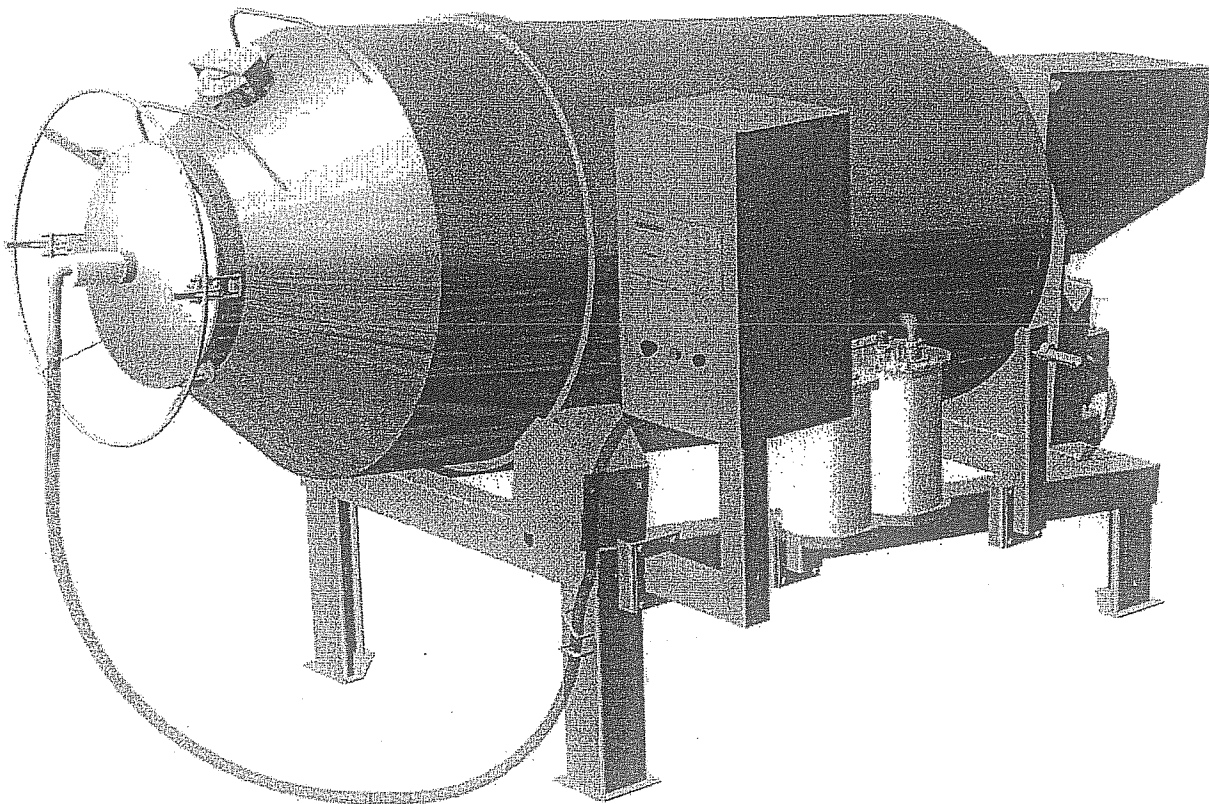


# **VT-2000**

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## **VACUUM TUMBLER**



## TUMBLER 1000 and 10000 OPERATION

### Circuit:

MC40 - Revision A - September 24, 1999

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### Software:

MC40T100 - Revision 1.00 - May 20, 1997

MC40T500 - Revision 1.00 - July 02, 1998

MC40T311 - Revision 1.00 - Sept. 24, 1999

### WARNING!

A SECURITY PERIMETER HAS TO BE DELIMITED BY THE CUSTOMER BEFORE USING THE TUMBLER, TO PREVENT ANY POTENTIAL CAUSE OF ACCIDENT!

NEVER ATTEMPT TO START THE TUMBLER WITH THE VACUUM HOSE PLUGGED !

PROTECT THE BACK AREA OF TUMBLER FROM ACCESS.

PLACE ALONG A WALL FOR BETTER SECURITY.

Make sure the tumbler area is cleared before initiating a cycle or a reverse operation; stay beyond customer security perimeter when the "CYCLE ON" indicator is lit, which indicates an active cycle or a reverse operation.

Note: Refer to the menus structure in annexe A and the keyboard details in annexe B.

### BASICS:

Use key "**POWER**" to power ON / OFF the tumbler. When the tumbler 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 access and execute the selection.

In programs menu, use key "**SELECT**" to select a program and key "**ENTER**" to access and modify the selection.

In programs submenu 1, use key "**SELECT**" to select a segment or the program identification and key "**ENTER**" to access and modify the selection.

In programs submenu 2, 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 program submenu 1 is performed automatically following the last parameter acquisition.

In any program submenus, use key "**ESC**" to get back to the preceding menu.

Strike any key to clear the error messages which may be displayed on LCD screen.

### FUNCTIONS:

When executing the "**F1 CREATE A PROGRAM**" function, the program submenu #1 is accessed, starting with the program identification. The identification "**Pxx NO NAME**" is given to the program and all parameters are established to zero; the program number is allocated automatically.

When executing the "**F2 DELETE A PROGRAM**" function, the programs menu is accessed and the number of the first program in memory is blinking to point out the deletion mode. Use key "**SELECT**" to select a program and key "**ENTER**" to access and confirm deletion of the selection. Use key "**ESC**" to unconfirm a deletion and to leave the function. When leaving this function, the number of the actual program on LCD screen stop to blink.

## TUMBLER OPERATION

When executing the "F3 UNLOCK A PROGRAM" function, the access to the other programs and functions is granted and all cycle counters and pointers are established to zero. A program is locked at the beginning of the execution, until completion or if this function is executed. The purpose of the locking feature is to prevent any unintentional modification to the status of the current program.

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## TUMBLER OPERATION

### PROGRAMS:

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

EXAMPLE 1 →	keys 2, 2, ENTER	→	E
(9 characters)	keys 8, 8, 8, ENTER	→	X
	keys 1, ENTER	→	A
	keys 5, ENTER	→	M
	keys 6, ENTER	→	P
	keys 4, 4, 4, ENTER	→	L
	keys 2, 2, ENTER	→	E
	keys 9, 9, 9, ENTER	→	space
	keys 1, 1, 1, 1, ENTER	→	I
	key ENTER to validate the characters string		

For each of the 3 segments, set segment, message ON and message OFF times; starting with the hours; the "h" symbol is automatically inserted following the second digit entry and the validation is automatically performed following the fourth digit entry (the new time is blinking). In the middle of an acquisition, use key "ENTER" to validate the time and key "ESC" to come backward and start over with a new acquisition (the old time is blinking). Examples:

12h30 → keys 1, 2, 3, 0 or 1, 2, 3, ENTER  
 01h00 → keys 0, 1, 0, 0 or 1, ENTER  
 00h00 → keys 0, 0, 0, 0 or 0, ENTER  
 00h45 → keys 0, 0, 4, 5

A complete program duration may be up to 72 hours (24 hours per segment). Set segment time to zero to bypass a segment. Set message on time to zero to deactivate the rotation over an entire segment cycle. Set message off time to zero to activate the rotation over an entire segment cycle.

For each of the 3 segments, set speed level value using "SELECT", "ENTER" and numeric key to change the speed: "SP<XXXXXXXXXX>" key#4(-) and key#5(+).

## TUMBLER OPERATION

### PROGRAM EXECUTION:

**WARNING!** Make sure the tumbler area is cleared before initiating a cycle;  
stay beyond customer security perimeter when "CYCLE ON" indicator is lit.

Use push button "STOP / START" to initiate or interrupt a program execution. A selected program can be initiated only in the programs menu, when no modifications are in progress; the access to the other programs and functions are denied. During cycle execution, the "CYCLE ON" indicator is lit and the following information is alternately displayed on LCD screen:

- program remaining time (all segments)
- segment remaining time (current segment)
- massage on or massage off remaining time (current segment)
- speed level (current segment)

During cycle execution, use key "ENTER" to access and modify the current segment, without affecting the program parameters in memory. When the cycle is interrupted, all segments are accessible and any modification affects the program parameters in memory.

When reinitiating a program execution from an interruption, performed using the "STOP / START" or the "EMERGENCY STOP" button or either the "POWER" key, the cycle restarts with the counts present at the time the stop occurred, or with the new counts if the current segment has been modified by the user during the interruption.

When reinitiating a program execution from an interruption, caused by a system power loss, the cycle restarts with the counts of the last past hour; during the execution, a back up of the cycle status is performed every hour for this purpose.

### REVERSE OPERATION:

**WARNING!** Make sure the tumbler area is cleared before initiating a reverse operation;  
stay beyond customer security perimeter when "CYCLE ON" indicator is lit.

Use key "1" to initiate a continuous reverse rotation at 2 RPM (RUN) and push button "STOP / START" to interrupt the rotation. The "CYCLE ON" indicator is lit when rotating.

Use key "2" to initiate a momentary reverse rotation at 2 RPM (JOG) or use the push-button on the remote box(option); release key or push-button(option) to interrupt the rotation. The "CYCLE ON" indicator is lit when rotating.

A reverse rotation can be initiated only in the programs menu, when no modification are in progress.

Annexe A

MENUS STRUCTURE

- Functions menu:

"F1 CREATE A PRGM"  
"F2 DELETE A PRGM"  
"F3 UNLOCK A PRGM"

- Programs menu:

"Pxx NAME"

Program submenu 1:

"CYCLE SEGMENT #1"  
"CYCLE SEGMENT #2"  
"CYCLE SEGMENT #3"  
"PRGRM CYCLE NAME"

Program submenu 2 (each cycle segment):

"SEGMENT TIME:xxhxx" (0h00 - 24h00)  
"MESSAGE ON:xxhxx" (0h00 - 24h00)  
"MESSAGE OFF:xxhxx" (0h00 - 24h00)  
"SPEED LEVEL:SP<XXXXXXXXXXXXXX"

Program submenu 2 (program cycle name):

"Pxx NAME" (12 characters)

- Diagnostics menu (keys "ESC" & "POWER" for access):

"DIAGNOSTICS MENU" (access code required)

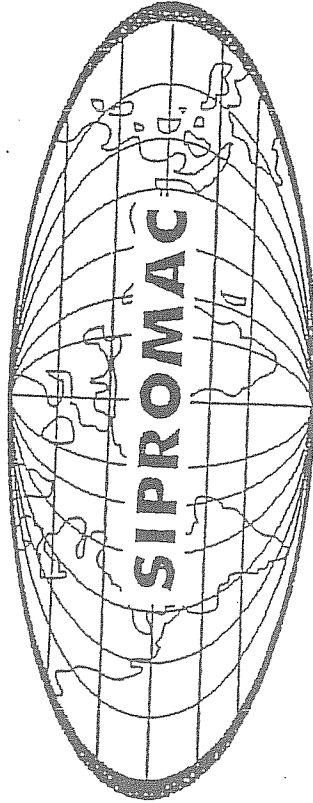
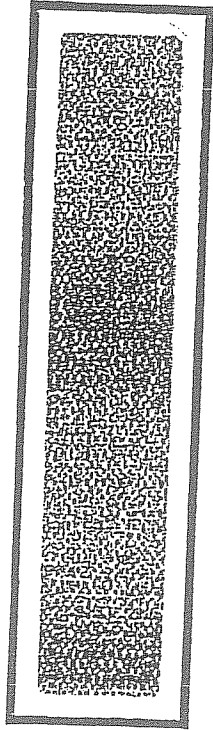
"D1 SPEED SELECT"  
"D2 INPUTS TEST"  
"D3 OUTPUTS TEST"  
"D4 PWM OUT TEST"

"SYSTEM MONITOR" (no access code required)

"WORKING HOURS"

ANNEXE B

KEYBOARD DETAILS

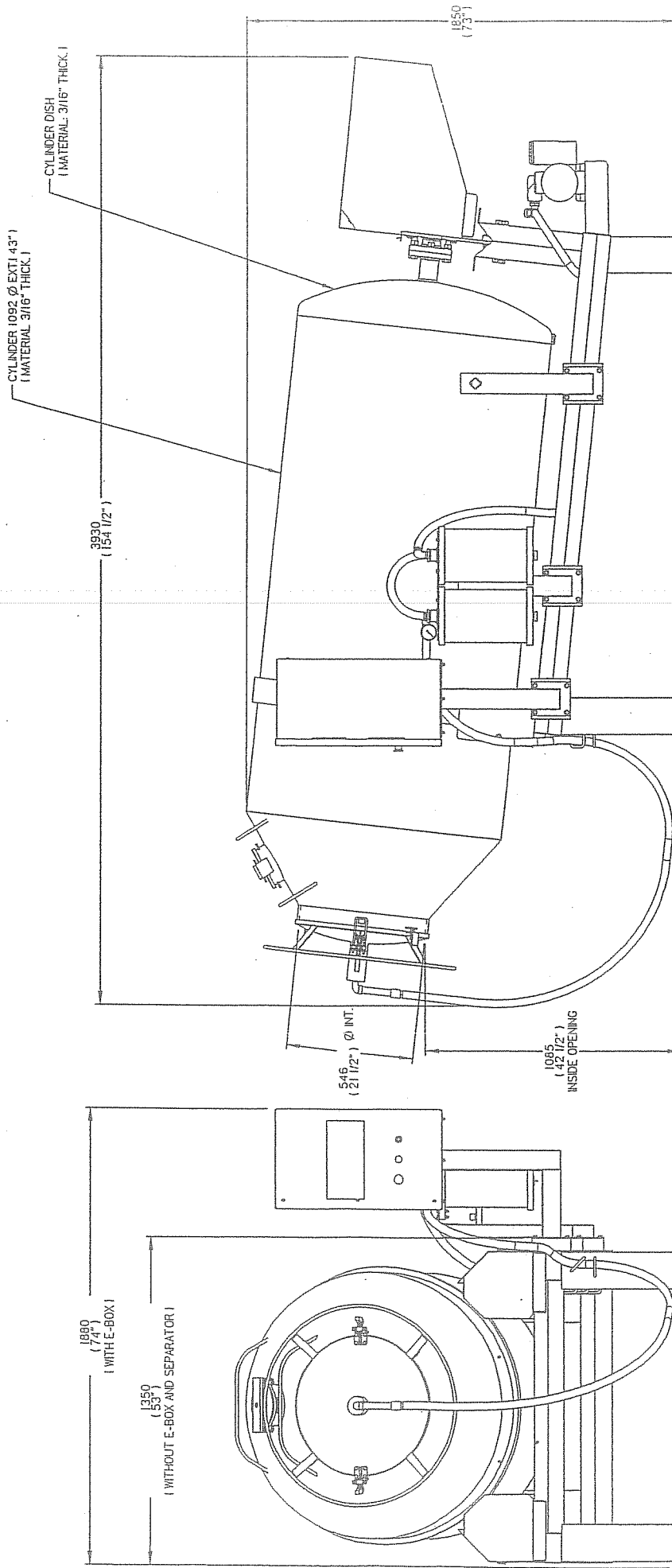


ABC	1	DEF	2	GHI	3	JKL	4	MNO	5	PQR	6	STU	7	VWX	8	YZ space	9	ESC	SELECT	0	ENTER	ON / OFF
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---	-----	---	-----	---	----------	---	-----	--------	---	-------	----------

A WORLD OF LEADING EQUIPMENT



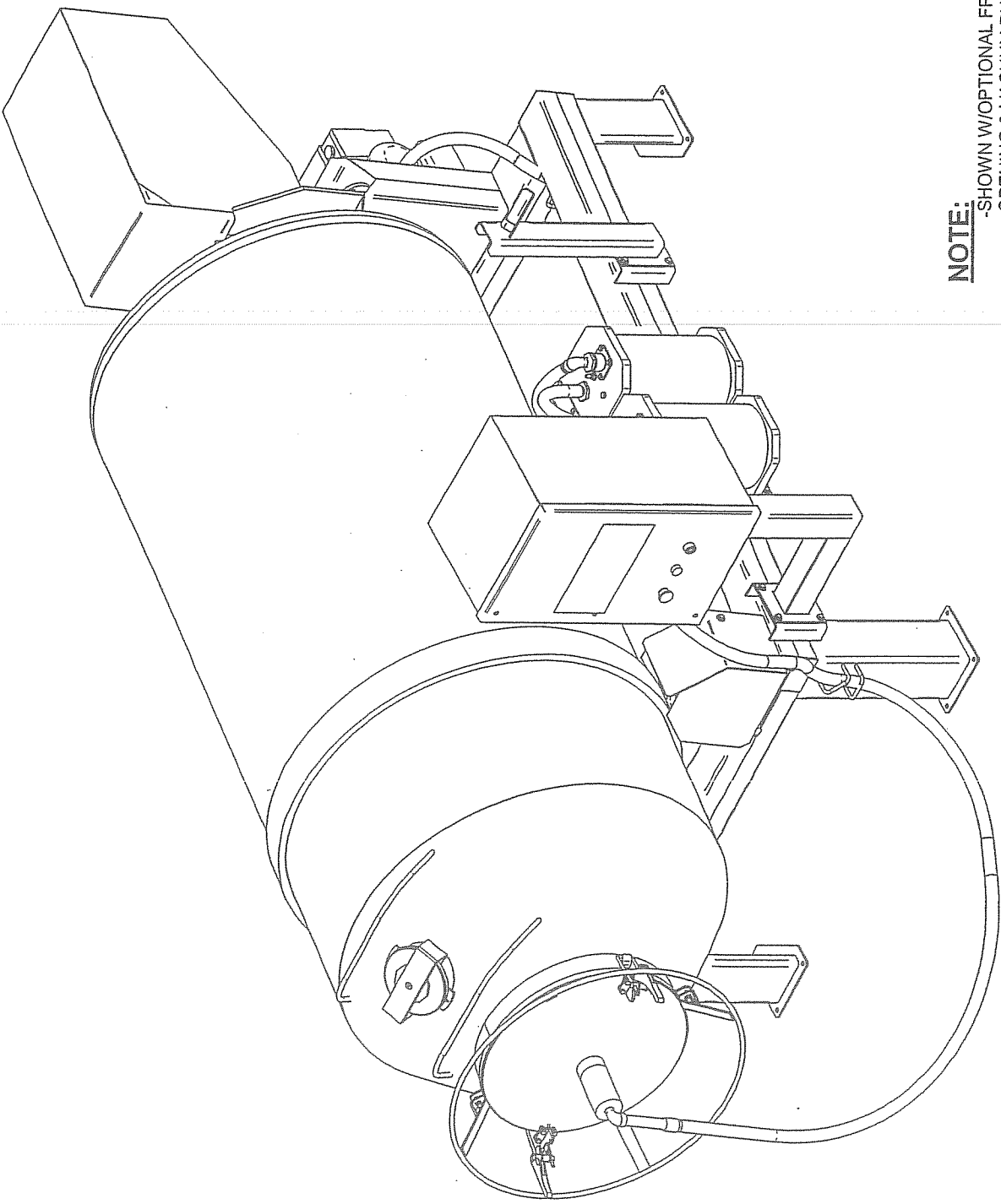
**NOTE:**  
 -TUMBLER SHOWN WITH FRONT SANITATION OPTION



MACHINE		DEPT. FOR METRIC TRICH		SIPROMAC	
VT-2000		USINAGE ± 0.1	F 0.004	ST-GERMAIN DE GRANTHAM	
OVERALL DIMENSIONS		TRAVERSE ± 0.1	0	QUEBEC CANADA	
		SCOURAGE ± 0.5	± 0.020"		
		N.T.S.			
ITEM	QTY	DEPT.	NO	DATE	
	1		02-08-22	DATE	
DRAWN BY L.T.		DATE		DATE	
APP. BY L.T.		DATE		DATE	

D	REDESSINE S.E.	02-08-22	L.T.
LET.	MODIFICATION	DATE	INT.

NO SK-06

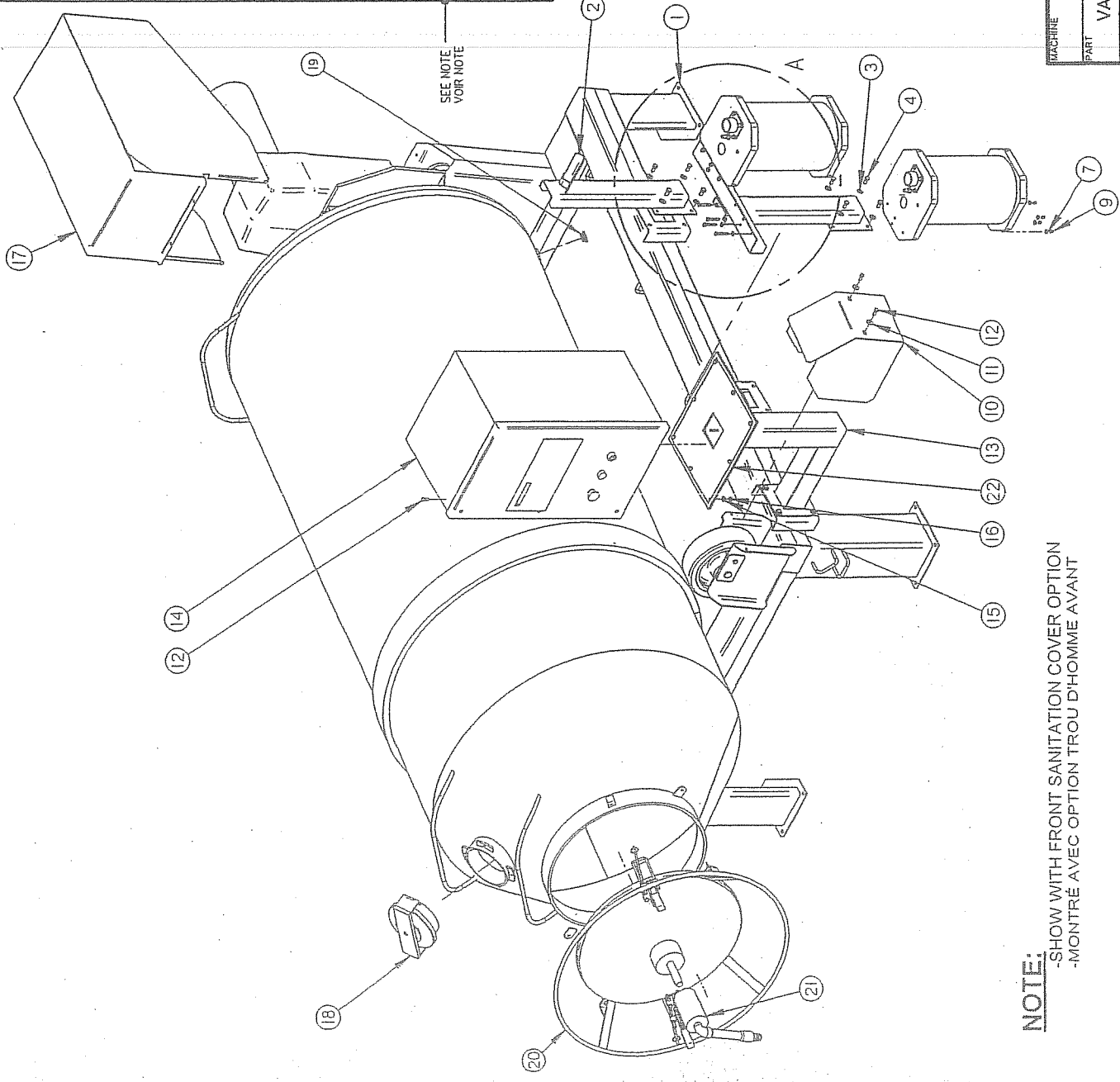


**NOTE:**  
 -SHOWN W/OPTIONAL FRONT SANITATION  
 OPENING & VACUUM PUMP 40M<sup>3</sup>

MACHINE	VT-2000	DEPT.	M-I	QTY.	1
PART	GLOBAL VIEW	DATE	02-08-22	NO.	SK-90
ITEM		DATE			
DATE		DATE			
RECESSINE S.E.	02-08-22	L.T.			
MODIFICATION		DATE			
		INT.			

PRECISION METRICS FINISH  
 USINAGE ± 0.1 ± 0.004  
 TOLERIE ± 0.5 ± 0.025  
 Soudage ± 0.5 ± 0.025  
 N.T.S.  
 SIPROMAC  
 ST-GERMAIN DE GRANTHAM  
 QUEBEC CANADA

ITEM	PART #	DESCRIPTION	QT.
1	004A1026	TUMBLER PRE ASSY	1
2	004-0307	COVER SUPPORT PRE-ASSY	1
3	051-0780	WASHER 3/8" FLAT S/S	12
4	051-0350	BOLT 3/8"-16nc. X 3/4" S/S	12
5	004-0420	SEPARATOR SUPPORT PRE-ASSY	1
6	005-0508	SEPARATOR ASSEMBLY	2
7	051-0740	WASHER 1/4" FLAT S/S	16
8	051-0255	BOLT 1/4-20 x 1-3/4" HEX SS	8
9	051-0581	NUT 1/4"-20 NYLON LOCK S/S	8
10	004-0834	WHEEL COVER PRE-ASSY	2
11	051-0762	WASHER 5/16" THICK FLAT S/S	4
12	051-0300	BOLT 5/16"-18nc. X 3/4" S/S	12
13	005-0517	E-BOX SUPPORT ARM ASSY	1
14	005-0028	E-BOX ASSEMBLY	1
15	051-0760	WASHER 5/16" FLAT S/S	8
16	051-0600	NUT 5/16" -18 S/S	8
17	004-0472	GEARBOX COVER PRE-ASSY	1
18	005-0620	SANITATION COVER ASSEMBLY	1
19	102-0750	PLASTIC DRUM PLUG 3/4"NPT	1
20	005-0619	COVER ASSEMBLY	1
21	005-0082	SWIVEL JOINT ASSY	1
22	179-0004	NITRILE 1/2" x 1/8" AUTOCOLLANT (2.7)	1



MACHINE: VT-2000  
 PART: VACUUM TUMBLER ASSEMBLY  
 ITEM: \_\_\_\_\_  
 MAT: \_\_\_\_\_

IDENTIFICATION: N.T.S.  
 TOLERANCE: ± 0.03  
 DIMENSIONS: ± 0.03  
 SOUDAGE: ± 0.5

SIPROMAC  
 ST-GERMAIN DE GRANTHAU  
 QUEBEC CANADA

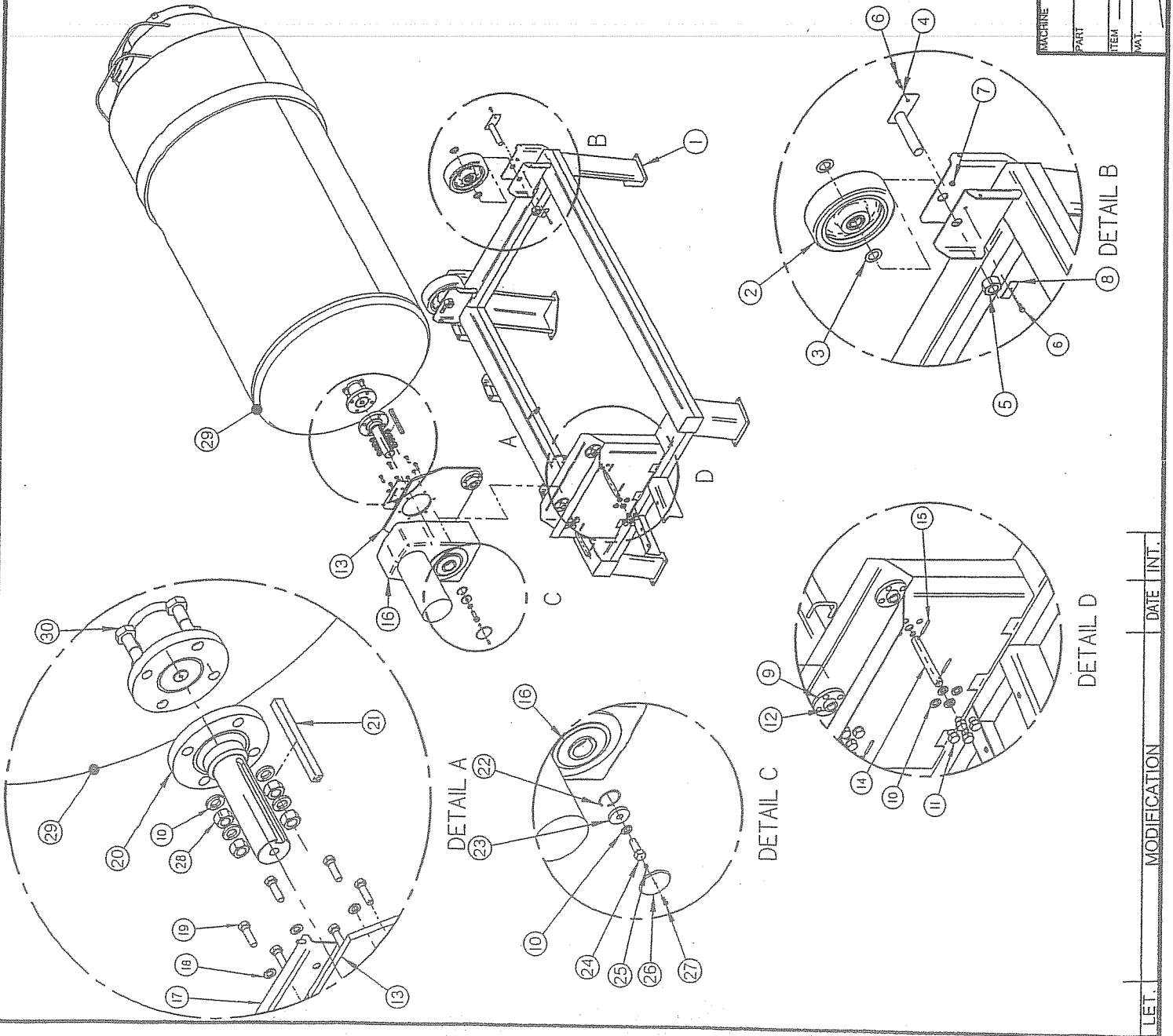
DATE: 02-06-28  
 DATE: 26-09-14  
 N. T. S.

NO: 005A0743  
 DEPT: M  
 QTY: 1

LET: \_\_\_\_\_  
 MODIFICATION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 INT: \_\_\_\_\_

**NOTE:**  
 -SHOW WITH FRONT SANITATION COVER OPTION  
 -MONTRÉ AVEC OPTION TROU D'HOMME AVANT

ITEM	PART #	DESCRIPTION	QT.
1	005-0073	FRAME ASSEMBLY	1
2	005-0529	10" WHEEL ASSEMBLY	2
3	001-1655	WHEEL SPACER	4
4	005-0081	WHEEL AXIS ASSY	2
5	051-0700	NUT 1 1/4"-12NF SS	2
6	051-0300	BOLT 5/16"-18nc. X 3/4" S/S	4
7	051-0601	NUT 5/16"-18 NYLON LOCK S/S	4
8	001-0323	WHEEL AXIS NUT STOPPER	2
9	003-0102	VP SLEEVE SHAFT SOCKET	4
10	051-0822	WASHER 3/4" LOCK SS	4
11	003-0104	SLEEVE FLANGE BOLT RE-WORKED	21
12	002-0475	VP SLEEVE SPACER	16
13	004A1027	VP SLEEVE/GEARBOX FIXATION PRE-ASSY	4
14	002-0479	VP SLEEVE SHAFT	1
15	056-0054	SPRING PIN 1/4" x 2" SS	2
16	037-5040	GEARMOTOR SHAFT MOUNTED HELIX	4
17	004-0359	GEARBOX COVER FIX. P-ASSY	1
18	051-0791	LOCK WASHER 1/2" SS	6
19	051-1004	BOLT M12 x 40 SS	6
20	009A0105	DRIVE SHAFT REWORKED	1
21	002-0473	DRIVE SHAFT KEY	1
22	056-0573	INT. RETAINING RING 62mm STEEL	1
23	002-0535	GEAR BOX RETAINER	1
24	003-0117	GEAR BOX BOLT	1
25	051-0581	LOCK NUT 1/2"-20nc. S/S	1
26	003A0162	PLASTIC PLUG DRILLED	1
27	051-0190	BOLT 1/4-20 x 3/4" HEX S/S	1
28	051-0680	NUT 3/4"-10 SS	4
29	005-0076	CYLINDER ASSEMBLY	1
30	051-0490	BOLT 3/4"-16NF x 3" SS	4



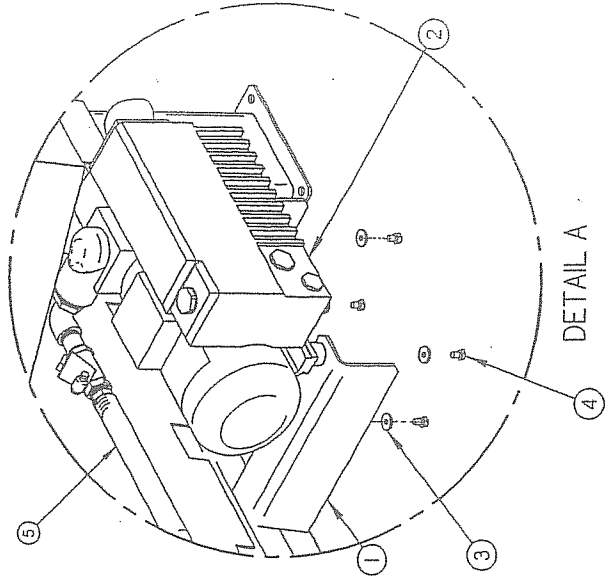
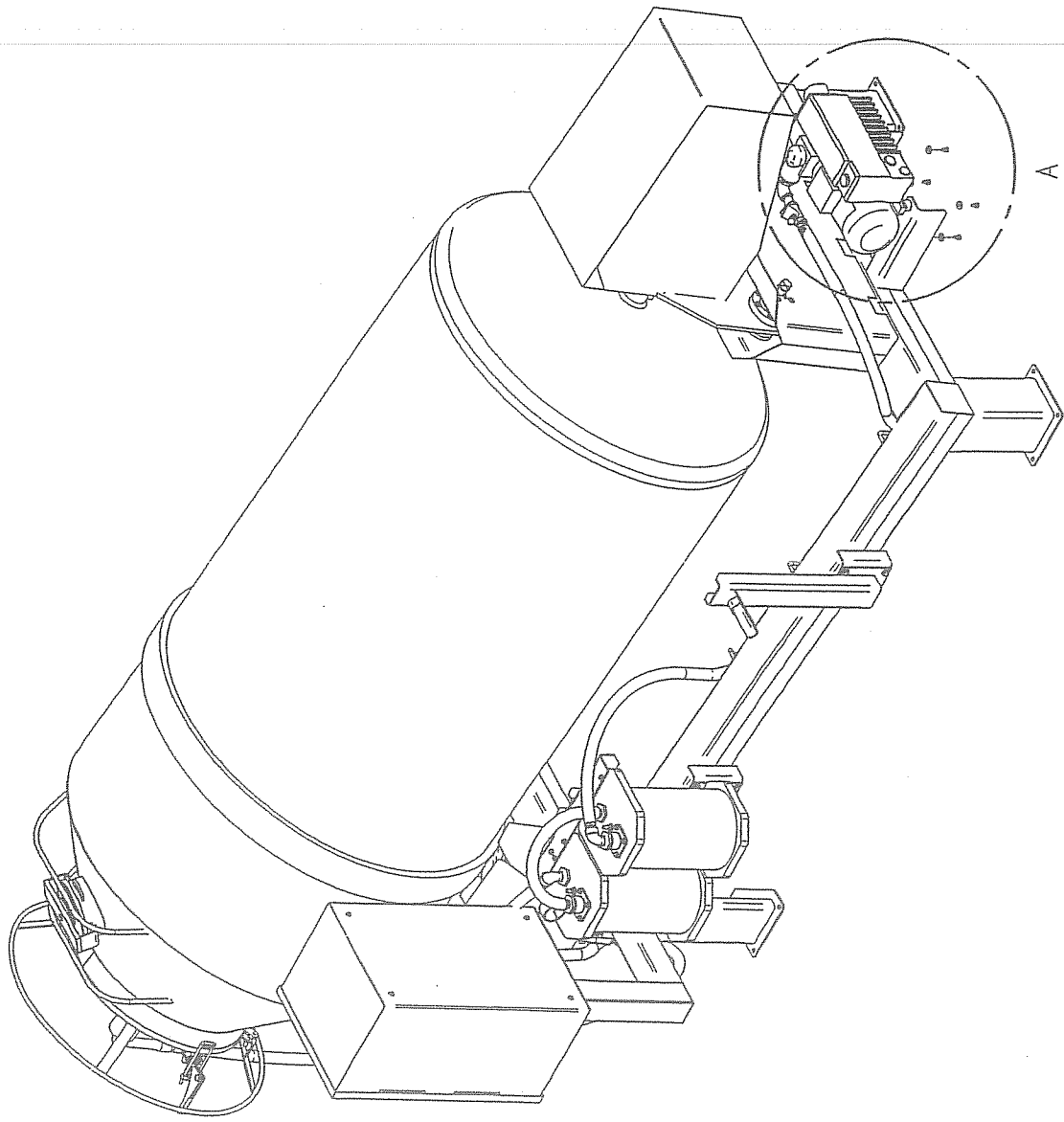
MACHINE		DEPT. METRIC FINISH		SIPROMAC	
PART		USINAGE ± 0.1 ± 0.004		ST-GERMAN DE GRANTHAM	
ITEM		TOLERIE ± 0.5 ± 0.027		CYBEC CANADA	
MAT.		SOUDAGE ± 0.5 ± 0.027		N.T.S.	
VT-2000		TUMBLER PRE ASSY		DEPT. M	
CNC		DATE 02-06-27		NO. 004A1026	
DWG BY LT		DATE		QTY. 1	
APP. BY LT		DATE		M	

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

MODIFICATION \_\_\_\_\_

005A0744

ITEM	PART #	DESCRIPTION	QTY.
1	005A0743	VACUUM TUMBLER ASSEMBLY	1
2	007-0045	KB-40 PUMP HOOK-UP ASSY	1
3	051-0762	WASHER 5/16" THICK FLAT S/S	4
4	052-4208	BOLT 8MM X 12	4
5	104-0120	HOSE 1"ID VACUUM TIGERFLEX (21')	1

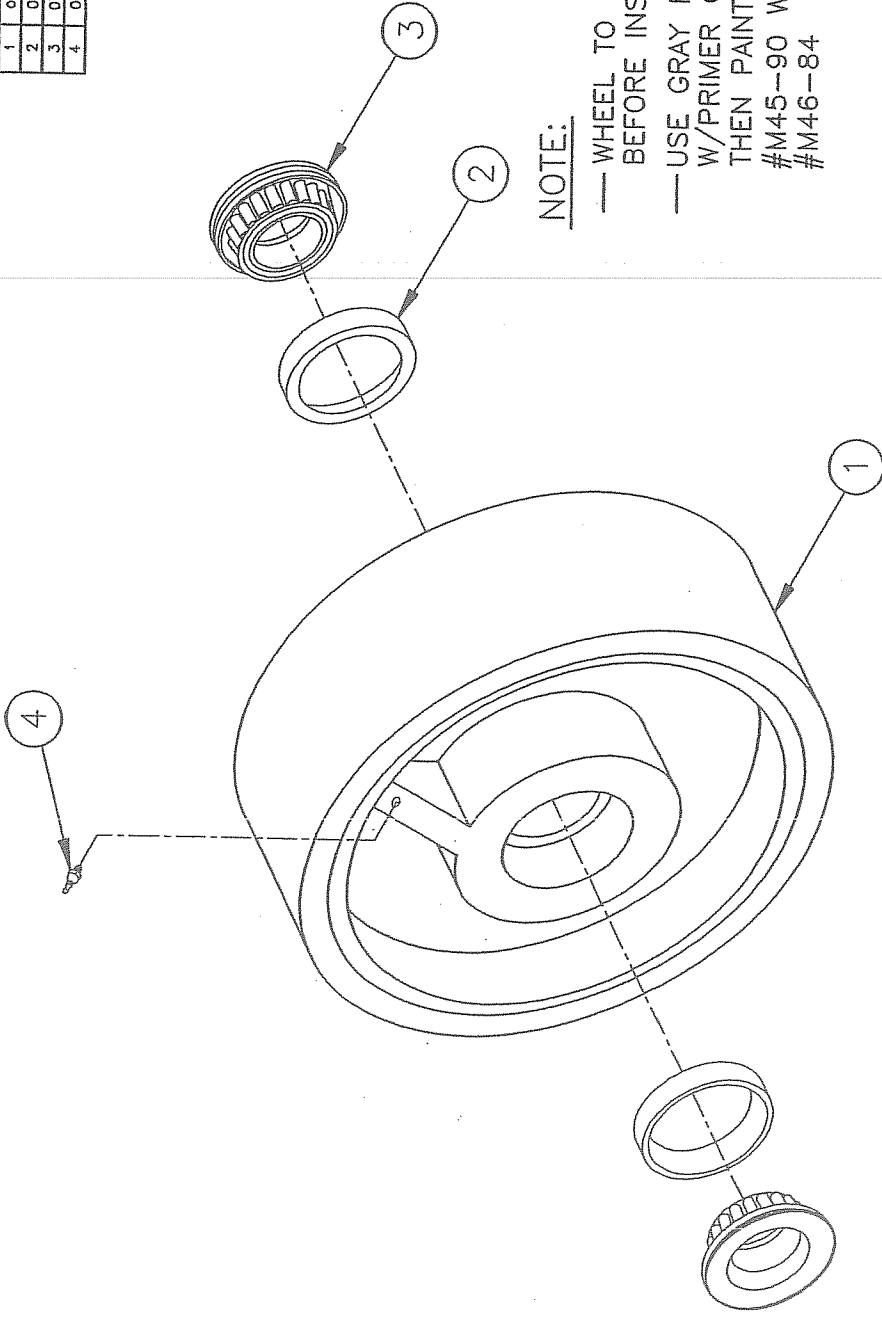


**-OPTION KB-40-**

MACHINE	VT-2000	DEPT.	VT	DATE	02-08-21	NO.	005A0744
PART	VACUUM TUMBLER ASSY WITH KB-40	USINAGE	± 0.1	± 0.001"			
ITEM		CLASSE	± 0.5	± 0.020"			
MAT.		SOUDEUSE	± 0.5	± 0.025"			

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

ITEM	PART #	DESCRIPTION	QTY.
1	009-0051	10" WHEEL RE-WORKED	1
2	075-1260	SLEEVE 1 1/4" I.D. x 2.328" O.D. CUP.	1
3	075-1270	BEARING 1 1/4" I.D. x 2.328" O.D. CONE	1
4	081-0080	GREASE FITTING STRAIGHT 1/4"-28NF ZINC	1



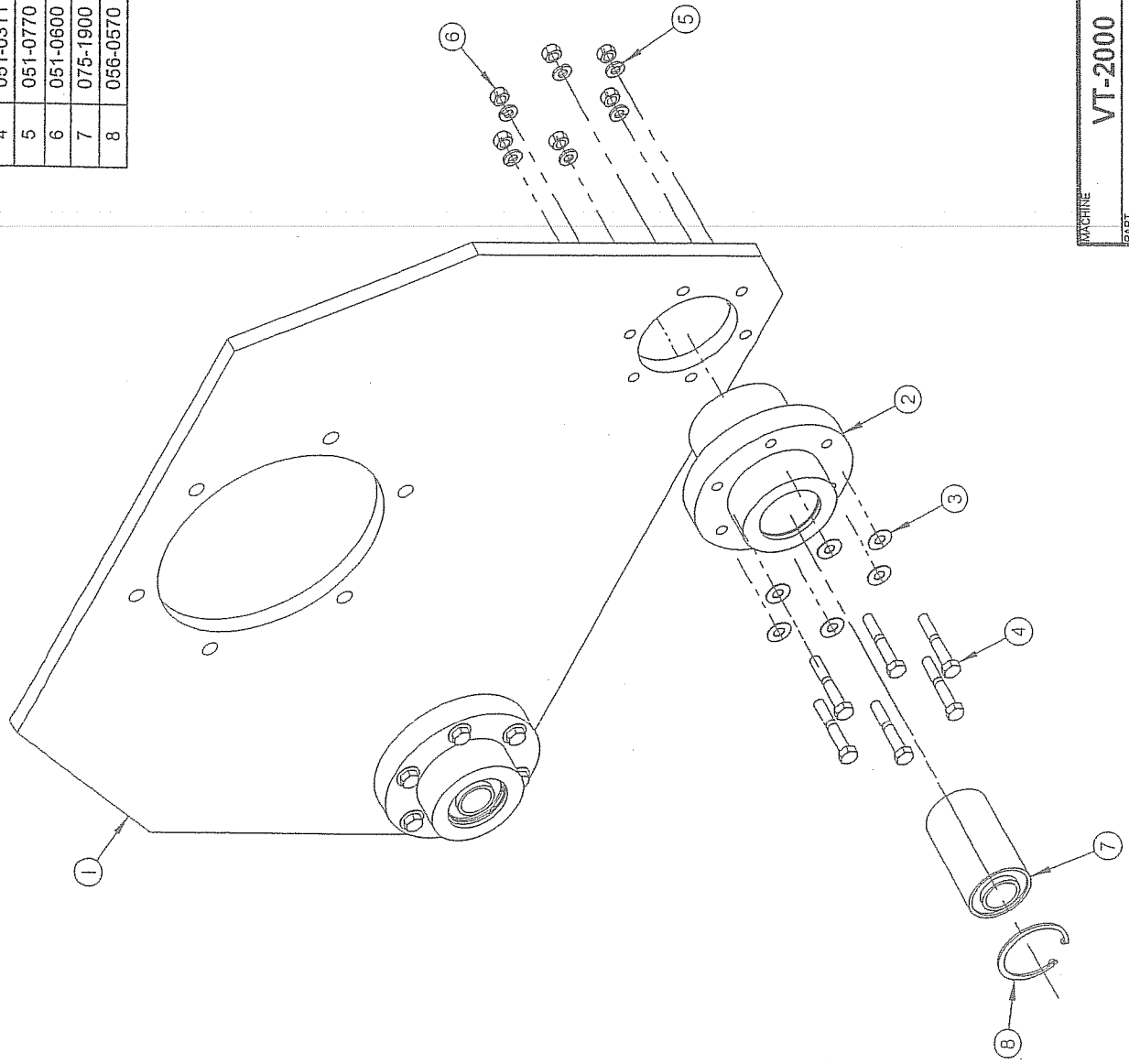
NOTE:

- WHEEL TO BE PAINTED BEFORE INSTALLING BEARINGS
- USE GRAY PRIMER #M33-70 W/PRIMER CATALYST #M34-84 THEN PAINT W/WHITE EPOXY COATING #M45-90 W/EPOXY COATING CATALYST #M46-84

MACHINE	T2000	METRIC DIMENSIONS	INCH DIMENSIONS	SCALE	QTY.
PART	10" WHEEL ASSEMBLY	0 ± .05 0.2 ± .005 0.02 ± .005 0.002 ± .0005 0.002 ± .0005 ANGLE ± 1'	0 ± .005 0.02 ± .005 0.002 ± .0005 0.002 ± .0005 ANGLE ± 1'	1:1	2
ITEM:	ENG	DATE	86-09-23	NO.	005-0529
MAT:	BY M.LAVIGNE	DATE			
	APP.				
LET.	MODIFICATION	DATE	INT.		

SIPROMAC  
ST-GERMAIN DE GRANTHAM  
QUEBEC CANADA

ITEM	PART #	DESCRIPTION	QT.
1	001-1828	VP SLEEVE / GEARBOX FIXATION	1
2	002-0478	VP SLEEVE HOUSING	2
3	051-0760	WASHER 5/16" FLAT S/S	12
4	051-0311	BOLT 5/16"-18 x 2" SS	12
5	051-0770	WASHER 5/16" LOCK S/S	12
6	051-0600	NUT 5/16" -18 S/S	12
7	075-1900	ANTIVIBRATION SLEEVE 25IDx50ODx85	2
8	056-0570	INT. RETAINING RING 50mm STEEL	2



MACHINE		VT-2000		SIPROMAC	
PART		VP SLEEVE/GEARBOX FIXATION PRE-ASSY		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
ITEM	QTY.	DEPT.	NO.	DATE	DATE
				02-06-26	
DRAWN BY L.T.		APPR. BY L.T.		004A1027	
MATERIAL		N.T.S.		DEPT. M	
TOLERANCES		FRACTIONNAIRE ± 0.025"		DECIMALE ± 0.025"	
SOUDEAGE		± 0.5		± 0.025"	

LET.	MODIFICATION	DATE	INT.
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SK-088

VACUUM HOSE 1" ID x 1 1/4" OD  
TRANSPARENT NYLON REINF. (104-0120)

1" HOSE CONNECTOR  
QTY: 4 (101-0284)

TO PUMP

SCREW CLAMPS 1 1/8"-2 3/4" ALL S/S  
QTY: 4 (105-0110)

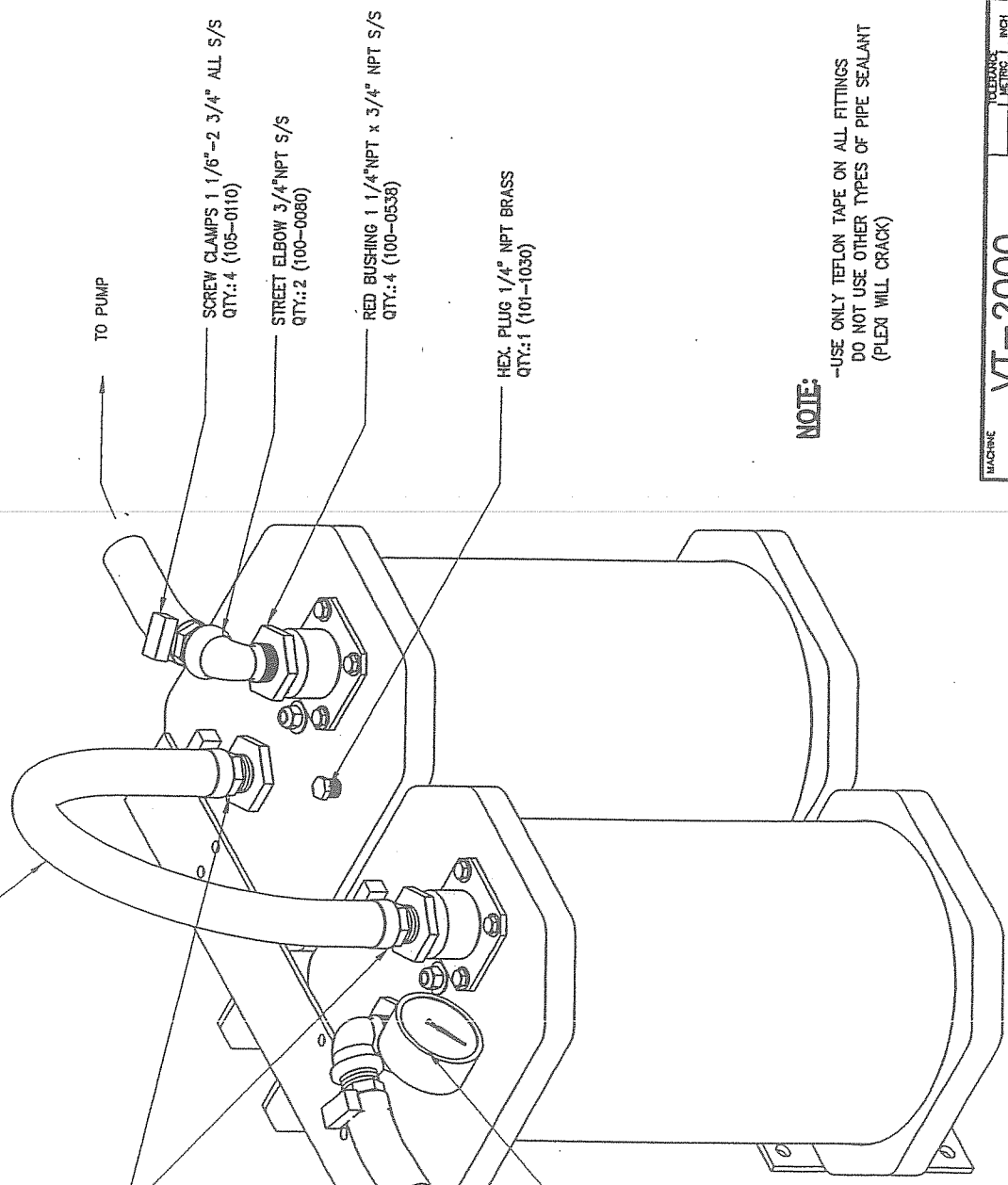
STREET ELBOW 3/4" NPT S/S  
QTY: 2 (100-0080)

RED BUSHING 1 1/4" NPT x 3/4" NPT S/S  
QTY: 4 (100-0536)

HEX. PLUG 1/4" NPT BRASS  
QTY: 1 (101-1030)

TO COVER

VAC GAUGE 0-30HG x 1/4" NPT BOTTOM  
S/S WITH GLYCERINE QTY: 1 (114-0270)



**NOTE:**

-USE ONLY TEFLON TAPE ON ALL FITTINGS  
DO NOT USE OTHER TYPES OF PIPE SEALANT  
(PLEXI WILL CRACK)

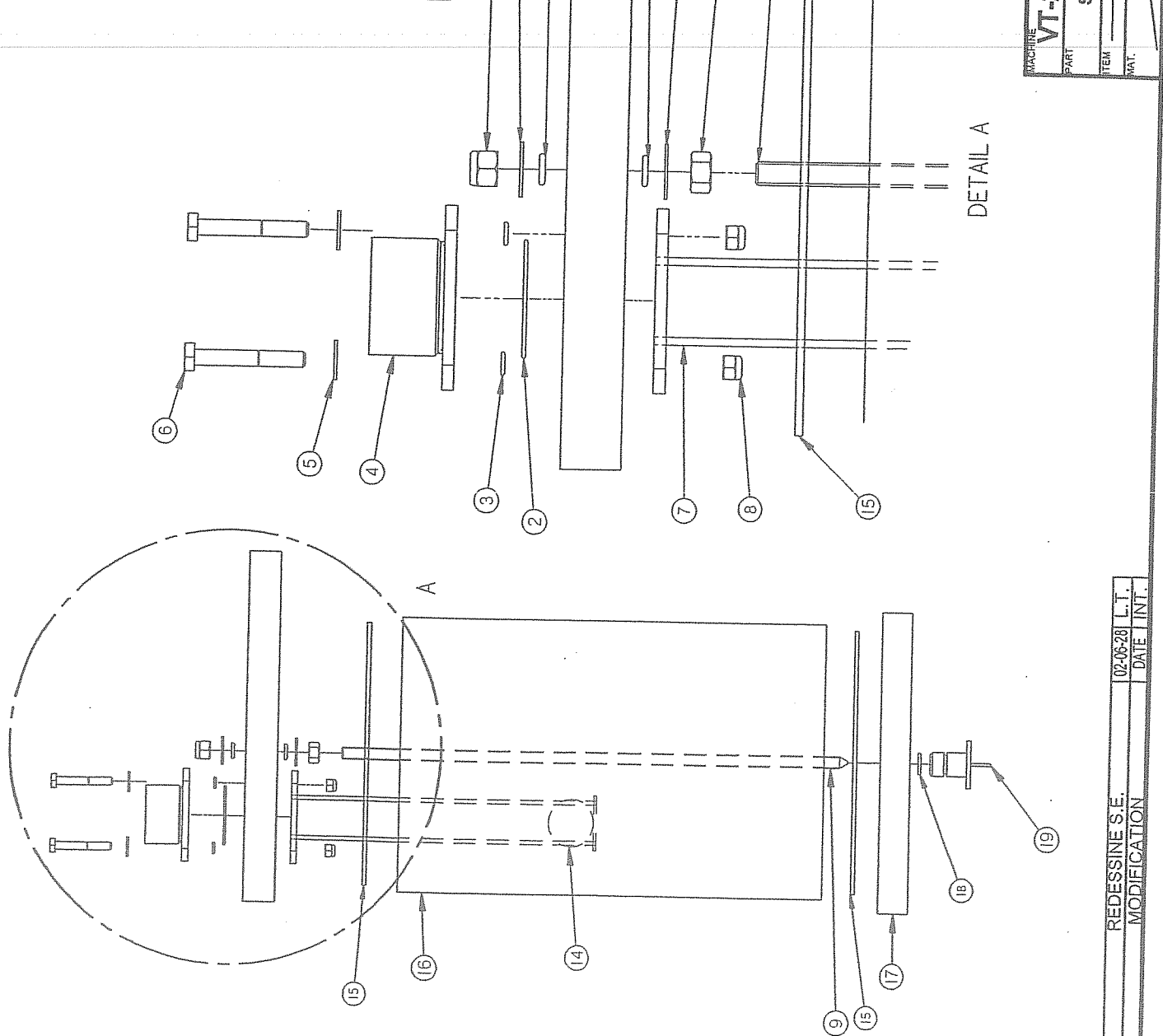
MACHINE	VT-2000		SIPROMAC	
PART	DOUBLE SEPARATOR PLUMBING		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
ITEM:	QTY:	UNIT:	DATE:	NO.:
			01-09-27	1
			1991-1-24	

A.	REDESIGN MODIF. #A-0313	01-09-27	L.T.
LET.	MODIFICATION	DATE	INT.



005-0508

ITEM	PART #	DESCRIPTION	QT.
1	002-0447	SEPARATOR TOP COVER	1
2	076-0165	"O" RING 1 3/4" x 1 7/8" x 1/16"	1
3	076-0010	"O" RING 1/4" x 3/8" x 1/16"	4
4	009A0106	COUPLING FIXATION REWORKED	1
5	051-0740	WASHER 1/4" FLAT S/S	4
6	051-0255	BOLT 1/4-20 x 1-3/4" HEX SS	4
7	005-0505	VACUUM STOPPER BALL HOUSING ASSY	1
8	051-0581	NUT 1/4"-20 NYLON LOCK S/S	4
9	003-0025	SEPARATOR HOLDING ROD	1
10	051-0620	NUT 3/8"-16 NC S/S	1
11	051-0780	WASHER 3/8" FLAT S/S	2
12	076-0030	"O" RING 5/16" x 1/2" x 3/32"	2
13	051-0622	NUT 3/8"-16nc. NYLON LOCK S/S	1
14	154-0300	PING PONG BALL	1
15	076-0306	"O" RING 8" x 8 1/4" x 1/8" SQUARE	2
16	008-0066	SEPARATOR CYLINDER	1
17	002-0049	SEPARATOR BOTTOM COVER	1
18	076-0050	"O" RING 1/2" x 1 1/16" x 3/32"	1
19	005-0079	SEPARATOR OPENING KNOB	1

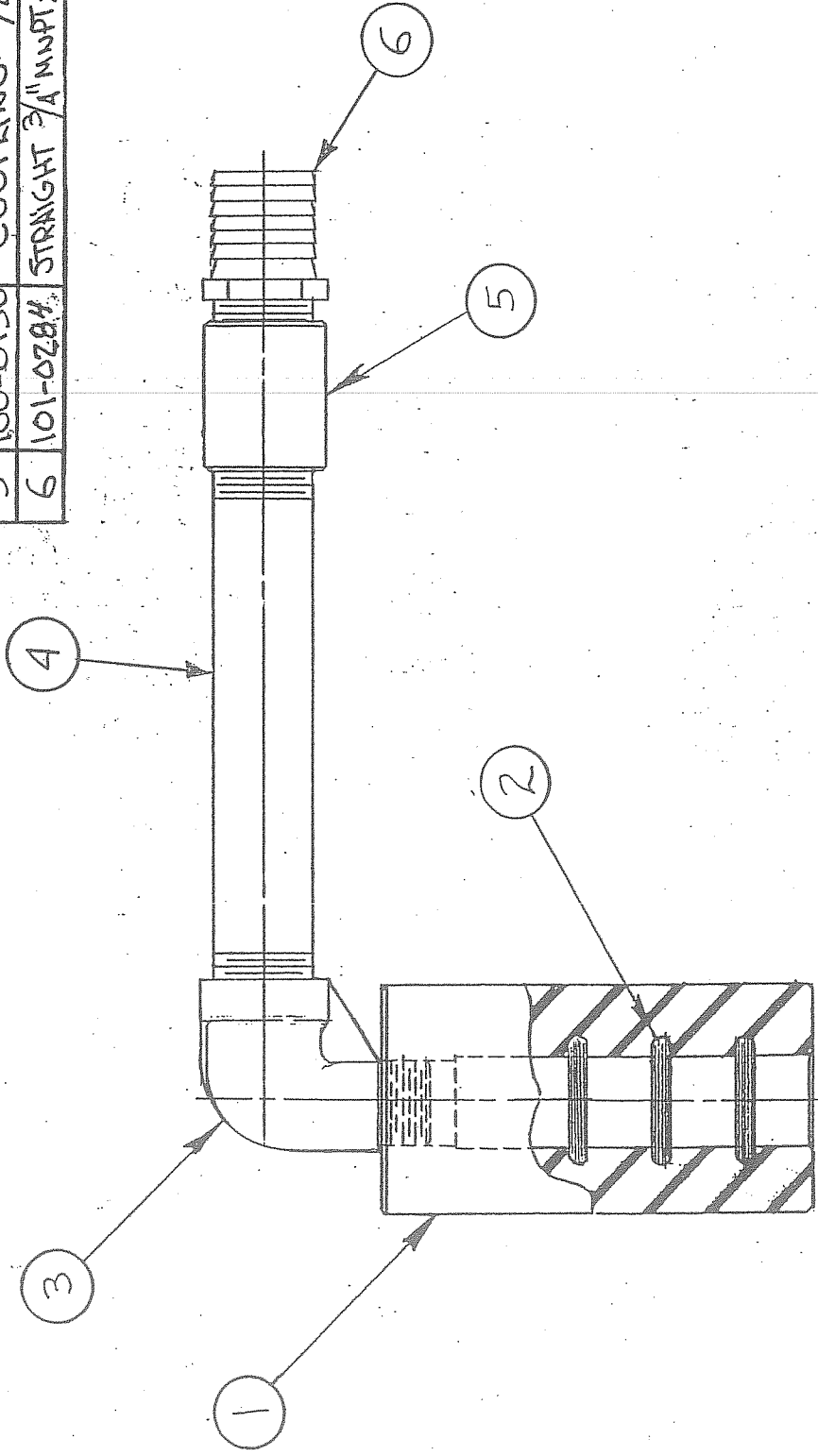


**VT-2000 @ VT-10000**  
 SEPARATOR ASSEMBLY  
 DEPT. L. T. DATE 02-06-28 NO. 005-0508  
 SIPROMAC  
 ST-GERMAIN DE GRANVILLE  
 QUEBEC CANADA  
 N.T.S.  
 DEPT. M  
 QTY. 2

REDESSINE S.E. 02-06-28 L.T.  
 MODIFICATION DATE INT.  
 D. LET.

1005-0082

ITEM	PART #	DESCRIPTION	QT.
1	002-0053	SWIVEL JOINT	1
2	076-0130	O-RING 1" φ 1.0 x 3/8" φ 0.0. ± 1/16"	3
3	100-0080	STREET ELBOW 3/4" NPT 5/5	1
4	100-0370	NIPPLE 3/4" NPT x 6" 5/5	1
5	100-0130	COUPLING 3/4" NPT 5/5	1
6	101-0284	STRAIGHT 3/4" MNPT x 1" HOSE (BRASS)	1

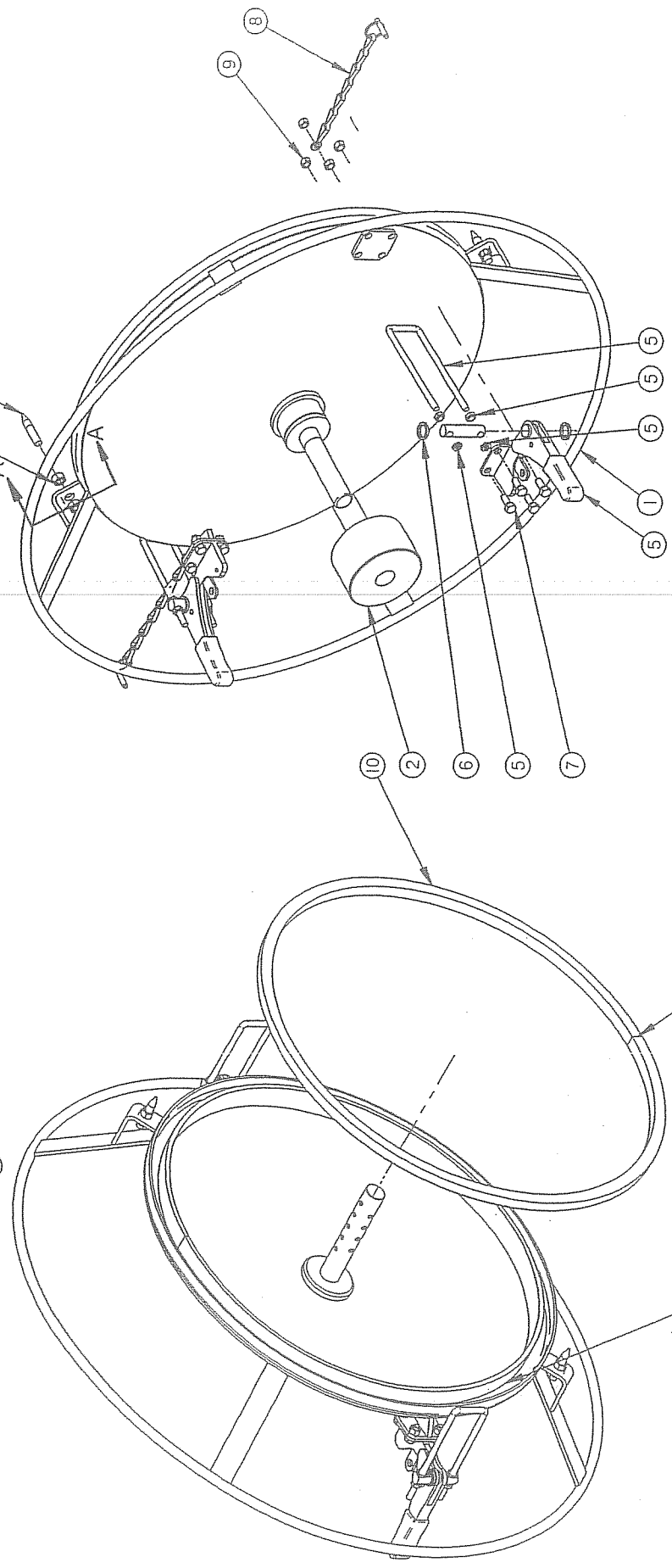
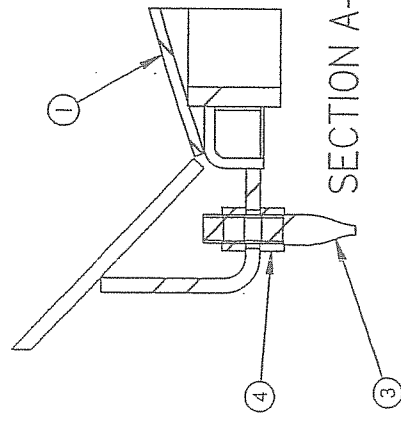


MACHINE		TUMBLERS 1000 & 2000		SIPROMAC	
PART		SWIVEL JOINT ASSY.		ST-GERMAIN DE GRANTHAM QUEBEC CANADA	
ITEM:		METRIC TOLERANCE	INCH TOLERANCE	N.T.S.	
		0 ± .05	0 ± .015		
		.00 ± .005	.00 ± .005		
		.000 ± .000	.000 ± .000		
		ANGLE ± 1°			
DATE	96-02-14	DATE	96-02-14	SCALE	1
INT.		DATE		QT.	1
LET.		DATE		005-0082	

C ITEM 6 WAS NYLON 102-0040  
 B ANNULED AND REDRAWN 4000 & 6000  
 SEE DRAW NO: 005-0505  
 A RE-DRAWN / FRENCH ⇒ ENGLISH  
 MODIFICATION

100 110

ITEM	PART #	DESCRIPTION	QT.
1	005A0077	COVER PRE-ASSEMBLY	1
2	002A0549	SWIVEL JOINT STOPPER	1
3	003-0089	COVER GUIDE PIN	2
4	051-0620	NUT 3/8"-16 NC S/S	4
5	003-0090	COVER LATCH	2
6	002-0547	COVER LATCH SWIVEL SPACER	4
7	051-0300	BOLT 5/16"-18nc. X 3/4" S/S	8
8	004-0339	COVER LATCH CHAIN PIN ASSEMBLY	2
9	051-0600	NUT 5/16"-18 S/S	8
10	008-0492	CYLINDER DOOR GASKET	1



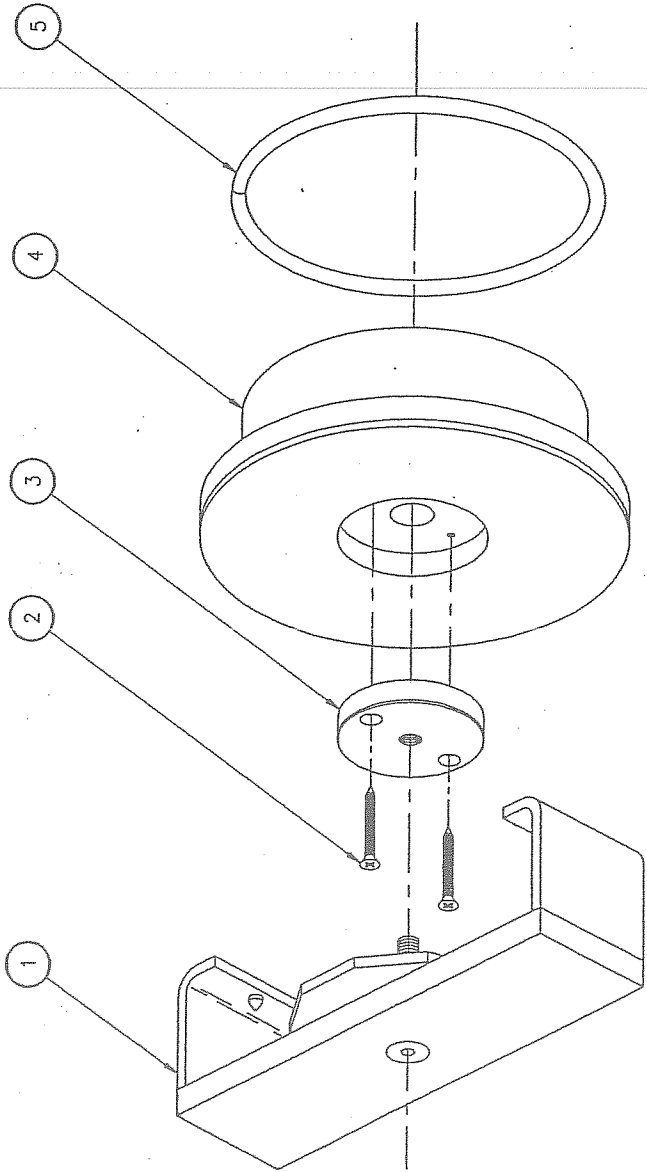
MACHINE		DEPT. COLIMETRIC		INCH	
VT-1000 & VT-2000		USINAGE		± 0.1	
COVER ASSEMBLY		TOLERANCE		± 0.020	
CNC		SOUDAGE		± 0.020	
ITEM		N.T.S.		DEPT. M	
DATE: 04-05-25		DATE: 04-05-25		NO. 005-0619	
DWG BY: J.G.		APP. BY: [Signature]		DSTY: 1	
REDESSINÉ S.E. OPTION COVER HANGING		DATE: 04-05-25		J.G.	
MODIFICATION		DATE: INT.		INT.	

USE SILICONE TO INSTALL GASKET

USE SILICONE IN GASKET JOINT

A

ITEM	PART #	DESCRIPTION	QTY.
1	004-0372	SANITATION COVER LATCH PRE-ASS'Y	1
2	054-0018	METAL SCREW #10 1/2" FLAT PHIL. S/S	2
3	002-0456	COVER LOCKING PLATE	1
4	002-0454	SANITATION OPENING COVER	1
5	008-0493	SANITATION OPENING GASKET	1



MACHINE	T-10,000	STD.	2
T-8000	OPT.	1 OR 2	
T-6000	OPT.	1 OR 2	
T-4000	OPT.	1 OR 2	
T-2000	OPT.	1 OR 2	
T-1000	OPT.	1 OR 2	
MACHINE	STAT.		QTY.

MACHINE T-1000, T-2000, T-4000, T-6000, T-8000 & T-10,000  
 PART SANITATION COVER ASSEMBLY

INCH TOLERANCE  
 .015" ± .015"  
 .005" ± .005"  
 .002" ± .002"  
 .001" ± .001"  
 N.I.S.

METRIC TOLERANCE  
 .004 ± .004"  
 .002 ± .002"  
 .001 ± .001"  
 .0005 ± .0005"  
 N.I.S.

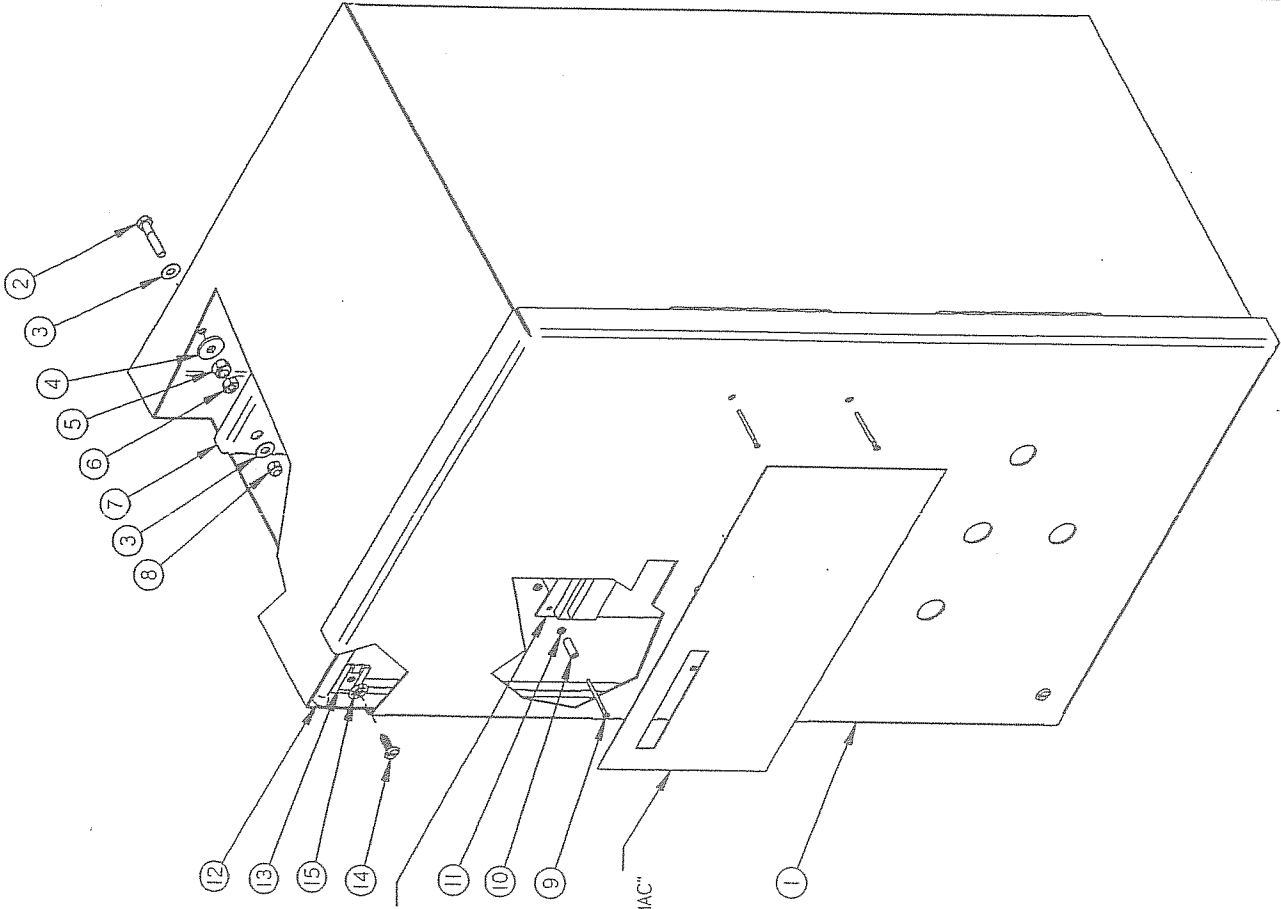
DATE 98-09-18  
 J.C.  
 DATE 98-09-18  
 J.C.  
 DATE 98-09-18  
 J.C.

SCALE --- SEE LIST

NO. 005-0620

LET.	MODIFICATION	DATE	INT.

UUL 0022



033-3003  
MC-40 DIGITAL P.C. BOARD

033-0015  
MC-40 KEYBOARD "SIPROMAC"

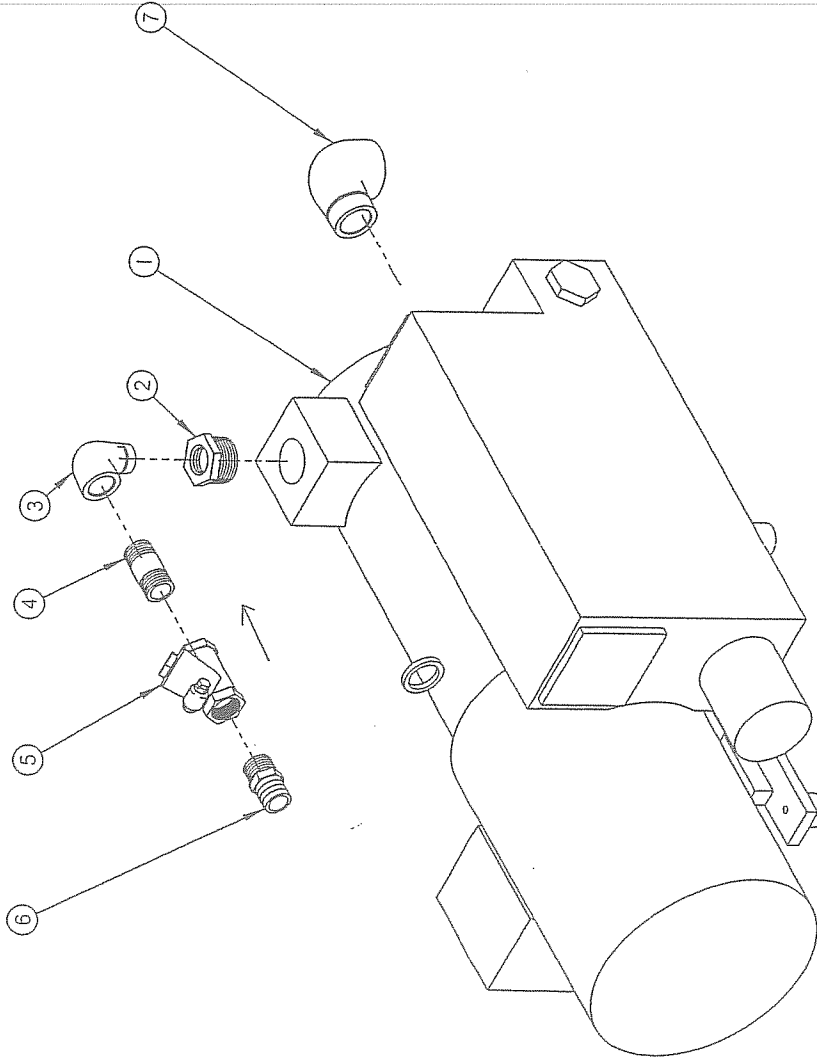
ITEM	PART #	DESCRIPTION	QTY.
1	004-0022	E-BOX PRE-ASSEMBLY	1
2	051-0230	HEX BOLT 1/4-20 x 1 1/4" SS	4
3	051-0740	WASHER 1/4" FLAT S/S	8
4	051-0757	WASHER 1/4" FLAT THICK S/S	4
5	051-0601	NUT 5/16"-18 NYLON LOCK S/S	4
6	051-0580	NUT 1/4"-20nc. S/S	4
7	001-0116	E-BOX FALSE BOTTOM	1
8	051-0581	NUT 1/4"-20 NYLON LOCK S/S	4
9	051-0092	SCREW #4-40 x 1 1/4" FLAT SLT S/S	4
10	058-0120	CPVC SPACER 0.120" x 1/4" x 5/8"	4
11	051-0540	NUT #4-40 HEX S/S	8
12	179-0020	NEOPRENE SPONGE 1/2" OD (1,2)	1
13	056-1270	CLIP-ON, RECEPTABLE U TYPE S/S	3
14	056-1230	SLOTTED HEAD SCREW ZINC	3
15	056-1290	RETAINERS S/S	3

MACHINE		VT-1000 @ VT-10000		SIPROMAC	
PART		E-BOX ASSEMBLY		ST-GERMAIN DE GRANTHAN QUEBEC CANADA	
ITEM		CNC		DEPT.	
MAT.		DWG BY J.G.		M-I	
		DATE 09-08-10		NO.	
		APP BY D1		005-0028	
				QTY. 1	

B	REDESSINE	09-08-10	J.G.
LET.	MODIFICATION	DATE	INT.

1007-VU33

VOIR NOTE



ITEM	PART #	DESCRIPTION	QT.
1	125-XXXX	PUMP 40 M <sup>3</sup> /2HP	1
2	103-0557	RED BUSHING 1 1/4" NPT X 3/4" NPT ZC	1
3	103-0082	ELBOW STREET 3/4" NPT ZC	1
4	103-0352	NIPPLE 3/4" NPT X 2" ZC	1
5	108-0040	CHECK VALVE 3/4" NPT STEAM BR	1
6	101-0284	STRAIGHT 3/4" MNPT X 1" HOSE BR	1
7	103-0092	ELBOW STREET 1 1/4" NPT ZC	1

**NOTE:**

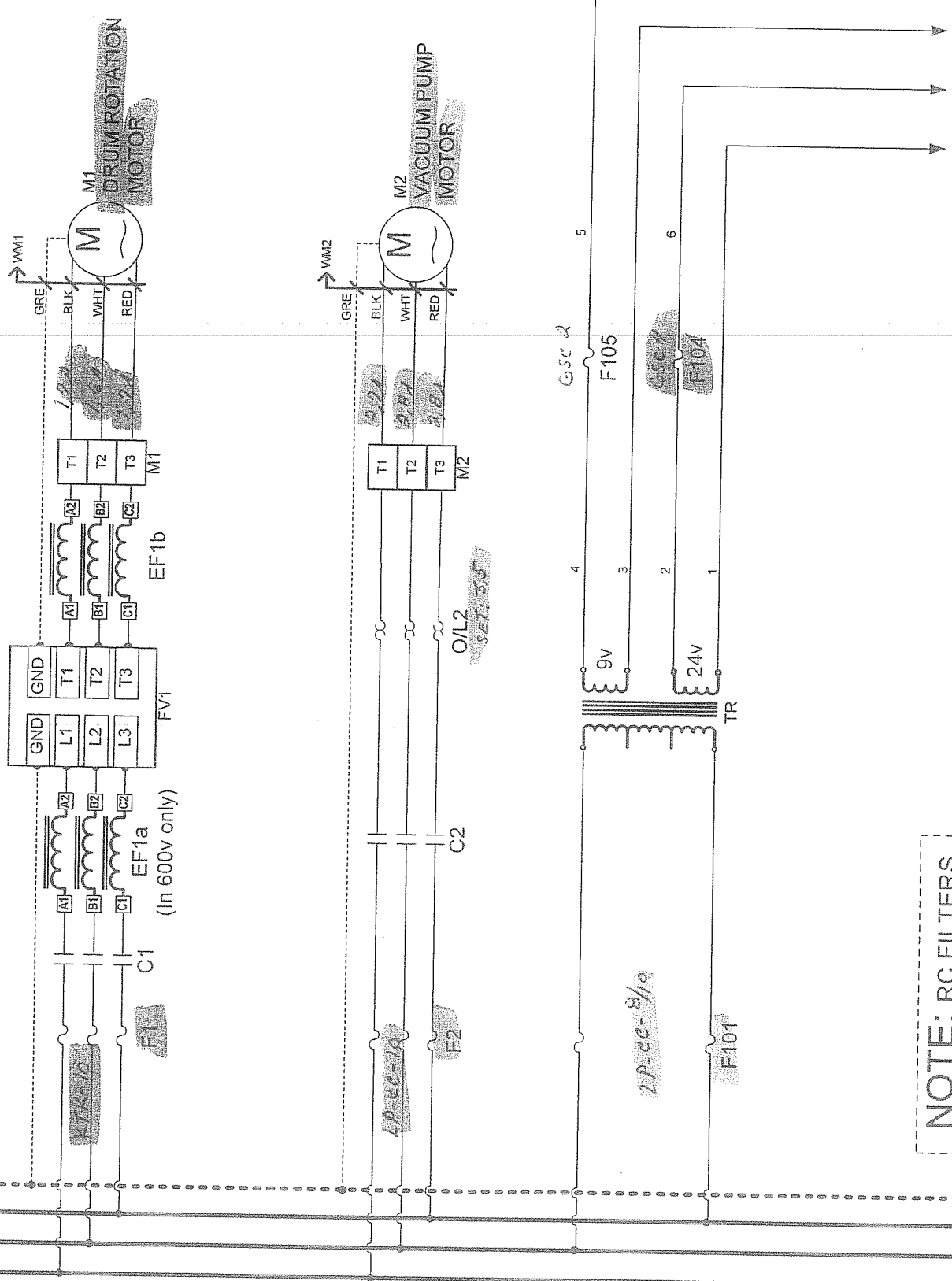
- 125-0030 -PUMP 40M<sup>3</sup> / 2 HP/230-240V/ 3PH/60HZ
- 125-0032 -PUMP 40M<sup>3</sup>/2 HP/575V/ 3PH/60HZ
- 125-0034 -PUMP 40M<sup>3</sup>/2 HP/220V/ 1PH/60HZ

MACHINE		DEPT. 101 METRIC INCH	
PART		USINAGE ± 0.004	± 0.004
ITEM		TOLERIE ± 0.05	± 0.020
MAT.		SOUDEGE ± 0.05	± 0.020
T-2000		N.T.S.	
40 M <sup>3</sup> PUMP HOOK-UP ASSY		DEPT. M	
DWG BY Y.C.		DATE 02-06-05	NO. 007-0033
APP. BY LT		DATE	QTY. 1

B	REDESSINER S.E./AJOUTER UN COUDE 1 1/4"	02-06-05	Y.C.
LET.	MODIFICATION	DATE	INT.

L1 L2 L3 GND

480V/3PH/60HZ



AMPERAGE  
THEORIC

MESURED

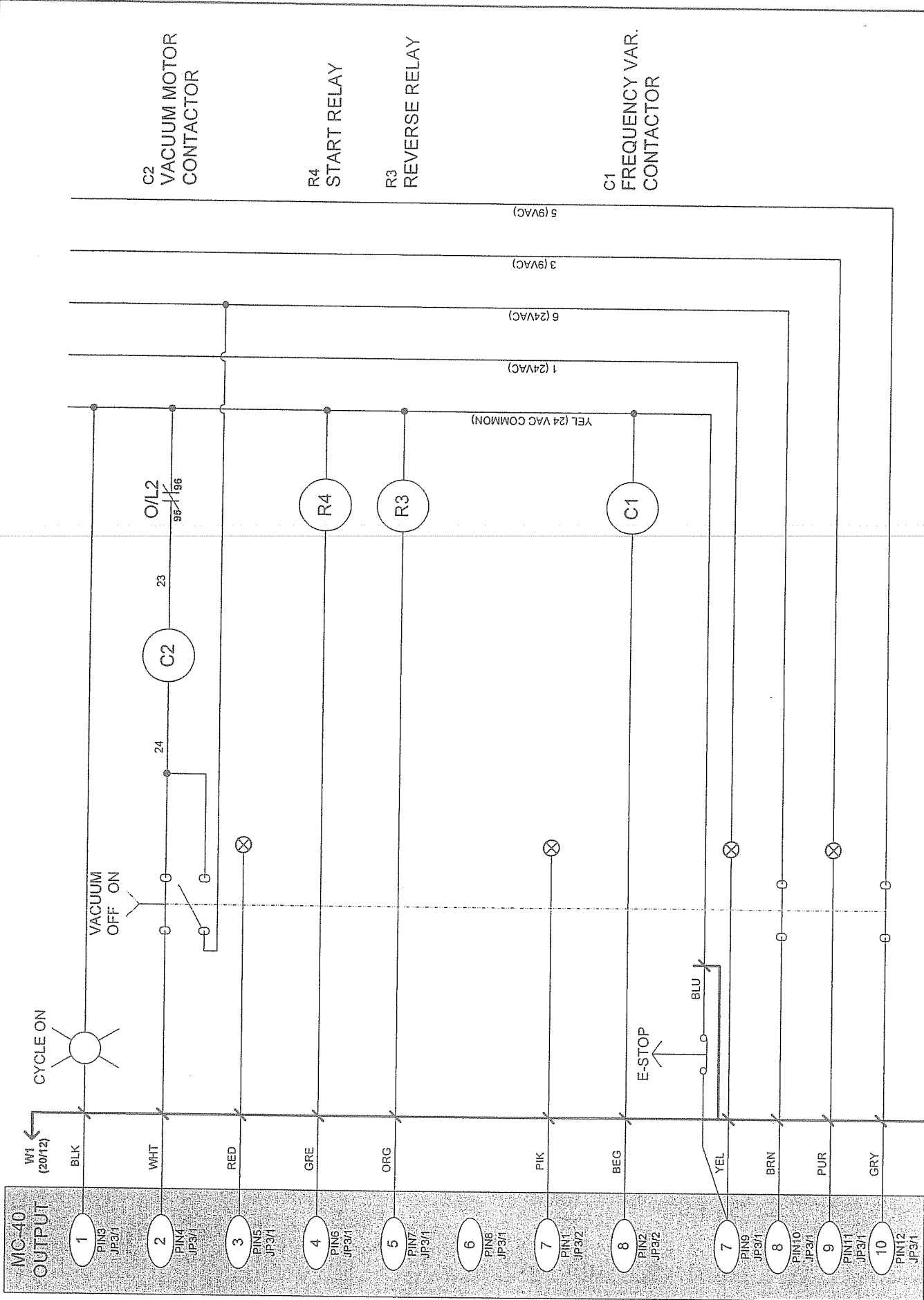
3.13 A  
1.6 A  
V

2.8 A  
2.8 A  
V

**NOTE: RC FILTERS  
MUST BE CONNECTED  
ON EACH AC COIL.  
(Not shown on diagram)**

category	MASSAGER	model	VT-1000 TO 10000	vol.	3PH/60HZ
system		circuit	POWER	year	09
usual functions		month	10	day	28
options		draw	DL	app	DL
concept					
DL SP DL					
006-2937					
PAGE: 1 OF 3					

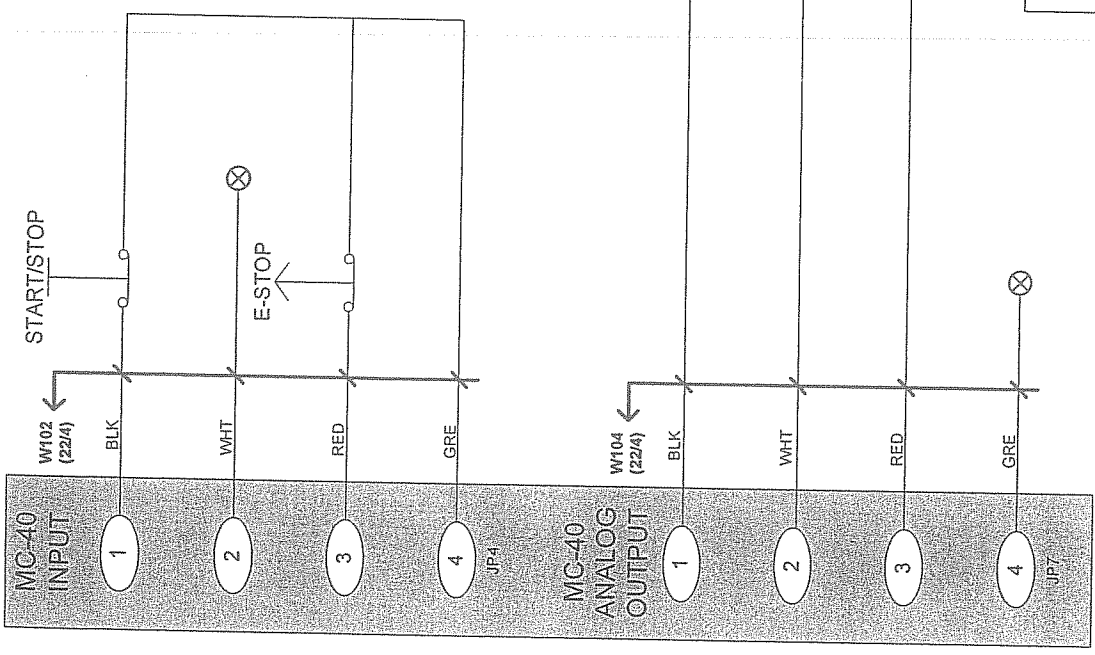
**SIPROMAC**  
St-Germain de Grantham  
QUEBEC, CANADA



category	MASSAGER	model	VT-1000 TO 10000	vol	ALL
system	MC-40 OUTPUT	circuit	COMMAND	year	09
usual functions		month	10	day	28
option		concept	draw	app	0

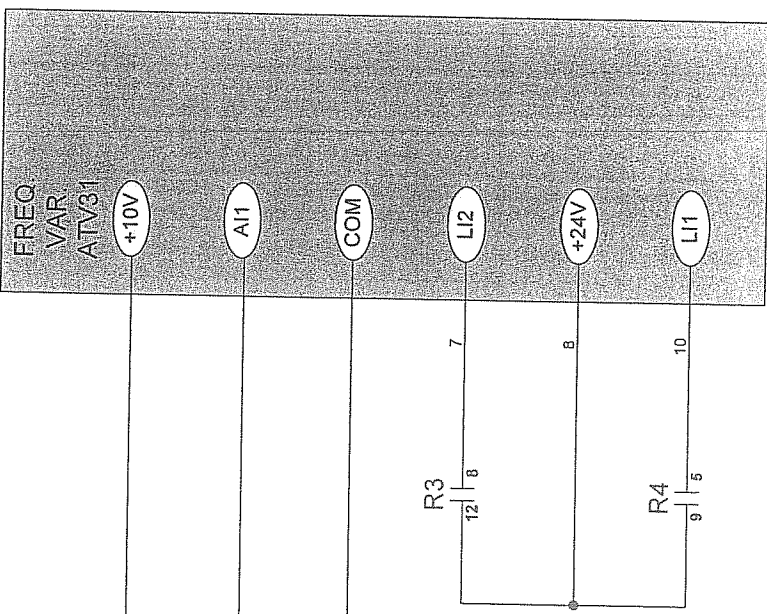
**SIPROMAC**  
 St-Germain de Grantham  
 QUEBEC, CANADA





ATV31

MENU SET:	PARAMETERS	SET TO:
	ACC	15
	DEC	6
	LSP	0.0
	HSP	100
	ITH	1.5 x I
DRC:	TUNE	YES → DONE
	TFR	100
I/O:	R1	RUN



category	MASSAGER	model	VT-1000 TO 10000	vol.	ALL
system	MC-40 INPUT AND ANALOG OUTPUT	circuit	COMMAND	year	09
usual functions				month	10
options				day	28
				app	
				draw	
				S.P	
				NI	

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

# SIPRO	PART DESCRIPTION	# MODEL	PART MANUFACTURER	PART APPLICATION	MACHINE VOLTAGE	MACHINE	REF.	QTY
028-0018	TERMINAL BLOCK M6/8	115-118-11	ENTRELEC	ALIMENTATION	480V/3PH/60HZ	VT-2000	L1-L2-L3	6
028-0020	GROUND TERMINAL BLOCK M6/8P	165-114-17	ENTRELEC	ALIMENTATION	480V/3PH/60HZ	VT-2000	L1-L2-L3	1
028-0060	SEPARATOR M4/6	118-368-16	ENTRELEC	ALIMENTATION	480V/3PH/60HZ	VT-2000	L1-L2-L3	4
034-0755	FUSE HOLDER 30A 1 POLE 600V	VLC10	ETI	DRIVE MOTOR	480V/3PH/60HZ	VT-2000	F1	3
034-0480	FUSE 10A/600V/FA	KTK-10	BUSSMAN	DRIVE MOTOR	480V/3PH/60HZ	VT-2000	F1	3
025-0010	CONTACTOR 5 HP IN 480V 3PH-CSA	LC1D09B7	TELEMECANIQUE	DRIVE MOTOR	480V/3PH/60HZ	VT-2000	C1	1
041-0040	FREQ. DRIVE ATV312-2HP 480V 3PH	ATV312HU15N4	SQUARE D	DRIVE MOTOR	480V/3PH/60HZ	VT-2000	FV1	1
041-0014	EMI FILTER 30A MAX. 600V 3PH	KDRA54L	TRANSFAB	DRIVE MOTOR	480V/3PH/60HZ	VT-2000	EF1	1
028-0018	TERMINAL BLOCK M6/8	115-118-11	ENTRELEC	MOTOR	480V/3PH/60HZ	VT-2000	M1-T1-T2-T3	3
028-0060	SEPARATOR M4/6	118-368-16	ENTRELEC	MOTOR	480V/3PH/60HZ	VT-2000		1
030-0190	CAB TIRE	14/4SOOW		MOTOR	480V/3PH/60HZ	VT-2000	WM1	3M.
037-5042	GEAR/MT 2HP 460V/3PH/60HZ-3.15A	SK5382AB-90L/4	NORD GEAR	MOTOR	480V/3PH/60HZ	VT-2000	M1	1
034-0755	FUSE HOLDER 30A 1 POLE 600V	VLC10	ETI	PUMP	480V/3PH/60HZ	VT-2000	F2	3
034-0471	FUSE 10A/600V TD	LPCC-10	BUSSMAN	PUMP	480V/3PH/60HZ	VT-2000	F2	3
025-0010	CONTACTOR 5 HP IN 480V 3PH-CSA	LC1D09B7	TELEMECANIQUE	PUMP	480V/3PH/60HZ	VT-2000	C2	1
025-0140	THERMAL OVERLOAD 2.5 TO 4A	LRD08 SET TO:2.8A	TELEMECANIQUE	PUMP	480V/3PH/60HZ	VT-2000	O/L2	1
028-0018	TERMINAL BLOCK M6/8	115-118-11	ENTRELEC	PUMP	480V/3PH/60HZ	VT-2000	M2-T1-T2-T3	3
028-0060	SEPARATOR M4/6	118-368-16	ENTRELEC	PUMP	480V/3PH/60HZ	VT-2000		1
030-0190	CAB TIRE	14/4SOOW		PUMP	480V/3PH/60HZ	VT-2000	WM2	3M.
125-0030	BUSCH RA-0040 460V/3PH/60HZ-2.8A	RA0040.E506.1001	BUSH	PUMP	480V/3PH/60HZ	VT-2000	M2	1
034-0755	FUSE HOLDER 30A 1 POLE 600V	VLC10	ETI	TRANSFO	480V/3PH/60HZ	VT-2000	F101	2
034-1660	FUSE 0.8A/600V TD	LPCC-0.8	BUSSMAN	TRANSFO	480V/3PH/60HZ	VT-2000	F101	2
029-0007	TRANSFO 65VA/220-380-460V/24-9	EXS114457	TRANSFAB	TRANSFO	480V/3PH/60HZ	VT-2000	TR	1
034-0740	FUSE HOLDER M4/8S F-CSA	115-657-25	ENTRELEC	24VAC-9VAC	ALL	VT-2000	F104+105	2
034-0210	FUSE 5X20MM/2A/250V TIME DELAY	GSC2		9VAC	ALL	VT-2000	F105	1
034-0240	FUSE 5X20MM/4A/250V TIME DELAY	GSC4		24VAC	ALL	VT-2000	F104	1
036-0740	12 CONTACTS CONNECTOR	CPF2,5/5-12JP1	WEIDMULLER	OUTPUT MC-40	ALL	VT-2000		1
036-0860	MTA-100 RECEPTACLE	640441-4		ANALOG OUTPUT MC-40	ALL	VT-2000		1
036-0820	0.156 CENTERLINE CRIMP HOUSING	DK PIN:WM2113-ND		INPUT MC-40	ALL	VT-2000		1
036-0860	0.156 CENTERLINE CRIMP TERMIN.	DK PIN:WM2302-ND		INPUT MC-40	ALL	VT-2000		4
038-0036	MICROPROCESSOR MC-40 VT MASSAGERS			MC-40	ALL	VT-2000		1
033-0015	MEMBRANE SIPROMAC			MC-40 CONTROL	ALL	VT-2000		1
026-0240	LIGHT HEAD BODY	ZB2BV6	TELEMECANIQUE	CYCLE ON LIGHT	ALL	VT-2000	CYCLE ON	1
026-0300	LIGHT BULB 24V			CYCLE ON LIGHT	ALL	VT-2000	CYCLE ON	1
026-0220	YELLOW LIGHT HEAD	ZB2BV05	TELEMECANIQUE	CYCLE ON LIGHT	ALL	VT-2000	CYCLE ON	1
026-0475	CYCLE ON LEGEND	ZB2BY2002		CYCLE ON LIGHT	ALL	VT-2000	CYCLE ON	1
026-0010	1 N.O. CONTACT WITH BASE	ZB2BZ101	TELEMECANIQUE	VACUUM	ALL	VT-2000	VACUUM OFF/ON	1
026-0030	N.C. WITHOUT BASE	ZB2BE101	TELEMECANIQUE	VACUUM	ALL	VT-2000	VACUUM OFF/ON	3
026-0040	2 POSITION SELECTOR	ZB4BD2	TELEMECANIQUE	VACUUM	ALL	VT-2000	VACUUM OFF/ON	1
127-0014	STICKER VACUUM OFF/ON			VACUUM	ALL	VT-2000	VACUUM OFF/ON	1
026-0025	MTA WITH BASE	ZB2BZ...	TELEMECANIQUE	VACUUM	ALL	VT-2000	VACUUM OFF/ON	1

#	SIPRO	PART DESCRIPTION	# MODEL	PART MANUFACTURER	PART APPLICATION	MACHINE VOLTAGE	MACHINE	REF.	QTY
026-0030		N.C. WITHOUT BASE	ZB2BE101	TELEMECANIQUE	EMERGENCY STOP	ALL	VT-2000	E-STOP	1
026-0150		E STOP BUTTON PUSH/PULL	ZB2BT4	TELEMECANIQUE	EMERGENCY STOP	ALL	VT-2000	E-STOP	1
026-0485		E STOP LEGEND	ZB2BY2330	TELEMECANIQUE	EMERGENCY STOP	ALL	VT-2000	E-STOP	1
026-0010		1 NO CONTACT WITH BASE	ZB2EZ101	TELEMECANIQUE	STOP/START	ALL	VT-2000	START/STOP	1
026-0110		BLACK CAP PUSH BUTTON (WATER)	ZB4BP2	TELEMECANIQUE	STOP/START	ALL	VT-2000	START/STOP	1
026-0435		STOP START LEGEND	ZB2BY2366	TELEMECANIQUE	STOP/START	ALL	VT-2000	START/STOP	1
025-0208		4PDT RELAY 24VAC (55.34-24VAC)	55.34-24VAC	FINDER	REV. FOW.	ALL	VT-2000	R3+R4	2
025-0610		4PDT RELAY SOCKET 24VAC	94.74	FINDER	REV. FOW.	ALL	VT-2000	R3+R4	2
025-0611		RELAY SOCKET RETAINING CLIP(FINDER)	#94.71	FINDER	REV. FOW.	ALL	VT-2000	R3+R4	2

