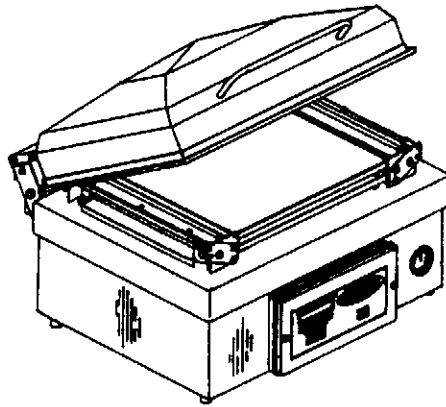
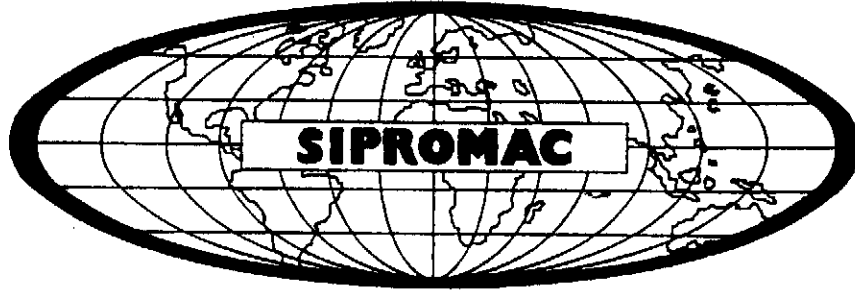


1AL-30



**MODEL 450T**



# VACUUM PACKAGING MACHINE

## MODEL 450T

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# VACUUM PACKAGING MACHINES

## OPERATION INSTRUCTIONS

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3. Operation
  - 3.1 Working principles
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  - 4.5 Control board failure
5. Regular maintenance

# 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

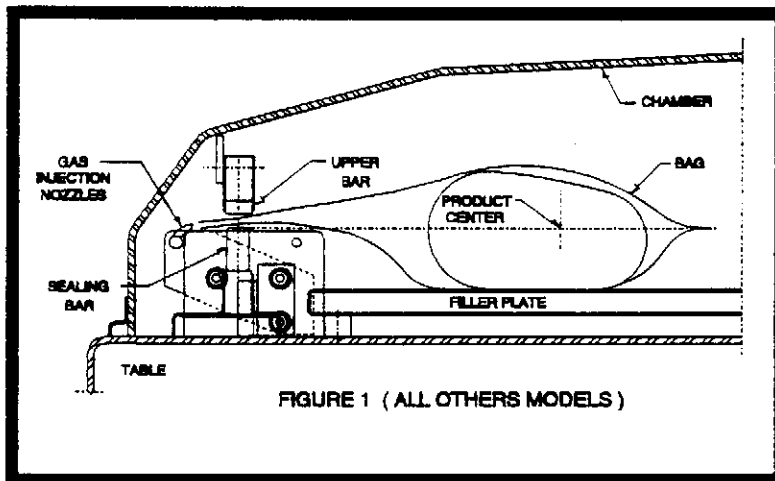
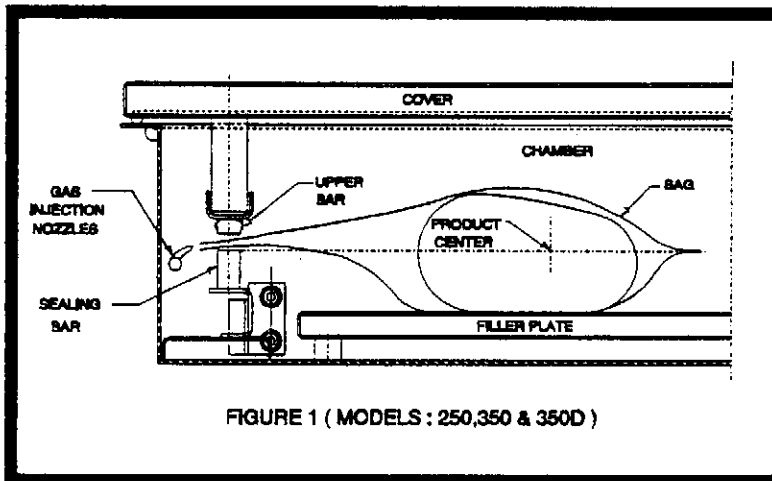
An important step in connecting the machine is to make sure that the pump turns in its correct rotation.

**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.

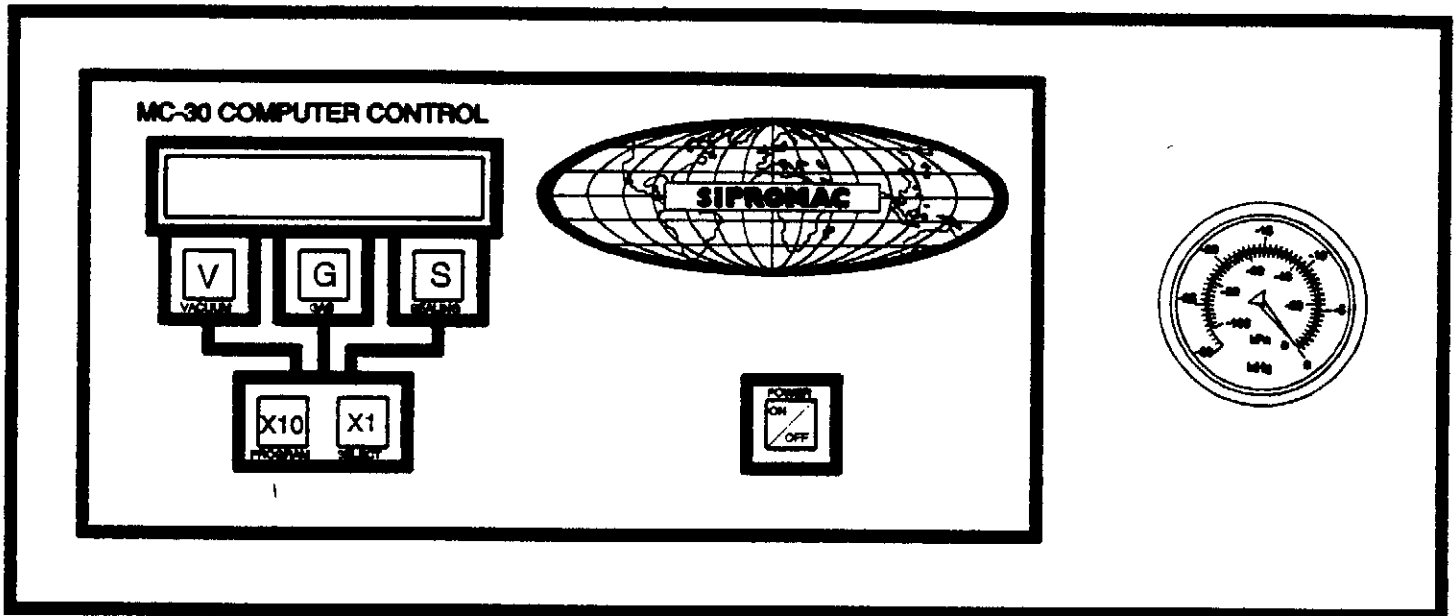
#### 3.2.3 Electrical bag cut:

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 you 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 250	18 sec.	As needed	1.2 sec.
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 580A	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".

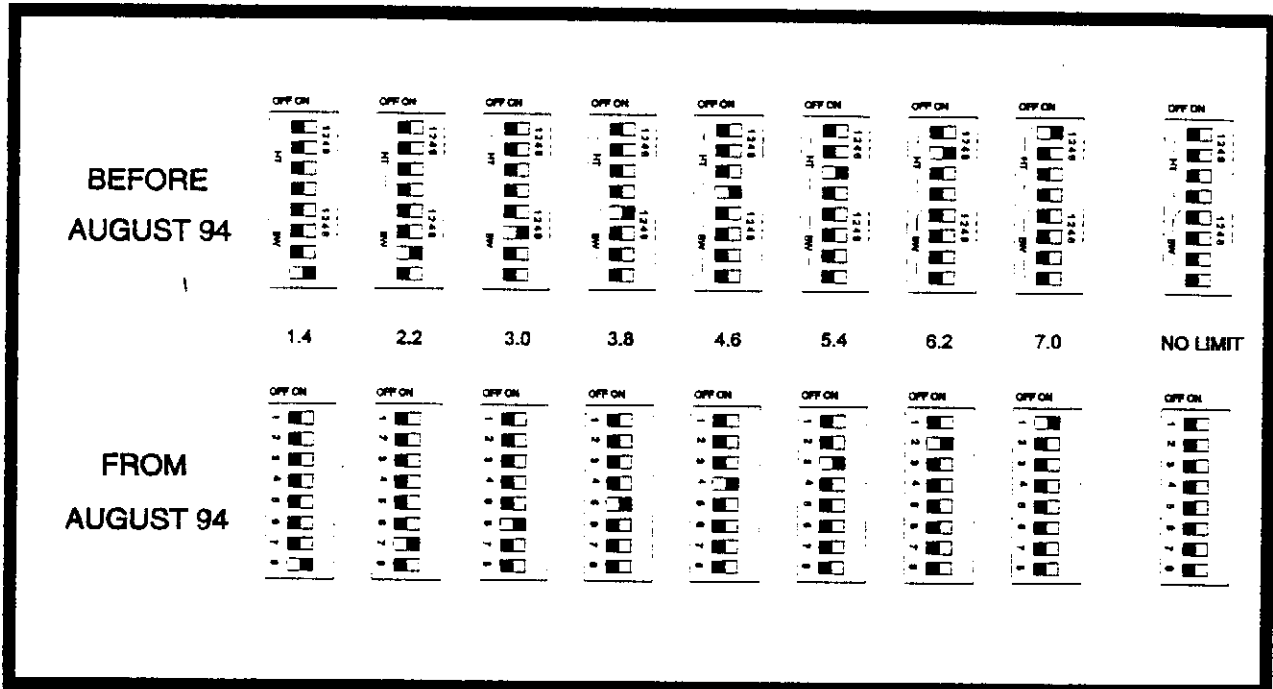
Warning: Do not increase the sealing time too much to prevent damaging the teflon.

#### 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.

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 LIMITS:**

Time limit factory settings:

250	3.0
350, 350D	3.8
420A	4.6
450T, 450A	4.6
550A	4.6
580A	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.

### 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 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.

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
<hr/>		
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
<hr/>		
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 functions 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.

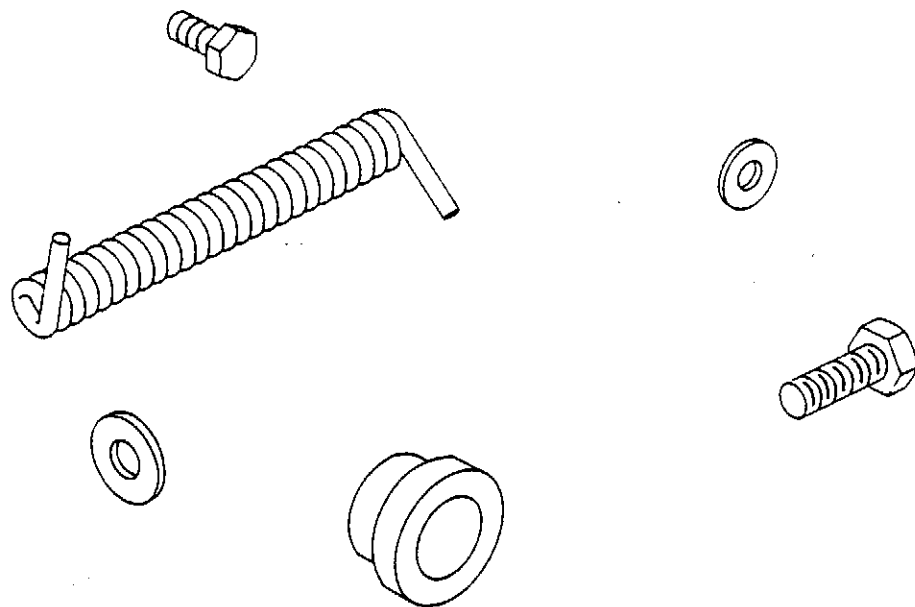
Check evacuation hose for damage (contraction of diameter, or abrasions).

Check vacuum connections for tightness.

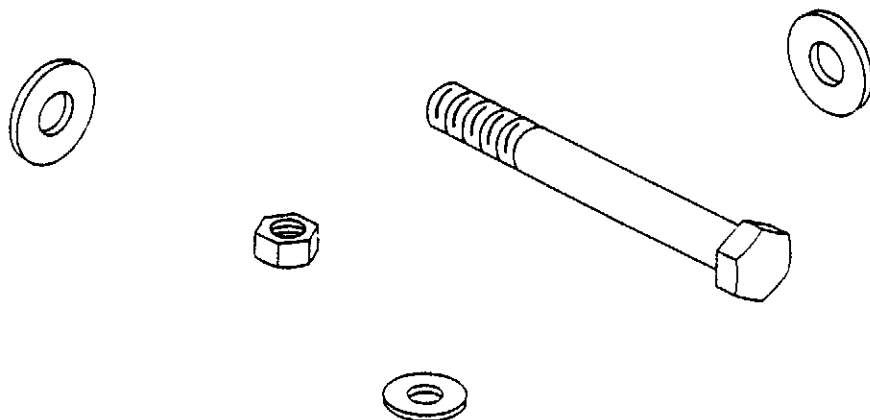
Check oil in pump (oil level in view glass; add if necessary. Regular change of oil - necessity indicated by change of color).

Check vacuum in chamber with precision vacuumeter.

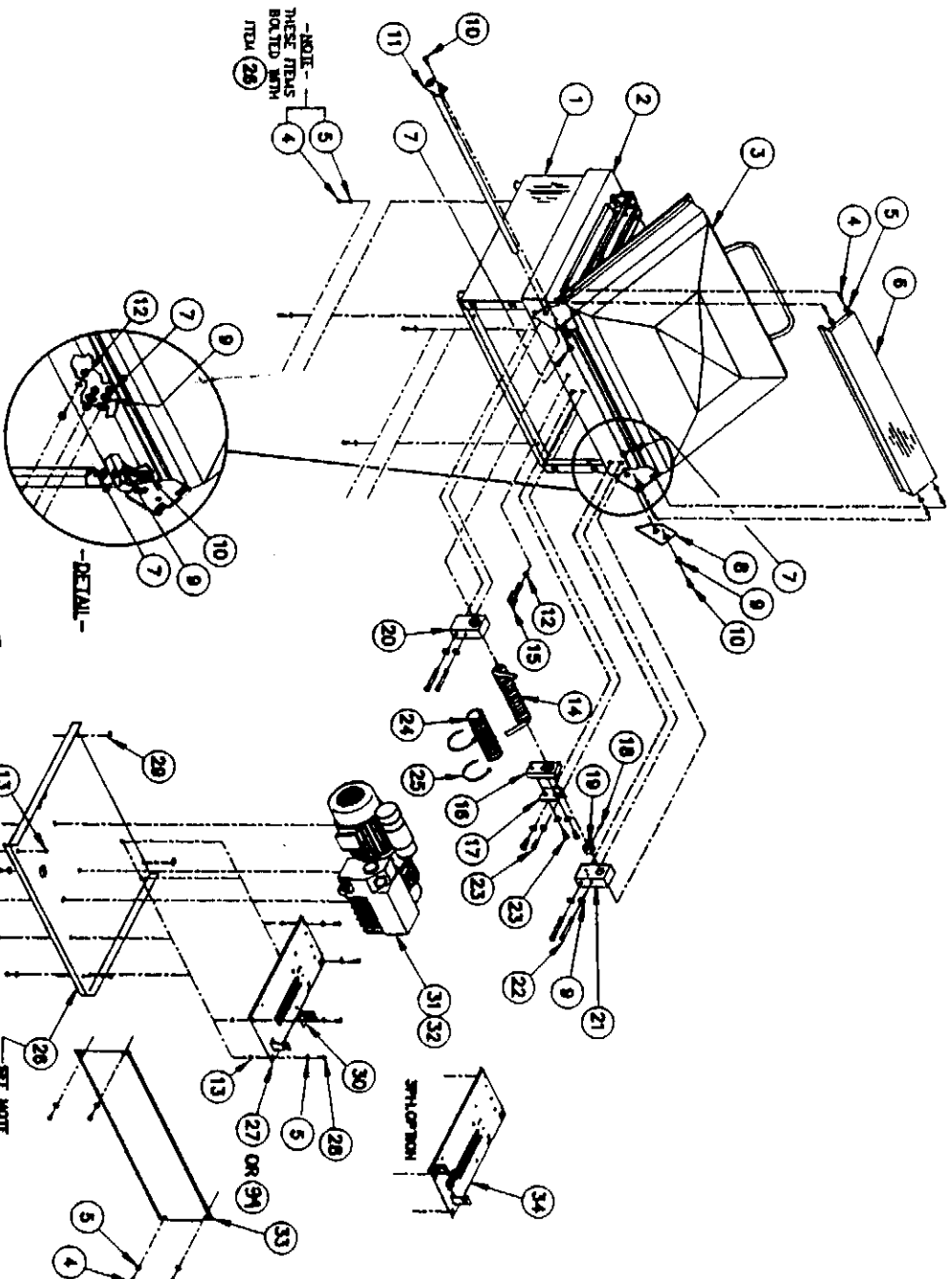
Check function of cycle with various settings of timers.



# MECHANICAL DRAWING







ITEM	PART #	DESCRIPTION	QTY
1	005-0445	STRUCTURE ASSEMBLY	1
2	009-0375	TABLE ASSEMBLY	1
3	005-0444	COVER ASSEMBLY	1
4	051-0180	HEX. BOLT 1/4"-20 x 1/2" S.S.	12
5	051-0740	FLAT WASHER 1/4" S.S.	20
6	004-0172	SPRING COVER ASSEMBLY	2
7	051-0630	HEX NUT 3/8"-16 S.S.	12
8	001-1335	CHAMBER STOPPER	1
9	051-0780	FLAT WASHER 3/8" S.S.	26
10	051-0350	HEX. BOLT 3/8"-16 x 3/4" S.S.	6
11	004-0128	COVER AXIS PRE-ASSEMBLY	1
12	051-0630	HEX NUT 1/2"-13 S.S.	2
13	051-0560	HEX NUT 1/4"-20 S.S.	10
14	008-0358	COVER SPRING	1
15	005-0348	SPRING TENSION SUPPORT PRE-ASSY	1
16	004-0276	CENTRAL COVER AXIS SUPPORT	1
17	001-1540	CENTRAL COVER AXIS SUPP FIX	1
18	051-0178	SET SCREW 1/4"-20 x 5/16" S.S.	1
19	005-0348	MICRO-SWITCH COLLAR ASSY	1
20	004-0274	LEFT COVER AXIS SUPPORT	1
21	004-0275	RIGHT COVER AXIS SUPPORT	2
22	051-0422	HEX. BOLT 3/8"-16 x 3/4" S.S.	4
23	051-0360	HEX. BOLT 3/8"-16 x 1" S.S.	4
24	036-0350	SLOT COORDIC LOCK 2" 10 x 37.0mm	2
25	057-0350	CABLE TIES 14" LONG BLACK	2
26	001-1954	PUMP SUPPORT	1
27	004-0042	ELECTRICAL SUPPORT PRE-ASSY	1
28	051-0180	HEX. BOLT 1/4"-20 x 3/4" S.S.	4
29	056-0002	SPRING NUT 1/4"-20 SPRING STEEL	1
30	001-1458	WIRE SUPPORT	2
31	004-0364	BUSCH PUMPS INSTALLATION	1
32	004-0365	TEYBOLD PUMPS INSTALLATION	1
33	001-1457	REAR PANNEL	1
34	009-0019	ELEC. SUPP. PRE-ASSY (3 PH. OPT.)	1

450T

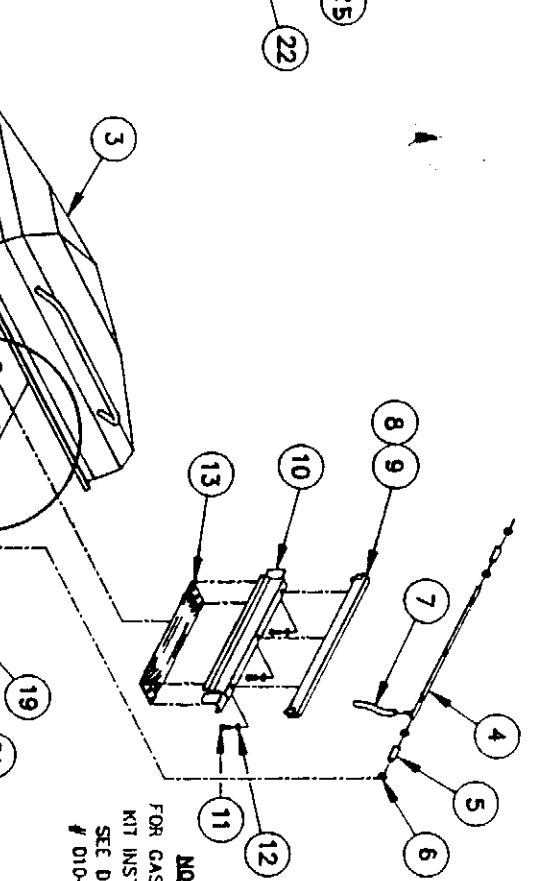
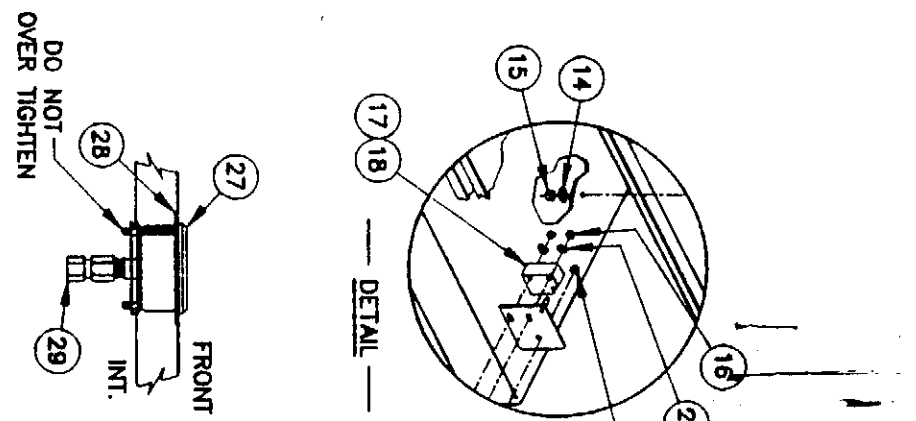
SIPROMAC

MACHINE ASSEMBLY REAR VIEW

DATE: 96-12-03

005-0539

1005-0539



NOTE:  
FOR GAS INJECTION  
KIT INSTALLATION  
SEE DRAWING  
# 010-0012

DO NOT  
OVER TIGHTEN

FRONT  
INT.

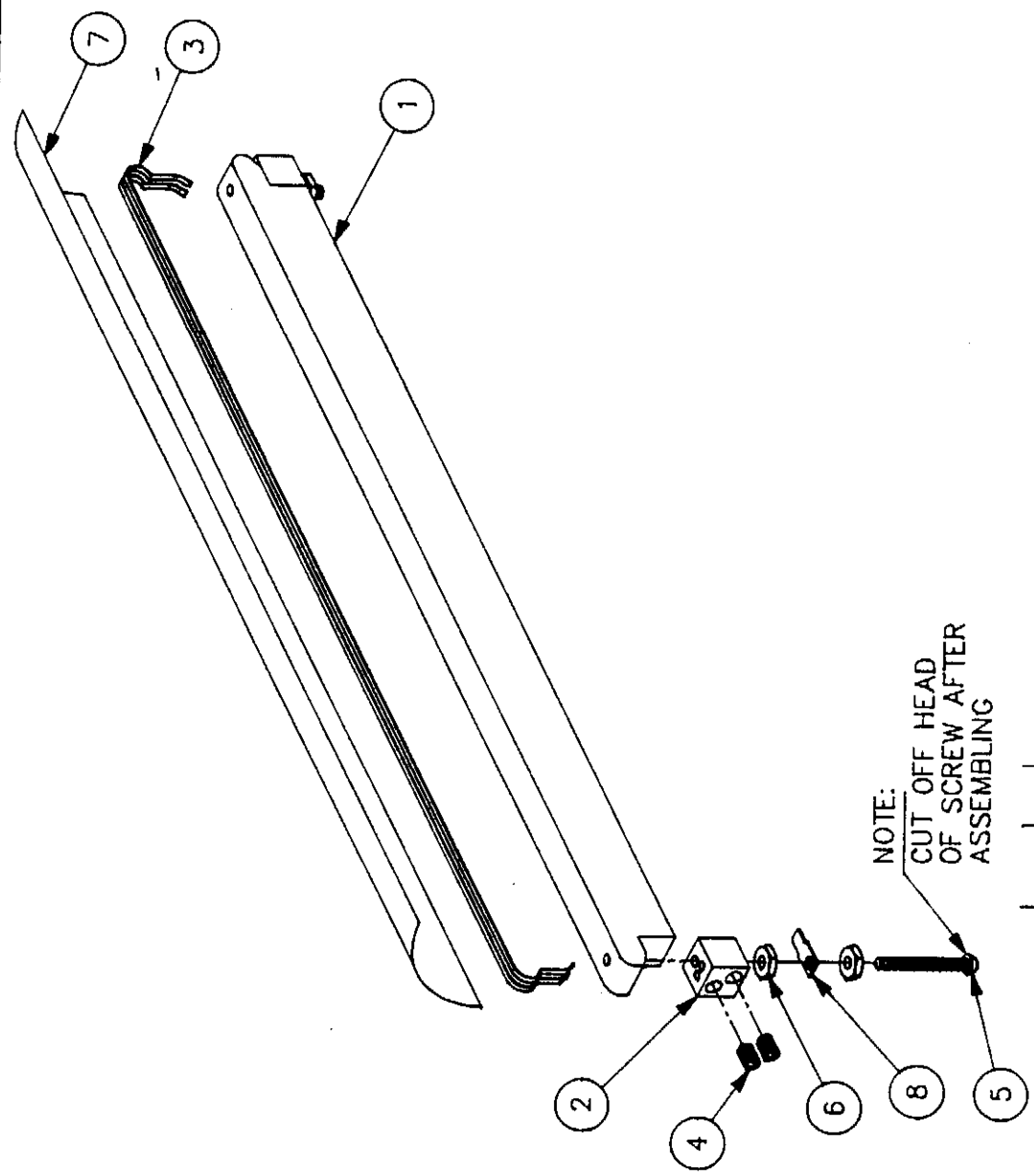
SEE  
INSTALLATION  
DETAIL

QTY	PART #	DESCRIPTION
1	005-0445	STRUCTURE ASSEMBLY
1	005-0375	TABLE ASSEMBLY
1	005-0444	COVER ASSEMBLY
2	005-0379	GAS INJECTION BAR ASSY (OPT.)
4	008-0285	GAS INJ. CONN. TUBE (OPTION)
8	105-0220	COLLARS (OPTION)
2	179-0030	RUBBER 3/8" OD BEIGE (OPT.)
2	005-0377	SEAL BAR PRE-ASSEMBLY
2	005-0383	SEAL BAR P-ASSY (BAG CUT OPT.)
2	005-0376	SEAL BAR SUPPORT ASSEMBLY
6	051-0180	BOLT 1/4"-20 x 1/2" S/S
6	051-0740	FLAT WASHER 1/4" S.S.
2	005-0378	BELLOWS ASSEMBLY
2	051-0780	FLAT WASHER 3/8" S.S.
2	051-0620	HEX. NUT 3/8"-16 S.S.
8	051-0581	LOCK NUT 1/4"-20 S.S./N/10M
2	002-0326	LEFT-SEAL BAR GUIDE BLOCK
2	002-0327	RIGHT-SEAL BAR GUIDE BLOCK
4	005-0326	GAS INJ.BAR SUPP. ASSY (OPT.)
4	051-0190	BOLT 1/4"-20 x 3/4" S/S (OPT.)
4	051-0740	FLAT WASHER 1/4" S.S. (OPT.)
4	051-0580	NUT 1/4"-20 S/S (OPT.)
8	051-0255	BOLT 1/4"-20 x 1 3/4" S/S (OPT.)
8	051-0250	BOLT 1/4"-20 x 1 1/2" S/S
16	051-0740	FLAT WASHER 1/4" S.S.
2	005-0380	FILLER PLATE ASSEMBLY
1	114-0260	VACUUM GAUGE W/SUPPORT
1	001-1888	HOLDING WASHER (VAC GAUGE)
1	101-0038	STR. 1/4" (N/10M) 3/8" T.P. COMP. BR.
2	051-0591	ACORN NUT 1/4"-20 S.S.
2	051-0740	FLAT WASHER 1/4" S.S.
1	005-0319	P.C. BOARD SUPPORT ASSEMBLY

REV. NO.	DATE	BY	CHKD.	APP'D.
005-0538	94-12-03	MAV	MAV	MAV

450T  
SIPROMAC  
MACHINE ASSEMBLY FRONT VIEW  
N.T.S.  
ST-GERMAIN DE GRANBY  
QUÉBEC CANADA

ITEM	PART #	DESCRIPTION	QTY
1	002-0352	SEAL BAR	2
2	002-0031	CONNECTOR	4
3	039-0200	SEALING ELEMENT	4
4	052-0395	SET SCREW 1/4" X 20 NC X 3/16" (OVAL POINT)	8
5	052-0250	SCREW #8-32 NC X 1 1/2" RND SLOT BRASS	4
6	051-0650	NUT #8-32 NC S/S	8
7	176-0200	TEFLON TAPE (SS) ADHESIVE	2
8	027-0400	CONNECTOR ADAPTOR	4

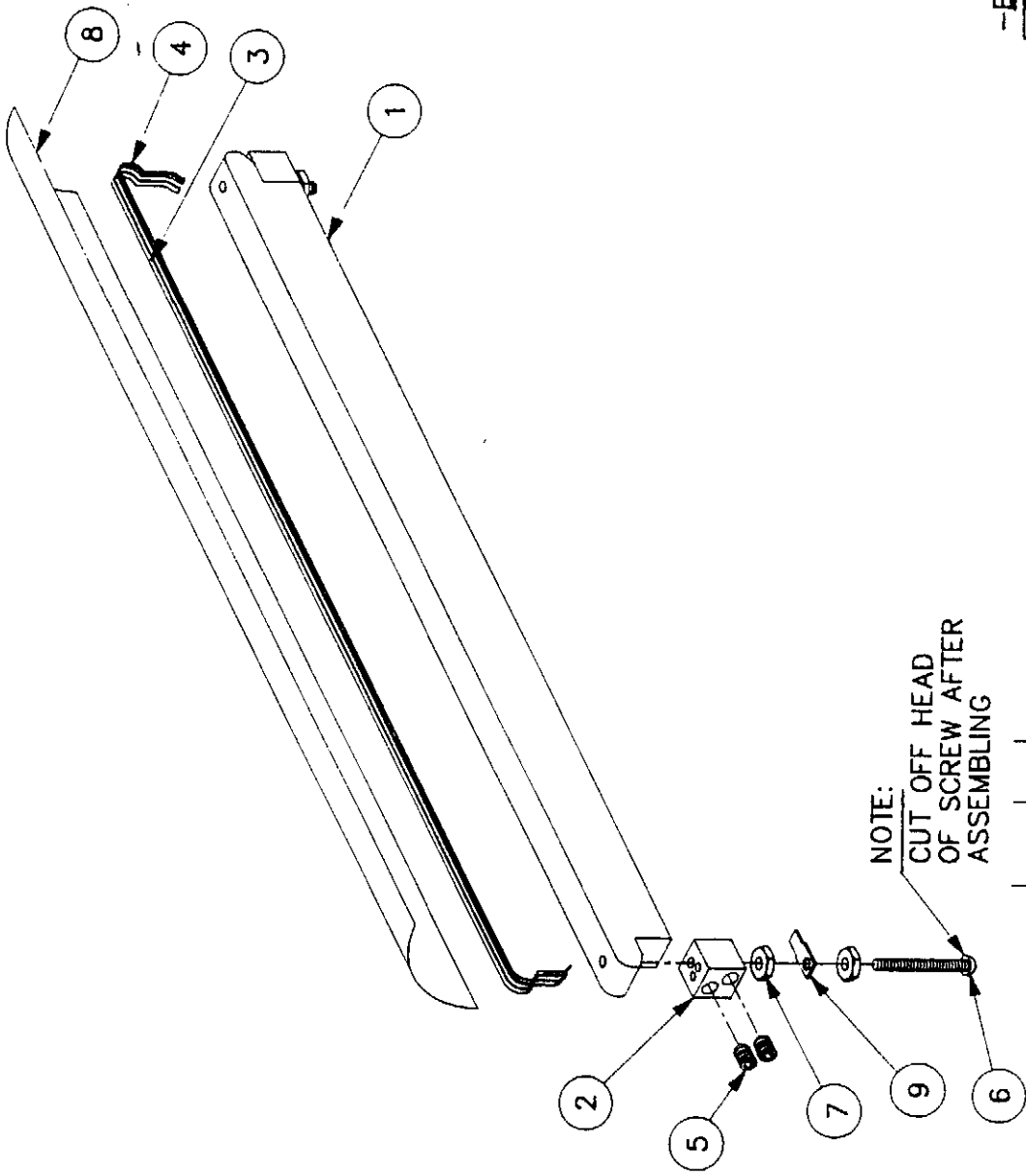


NOTE:  
CUT OFF HEAD  
OF SCREW AFTER  
ASSEMBLING

NAME: 450T		SIPROMAC	
PART: SEAL BAR PRE-ASSEMBLY		ST-GERMAN DE GRANBY QUEBEC CANADA	
DATE: 96-11-05	BY: A.P.	SCALE: 1/2	FIG. 2
MODIFICATION		005-0377	

LET	MODIFICATION	DATE	INT.
C	REDRAWN/AAR 450A SEE 004-0352/ ADDED 450T	96-11-05	A.P.

ITEM	PART #	DESCRIPTION	QTY
1	002-0352	SEAL BAR	2
2	002-0031	CONNECTOR	4
3	038-0230	CONVEX SEALING ELEMENT	2
4	039-0270	"T" PROFILE CUTTING ELEMENT	2
5	052-0395	SET SCREW 1/4" - 20 NC X 5/16" (OVAL POINT)	8
6	052-0250	SCREW #8-32 NC X 1 1/2" RND SLOT BRASS	4
7	051-0550	NUT #8-32 NC S/S	8
8	176-0200	TEFLON TAPE (55) ADHESIVE	2
9	027-0400	CONNECTOR ADAPTOR	4



NOTE:  
CUT OFF HEAD  
OF SCREW AFTER  
ASSEMBLING

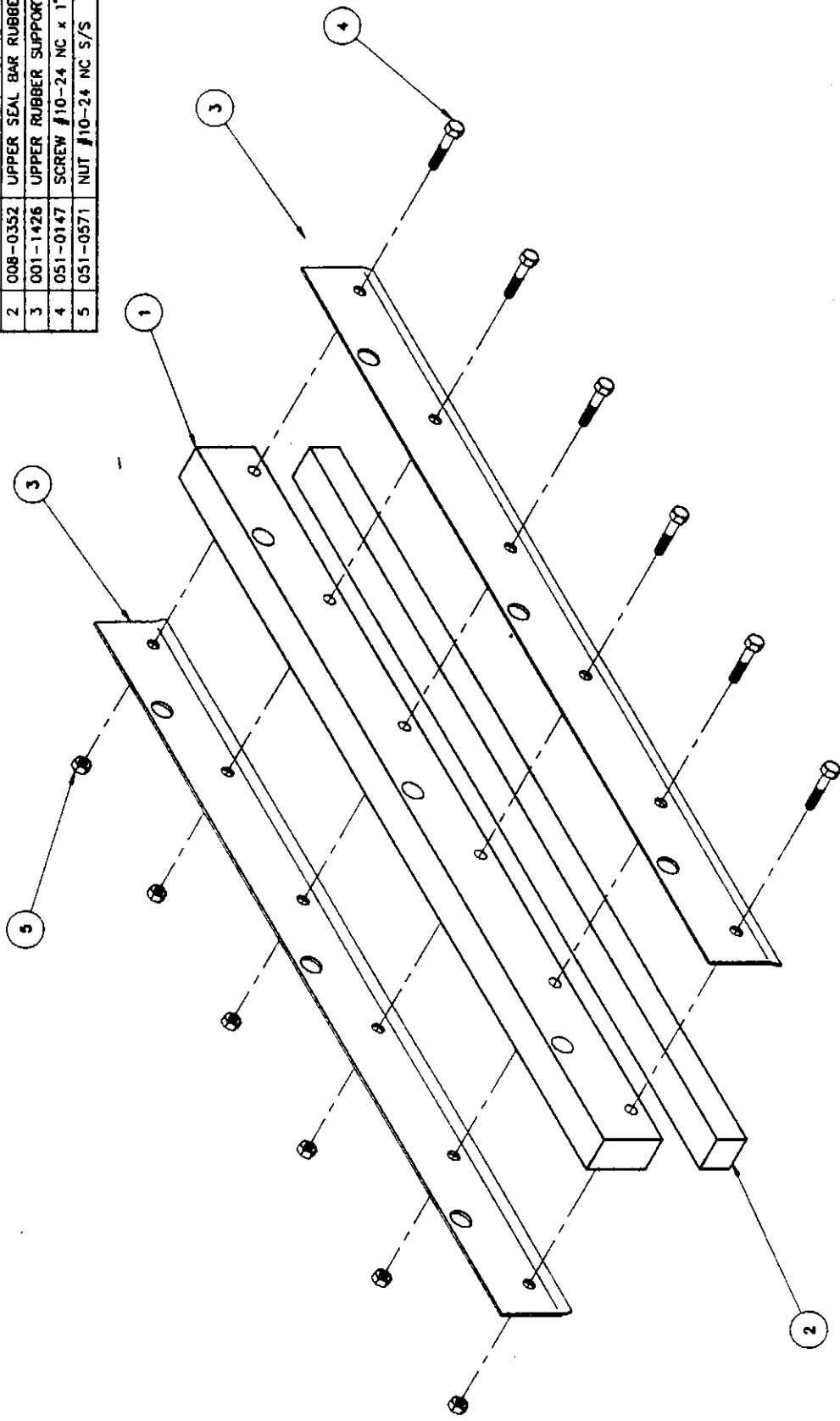
--BAG CUT OPTION--

MATERIAL		450T	
PART		SEAL BAR PRE-ASSEMBLY	
ITEM	QTY	DATE	SCALE
		96-11-05	2
MANUFACTURER		SIPROMAC	
		ST-GERMANY DE GRANTHAM	
		QUEBEC CANADA	
N.T.S.		005-0383	

LET	MODIFICATION	DATE	INT.
C	REDRAWN/A&R 450A SEE 004-0355/ADDED 450T	96-11-05	A.P.



ITEM	PART #	DESCRIPTION	QTY
1	002-0405	UPPER SEAL BAR SUPPORT	2
2	008-0352	UPPER SEAL BAR RUBBER	2
3	001-1426	UPPER RUBBER SUPPORT	4
4	051-0147	SCREW #10-24 NC x 1" HEX. S/S	12
5	051-0571	NUT #10-24 NC S/S	12



MACHINE	450T	SCALE	REL 2
PART	UPPER SEAL BAR PRE-ASSY	STAMPING TOLERANCE	ST-GERMAIN DE GRANTHAM
ITEM	004-0161	DATE	09-12-30
DATE	09-12-30	DATE	09-12-30
DESIGNER	M. LAVIGNE	DATE	09-12-30
DATE	09-12-30	DATE	09-12-30

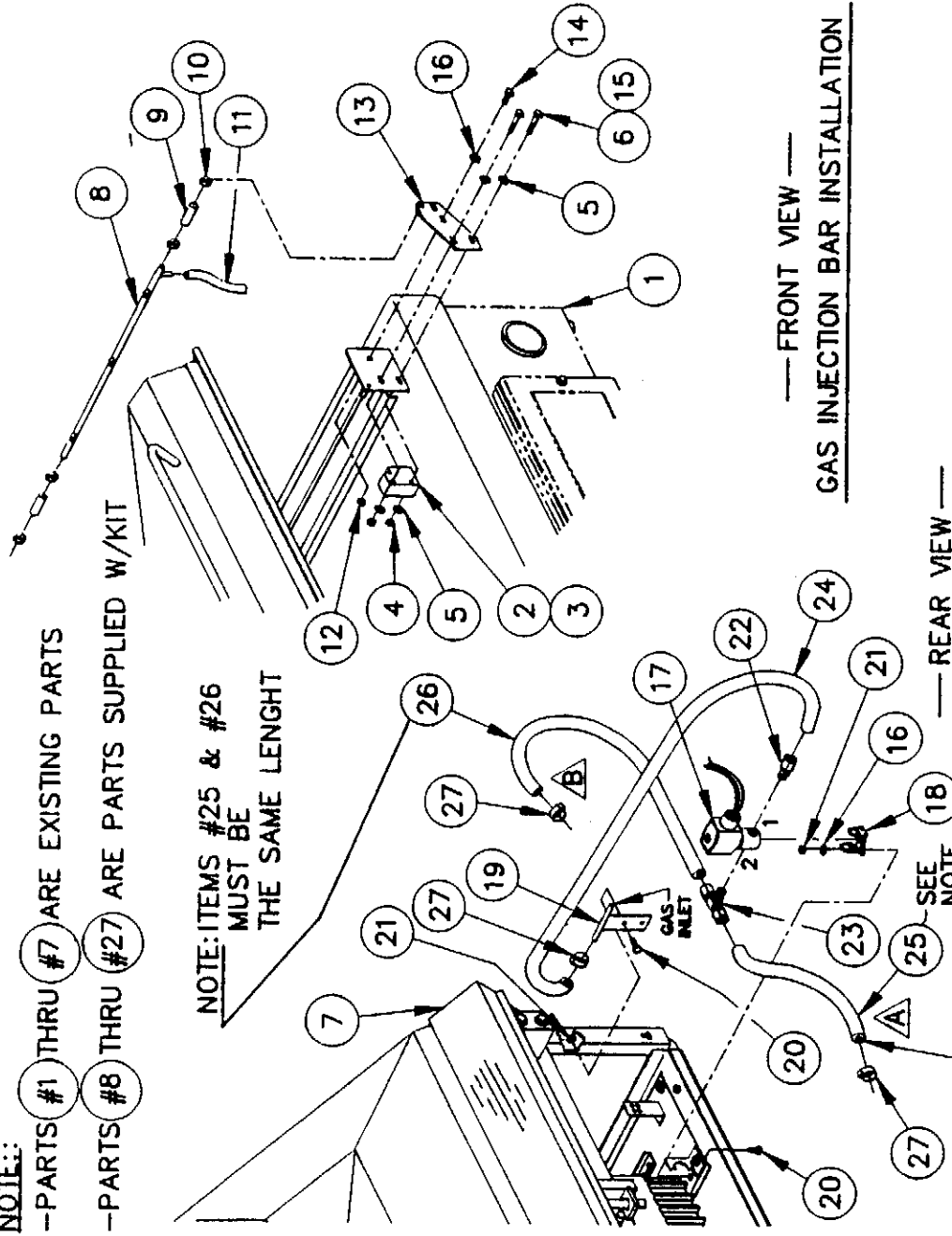
LET.	A	REDRAWN / FR. => EN. / MODIF. #A-0159	DATE	96-12-30	M.L.	INT.
MODIFICATION						

**NOTE:**

-PARTS #1 THRU #7 ARE EXISTING PARTS

-PARTS #8 THRU #27 ARE PARTS SUPPLIED W/KIT

NOTE: ITEMS #25 & #26  
MUST BE  
THE SAME LENGTH



FRONT VIEW  
GAS INJECTION BAR INSTALLATION

REAR VIEW  
VALVE INSTALLATION

ITEM	PART #	DESCRIPTION	QTY
1	005-0538	MACHINE ASSEMBLY FRONT VIEW	1
2	002-0326	LEFT/SEAL BAR GUIDE BLOCK	2
3	002-0327	RIGHT/SEAL BAR GUIDE BLOCK	2
4	051-0581	LOCK NUT 1/4"-20 S.S./NYLON	8
5	051-0740	FLAT WASHER 1/4" S.S.	16
6	051-0250	HEX. BOLT 1/4"-20 x 1 1/2" S.S.	8
7	005-0539	MACHINE ASSEMBLY REAR VIEW	1
8	005-0379	GAS INJECTION BAR ASSY.(OPT.)	2
9	008-0295	GAS INJ. CONN. TUBE (OPTION)	4
10	105-0220	COLLARS 1/2"	8
11	179-0030	GAS INJECT.TUBE (OPTION)	2
12	051-0580	HEX. NUT 1/4"-20 S.S.	4
13	005-0326	GAS INJ.BAR SUPP.ASSY (OPT.)	4
14	051-0190	HEX. BOLT 1/4"-20 x 3/4" S.S.	4
15	051-0255	HEX.BOLT 1/4"-20x1 3/4"S.(OPT.)	8
16	051-0740	FLAT WASHER 1/4" S.S (OPT.)	4
17	106-0010	SELENOID VALVE 2 WAY 1/4"NPT	1
18	106-0345	VALVE SUPPORT FOR 1/4" NPT	1
19	005-0323	GAS INLET ASSEMBLY	1
20	051-0190	HEX. BOLT 1/4"-20 x 3/4" S.S.	2
21	051-0580	HEX. NUT 1/4"-20 S.S.	3
22	101-0036	STRAIGHT 1/4"MNPT x 3/8"TP.COMP.	1
23	101-0065	T 3/8"TP.COMP.x1/4"MNPTx3/8"TP.COMP	1
24	104-0060	TUBE 3/8"ODx1/4"(POLY.) x mm LG.	1
25	104-0060	TUBE 3/8"ODx1/4"(POLY.) x mm LG.	1
26	104-0060	TUBE 3/8"ODx1/4"(POLY.) x mm LG.	1
27	105-0200	COLLARS 3/8"	3

OPTION GAS INJECTION

450T

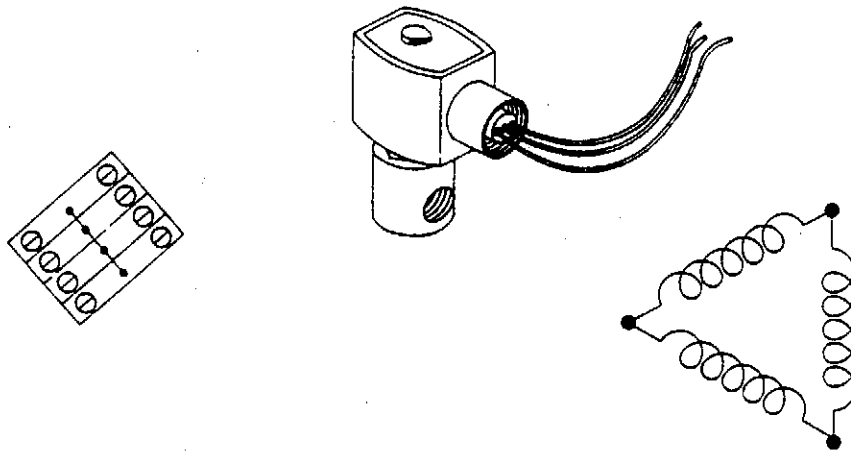
SIPROMAC

GAS INJECTION KIT INSTALLATION

ST-GERMAIN DE GRANBY QUEBEC CANADA

DATE: 06-12-02

010-0012

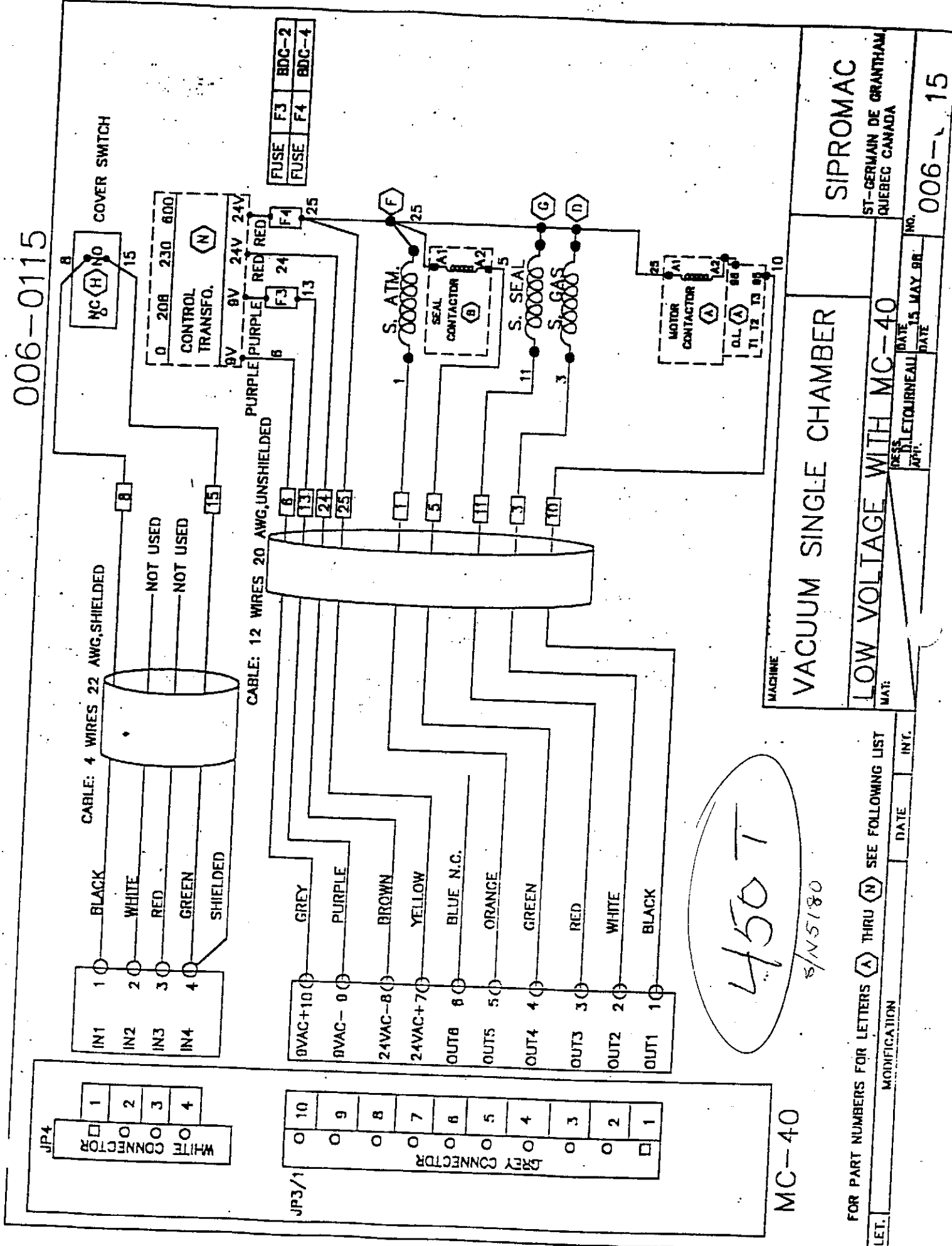


# ELECTRICAL DRAWING





006-0115



SIPROMAC

ST-GERMAIN DE GRANTHAM  
QUEBEC CANADA

VACUUM SINGLE CHAMBER

LOW VOLTAGE WITH MC-40

MAT: [ ] DATE: 15 MAY 80

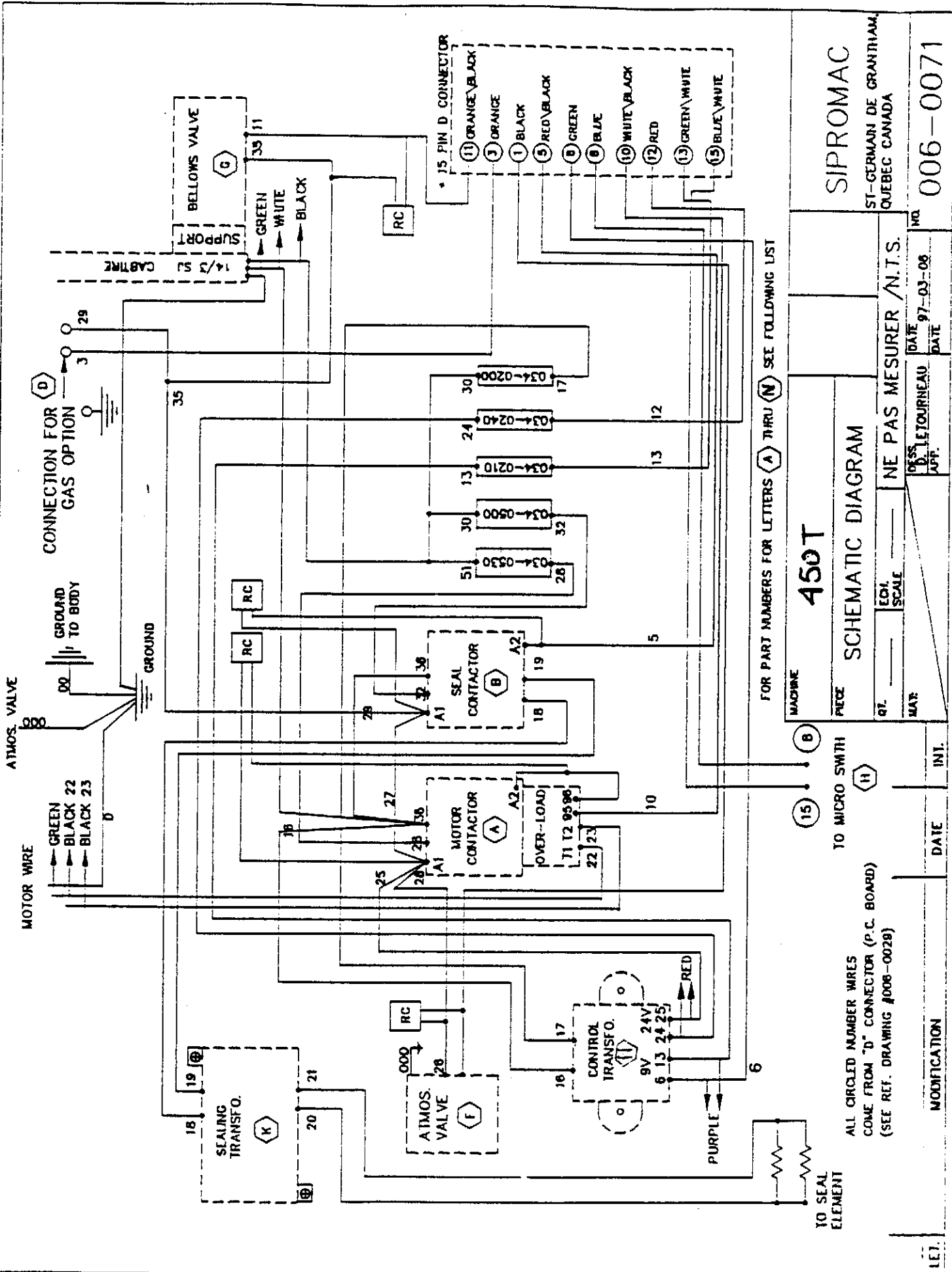
006-15

MC-40

FOR PART NUMBERS FOR LETTERS (A) THRU (N) SEE FOLLOWING LIST  
MODIFICATION DATE INT.



1006-0071



SIPROMAC  
ST-GERMAIN DE GRANTRIAM,  
QUEBEC CANADA

NO. 006-0071

DATE 97-03-06  
APP. D. LEJOURNEAU  
NE PAS MESURER N.T.S.

DATE INT.

MODIFICATION

ALL CIRCLED NUMBER WIRES  
COME FROM "D" CONNECTOR (P.C. BOARD)  
(SEE REF. DRAWING #006-0028)

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

450T  
SCHEMATIC DIAGRAM

ED. SCALE

TO MICRO SWITCH

TO SEAL ELEMENT





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

COLOR CODE

- ① BLACK : OUTPUT TO ATMOSPHERE VALVE
- ② WHITE : OUTPUT TO SEALING CONTACTOR
- ③ ORANGE : OUTPUT TO GAZ VALVE
- ④ RED/WHITE : CONTACT OF PC BOARD RELAY ACTIVATES WHEN MACHINE IS ON
- ⑤ RED/BLACK : CONTACT OF PC BOARD RELAY ACTIVATES WHEN MACHINE IS ON
- ⑥ GREEN : INPUT 9 VAC
- ⑦ ----- : JUMPED WITH ⑥

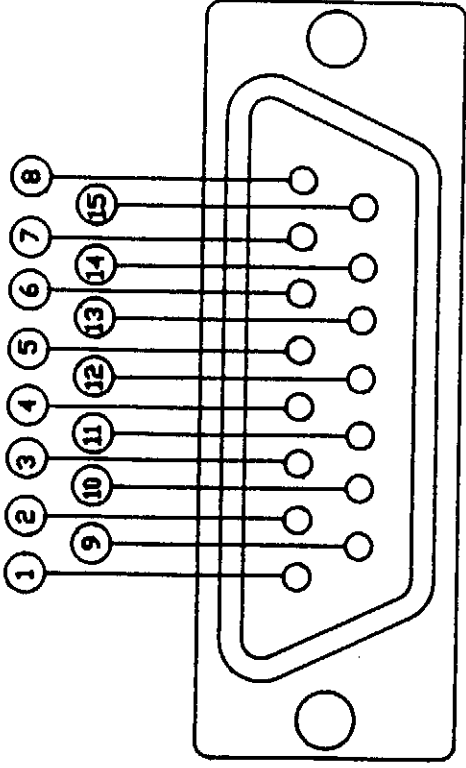
JUMP  
SEE NOTE

PC BOARD  
RELAY

- ⑧ BLUE : TO COVER SWITCH
- ⑨ ----- : NOT USED

COVER  
SWITCH

- ⑩ WHITE/BLACK : OUTPUT TO VACUUM VALVE OR CONT. MOTOR 350,450A OR 550A
- ⑪ ORANGE/BLACK : OUTPUT TO SEALING SELENOID VALVE
- ⑫ RED : INPUT 24 VAC
- ⑬ GREEN/WHITE : INPUT 9 VAC
- ⑭ ----- : JUMPED WITH ⑬
- ⑮ BLUE/WHITE : TO COVER SWITCH



WIRE SIDE VIEW

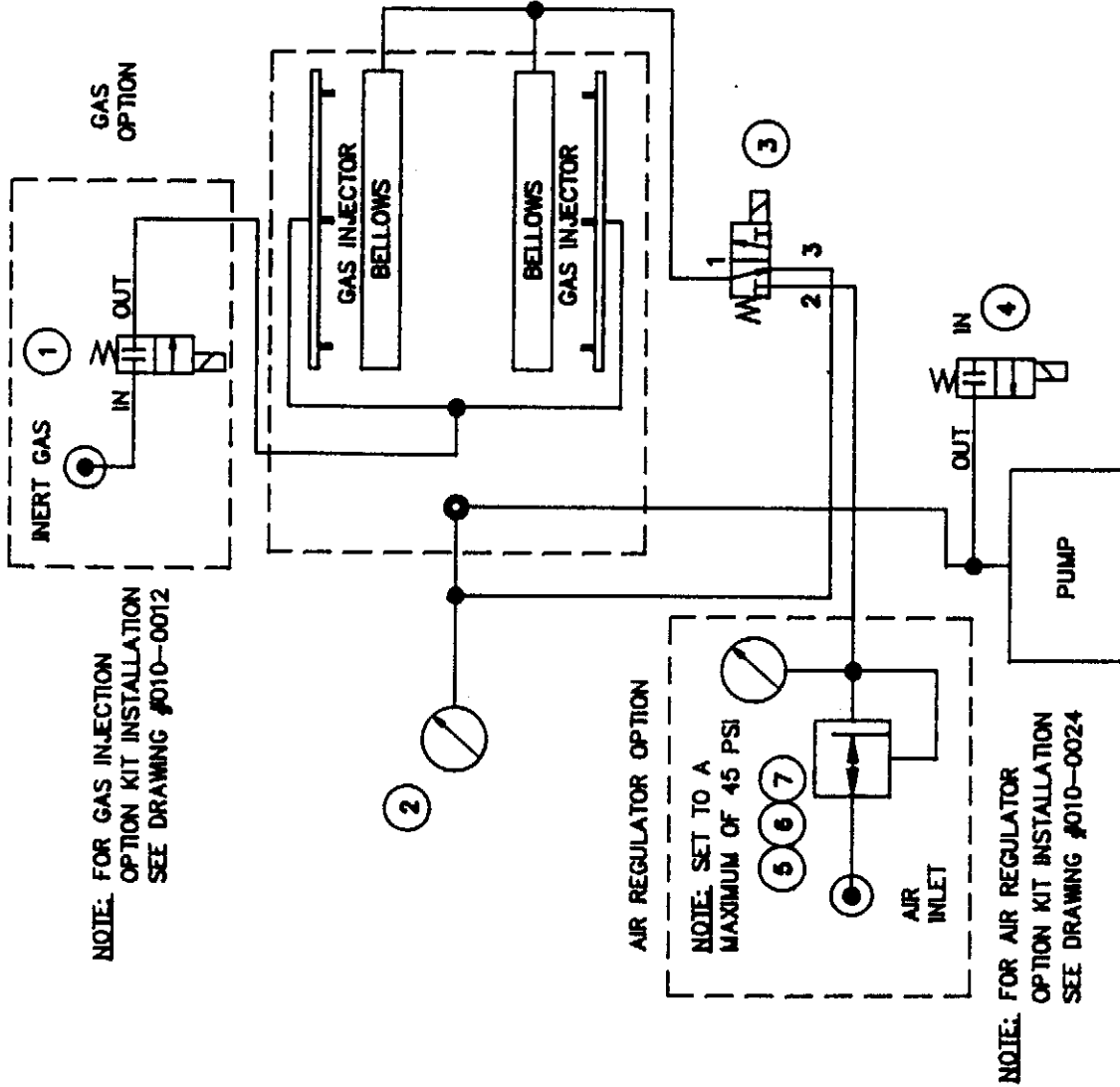
NOTE: - JUMP ②④ FOR VACUUM : 250 350 450A 550A ONLY  
 -THIS CONNECTOR PLUGS IN AT REAR OF P.C. BOARD

VACUUMS		SIPROMAC	
"D" CONNECTOR DETAIL		ST-GERMAN DE GRANTRIANG QUEBEC CANADA	
QTY	1	NE PAS MESURER /N.I.S.	NO.
REVISION		DATE	96-11-07
DATE	95-01-31	D.L.	
MODIFICATION		INT.	
LET.			006-0029



007-0036

ITEM	PART #	DESCRIPTION	QT.
1	106-0010	GAS VALVE	1
2	114-0280	VACUUM GAUGE	1
3	106-0070	BELLOWS VALVE	1
4	106-0020	ATMOSPHERE VALVE	1
5	114-0147	PRESSURE REGULATOR	1
6	114-0245	PRESSURE GAUGE	1
7	114-0170	PRESSURE REGULATOR SUPPORT	1



MACHINE		450T		SIPROMAC	
PART		PNEUMATIC DRAWING		ST-GERMAIN DE GRANTHAU QUEBEC CANADA	
ITEM	QNC	N.T.S.	SCALE	QT.	1
DATE	DATE	DATE	DATE	NO.	007-0036
97-03-12	97-03-12	97-03-12	97-03-12		
M.L.	M.L.	M.L.	M.L.		
INT.	INT.	INT.	INT.		
RE-DRAWN	MODIFICATION				
LET.					



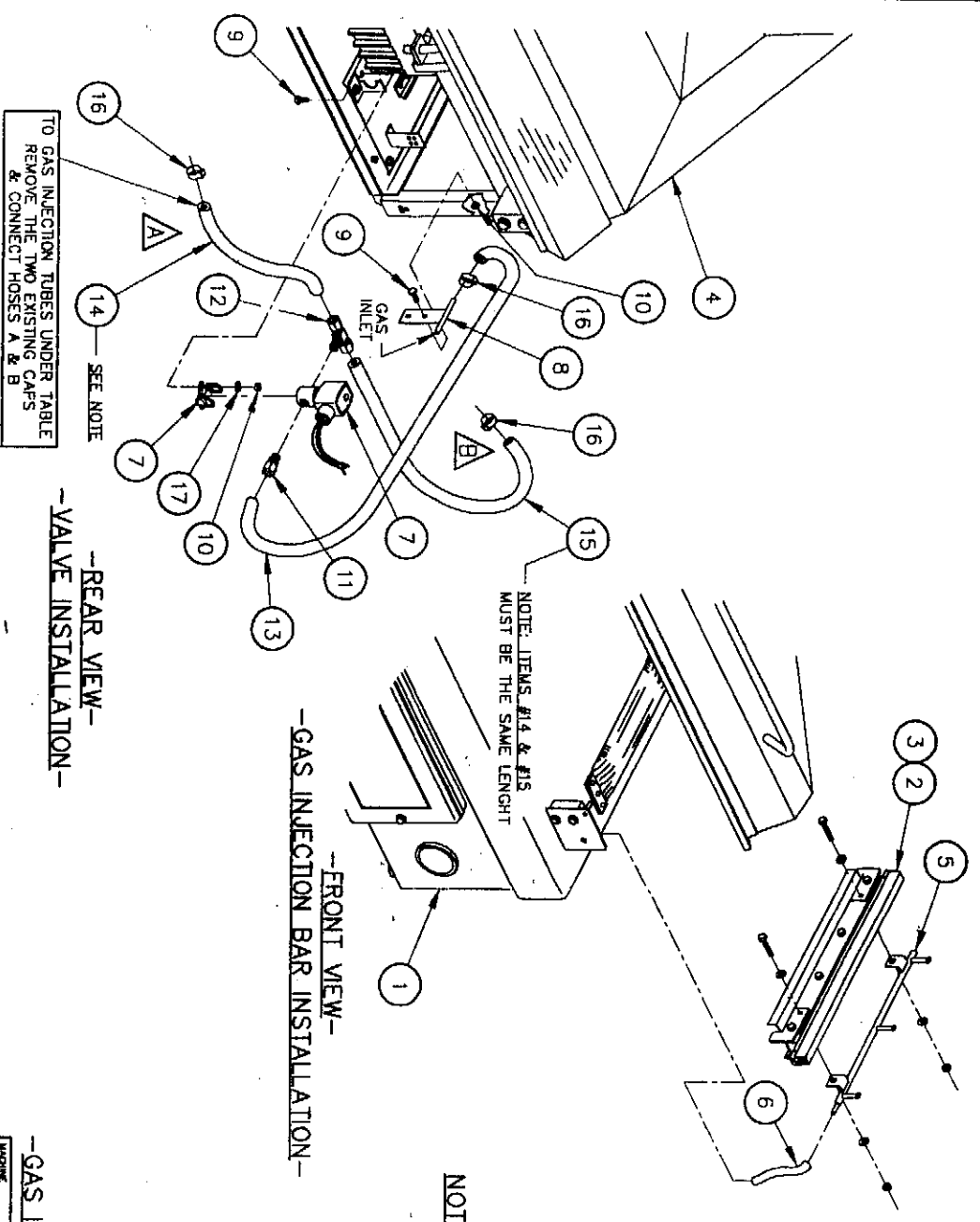
# NOTES



ITEM	PART #	DESCRIPTION	QTY.
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	STENOID 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	051-0530	HEX. NUT 1/4"-20 NC S/S	3
11	101-0036	STRAIGHT 1/4" MNPT X 3/8" T.P. COMP.	1
12	101-0065	T 3/8" T.P. COMP. X 1/4" MNPT X 3/8" T.P. COMP.	1
13	104-0080	TUBE 3/8" O.D. X 1/4" I.D. (POLY.) X mm LG.	1
14	104-0080	TUBE 3/8" O.D. X 1/4" I.D. (POLY.) X mm LG.	1
15	104-0080	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 ⑯ ARE PARTS SUPPLIED W/ KIT



REF. NO.	97-10-23	A.P.
MODIFICATION	DATE	INT.
LET:		

MACHINE	450T	SCALE	1
PART	GAS INJECTION KIT INSTALLATION	DATE	97-10-23
ITEM		NO.	010-0012
MANUFACTURER	SIPROMAC	QTY.	1
ADDRESS	1ST-DEGRAN DE GRANVILLE		
	QUEBEC CANADA		

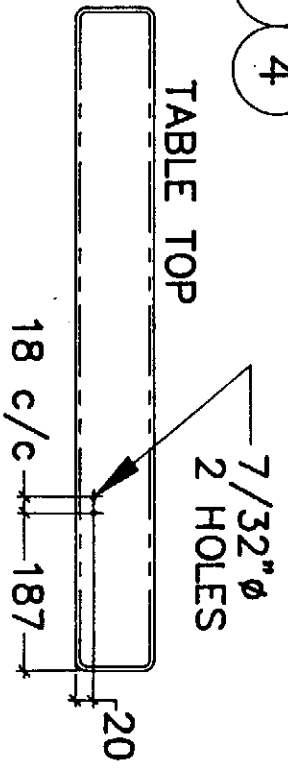
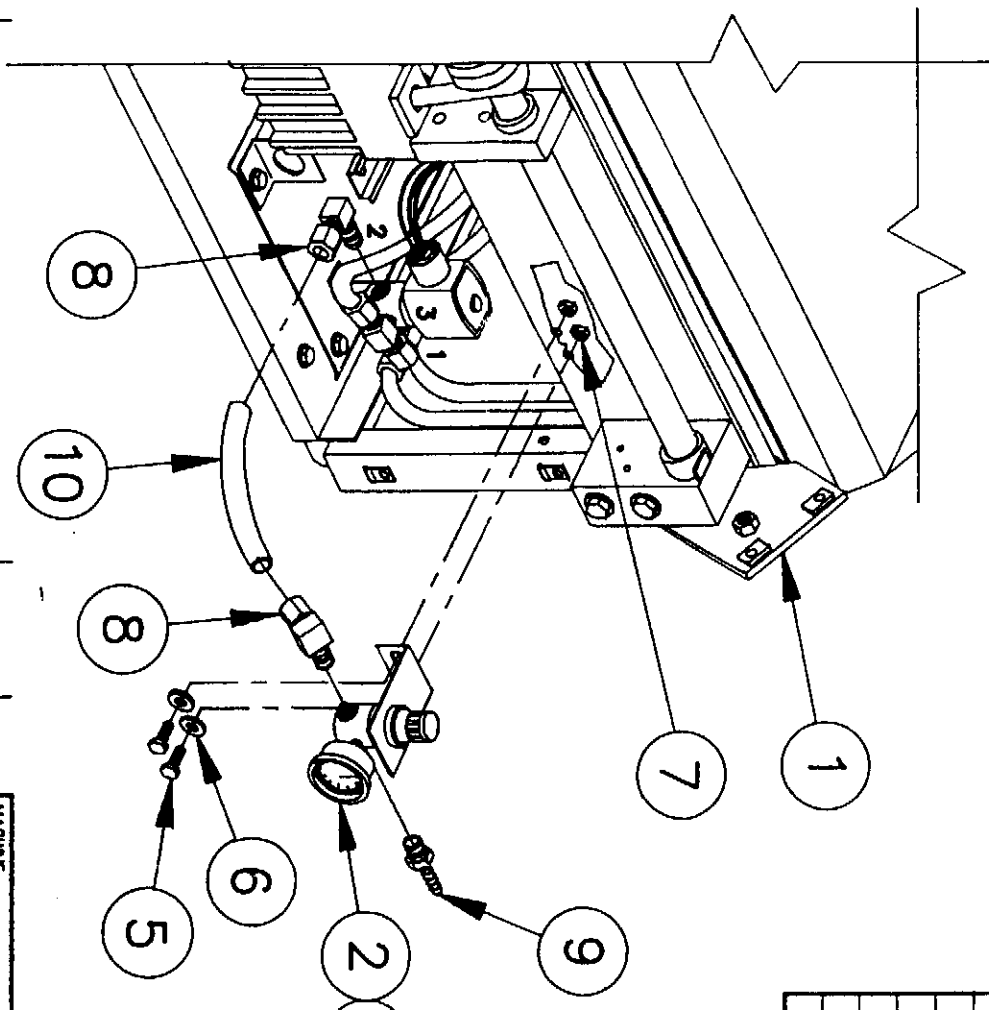




1010-0024

ITEM	PART #	DESCRIPTION	QTY
1	005-0411	MACHINE ASSEMBLY REAR VIEW	1
2	114-0147	PR.REG. 0-60 PSI 1/4"NPT	1
3	114-0245	PR.GAUGE 0-60 PSI 1/8"NPT	1
4	114-0170	PR.REGULATOR SUPPORT	1
5	051-0147	SCREW #10-24 x 1" HEX. S/S	2
6	051-0730	WASHER #10 FLAT S/S	2
7	051-0572	NUT #10-24 NYLON LOCK S/S	2
8	101-0059	ELBOW 90° 1/4"NPT x 3/8" T.P.COMP.	2
9	101-0200	STRAIGHT 1/4"MNP x 1/4" HOSE BARB	1
10	104-0060	TUBE 3/8"ODx1/4"ID(POLY)x	1

-NOTE:-  
MACHINE REAR VIEW  
SHOWN WITHOUT REAR COVER



-REAR VIEW-

LET.	A	RE-DRAWN/450T WAS 450A/ARR 450A	96-12-12	M.L.
MODIFICATION			DATE	INT.

MACHINE	450T	METRIC TOLERANCE	0 ± .5 .00 ± .005 ANGLE ± 1°	INCH TOLERANCE	0 ± .015 .000 ± .0005 N.T.S.	SCALE	QT.
PART	AIR REGULATOR OPTION KIT INSTALLATION						
DATE	95-12-04	DATE	95-12-04	NO.	010-0024		
APP.		DATE					

SIPROMAC  
ST-GERMAIN DE GRANTHAM  
QUEBEC CANADA

