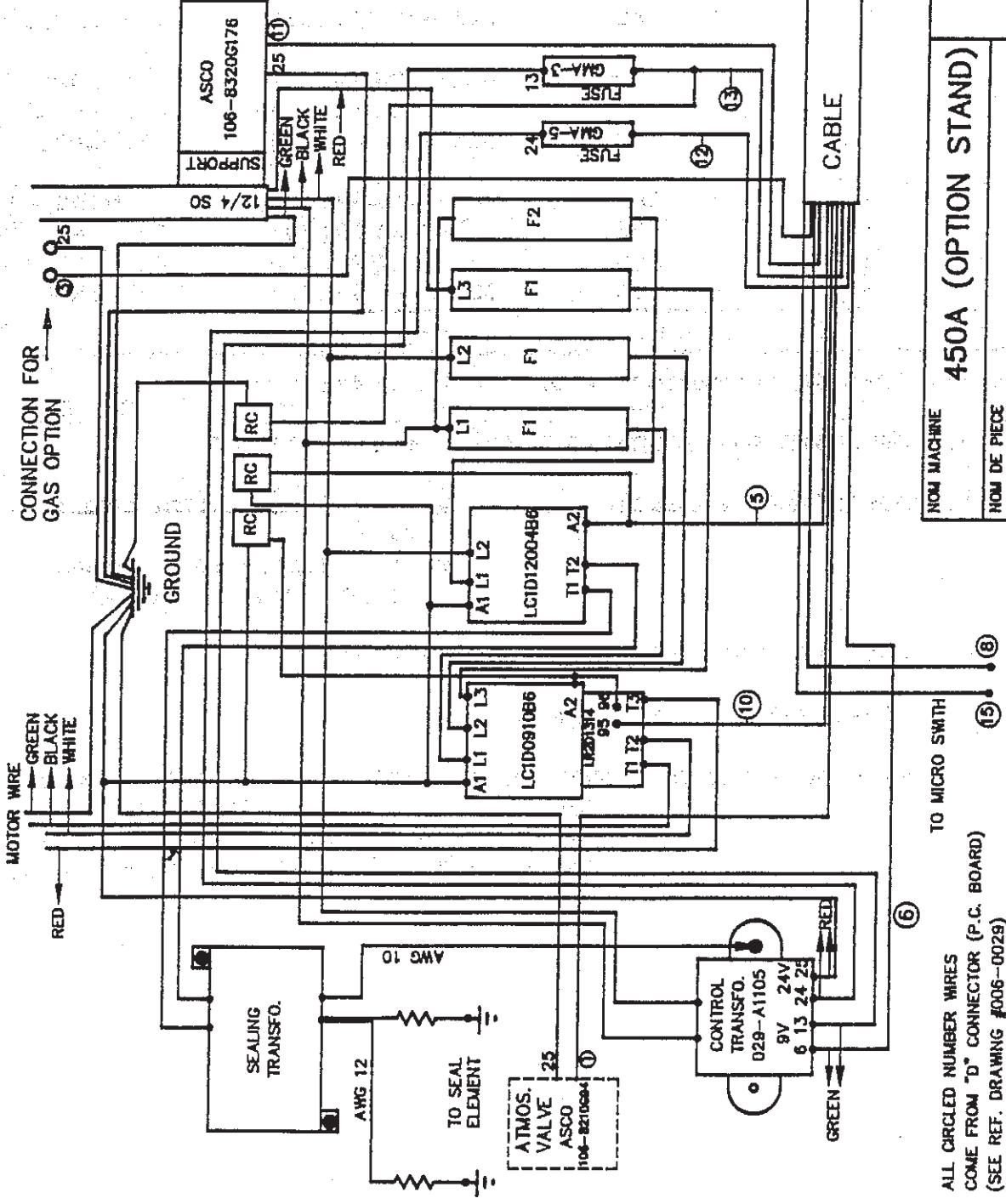
DATE

APPRO.

DATE

006-0079

PUMP		
MOTOR (HP)	VOLT +ph	FUSE F1
2	230-1	MEN-20
2	230-3	MEN-15
2	576-3	MCL-10
OPTION		
OPTION	VOLTAGE	FUSE F2
TWIN SEAL	220	MEN-25
TWIN SEAL	380	KTK-25
TWIN SEAL	600	KTK-15
BAG CUT	220	MEN-25
BAG CUT	380	KTK-25
BAG CUT	600	KTK-15



ALL CIRCLED NUMBER WIRES
COME FROM "D" CONNECTOR (P.C. BOARD)
(SEE REF. DRAWING #006-0029)

NOM MACHINE: 450A (OPTION STAND)

NOM DE PIECE: SCHEMATIC DIAGRAM

QTE: ECH: NE PAS MESURER

MATERIEL: APPRO. Y. N. DATE 93-08-08

DRUMMONDVILLE, QUEBEC, CANADA

NO DESSIN: 006-0079

450T, 450A & 550A

A: MOTOR CONTACTOR & OVERLOAD: SEE FOLLOWING CHART

VOLTS	PHASE	PUMP SIZE (M ³)	CONTACTOR #	OVERLOAD (O.L.) #
110	1	21	025-LC1D1810B6	025-LR2D1321
220	1	21	025-LC1D12004B6	025-LR2D1321
220	1	40	025-LC1D1210B6	025-LR2D1321
220	3	40	025-LC1D0910B6	025-LR2D1314
380	3	40	025-LC1D12004B6	025-LR2D1310
575	3	40	025-LC1D0910B6	025-LR2D1308
220	1	63	025-LC1D2510B6	025-LR2D1321
220	3	63	025-LC1D12004B6	025-LR2D1316
575	3	63	025-LC1D0910B6	025-LR2D1310
220	1	100	025-LC1D3210B6	025-LR2D1322
220	3	100	025-LC1D1810B6	025-LR2D1321
460	3	100	025-LC1D0910B6	025-LR2D1314
575	3	100	025-LC1D0910B6	025-LR2D1312

B & C: SEALING CONTACTOR: # 025-LC1D12004B6

D: OPTIONAL GAZ SOLENOID VALVE: # 106-8262G22

E: ATMOSPHERE SOLENOID VALVE: # 106-8210G94 WITH PUMP:
21 M³
106-8210G95 WITH PUMPS:
40 M³, 60 M³ & 100 M³

F: BELLOWS SOLENOID VALVE: # 106-8320G176

G, H, I: COVER SWITCH: # V15G6

J: SEALING TRANSFO: TWIN SEAL & BAG CUT 220 VOLTS: # 029-0040
TWIN SEAL & BAG CUT 575 VOLTS: # 029-0050
TOP & BOTTOM SEALING 220 VOLTS: # 029-0080
TOP & BOTTOM SEALING 575 VOLTS: # 029-0

006-0029

ITEM # PIECE DESCRIPTION QT.

WIRING OF 15 PIN "D" CONNECTOR-VACUUM PACKAGING MACHINE

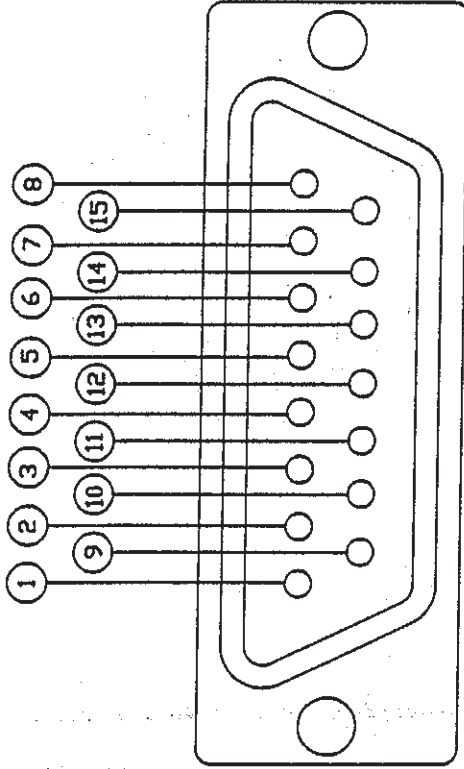
COLOR CODE

- ① BLACK : OUTPUT TO ATMOSPHERE VALVE
- ② WHITE : OUTPUT TO SEALING CONTACTOR
- ③ GREEN : OUTPUT TO GAS VALVE
- ④ RED : CONTACT OF PC BOARD RELAY
- ⑤ BLACK : CONTACT OF PC BOARD RELAY
ACTIVATES WHEN MACHINE IS ON
- ⑥ YELLOW : INPUT +9 VOLTS
- ⑦ ----- : JUMPED WITH ⑥
- ⑧ WHITE : TO COVER SWITCH
- ⑩ RED : OUTPUT TO VACUUM VALVE
OR CONTACTOR MOTOR (350,450A OR 550A)
- ⑨ ----- : NOT USED
- ⑪ BLACK : OUTPUT TO SEALING SELENOID VALVE
- ⑬ ORANGE : INPUT -9 VOLTS
- ⑭ ----- : JUMPED WITH ⑬
- ⑫ BLACK : INPUT 24 VAC
- ⑮ BROWN : TO COVER SWITCH

JUMP
SEE NOTE

PC BOARD
RELAY

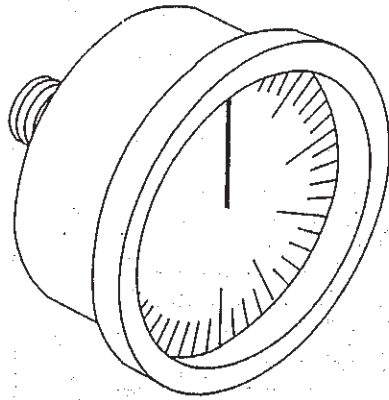
COVER
SWITCH



NOTE: - JUMP ② ④ FOR VACUUM : 350 450A 550A ONLY
 - THIS CONNECTOR PLUGS IN AT REAR OF P.C. BOARD

MACHINE		VACUUMS		INCH TOLERANCE 0.0 ± .015" .00 ± .005" .000 ± .0005"		METRIC TOLERANCE 0. ± .5 .0 ± .05 .00 ± .005 .000 ± .0005		DATE 94-03-03		NO.	
PIECE "D" CONNECTOR DETAIL		NE PAS MESURER / N.T.S.		ANGLE ± 1°		DATE 94-03-04		DATE 94-03-04		006-0029	
QT.	ECH. SCALE	APP. M. LAVIGNE		DATE 94-03-03		NO.		DATE 94-03-04		006-0029	
MAT:		APP. M. LAVIGNE		DATE 94-03-03		NO.		DATE 94-03-04		006-0029	
LET.	MODIFICATION	DATE		INT.							

SIPROMAC
 ST-GERMAIN DE GRANTHAM
 QUEBEC CANADA



PNEUMATIC DRAWING

