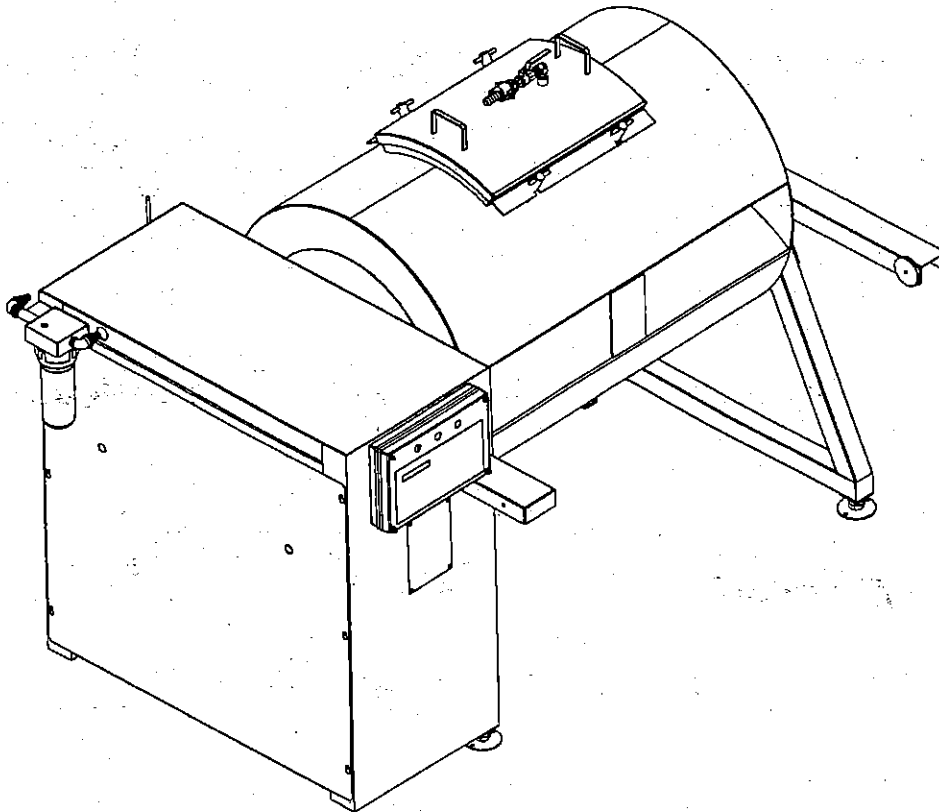


ET-10 VACUUM TUMBLER



OPERATOR MANUAL - PART LIST

EVERY PERSON OPERATING THIS MACHINE MUST READ THIS MANUAL INCLUDING ALL SAFETY INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS MACHINE. PROPER GUARDS AND SAFETY DEVICES ARE INSTALLED FOR YOUR SAFETY. DO NOT OPERATE THE MACHINE UNLESS ALL GUARD ARE IN PLACE.

PRE-OPERATION

PHOTOELECTRIC SAFETY BEAM ASSEMBLY

THE PHOTO SENSOR BRACKET AND THE REFLECTOR ARM ARE FASTENED TO THE SHIPPING SKID. 1). REMOVE THE ACCESS PANEL ON THE LEFT SIDE OF THE CABINET. 2). UNSCREW THE PLASTIC NUT FROM THE SENSOR AND PASS IT THROUGH THE LARGE HOLE IN THE END OF THE BRACKET. PASS THE SENSOR THROUGH OTHER HOLE AND TIGHTEN WITH THE PLASTIC NUT. 3). FASTEN THE BRACKET TO THE CABINET WITH THE HARDWARE PROVIDED. 4). FASTEN THE REFLECTOR ARM TO THE FRAME USING THE HINGE PIN AND COTTER KEY AS SHOWN. NOTE: THE PHOTO SENSOR AND REFLECTOR MUST BE IN LINE FOR THE MACHINE TO OPERATE. THE HEIGHT OF THE REFLECTOR CAN BE CHANGED BY TURNING THE ADJUSTMENT SCREW ON THE BOTTOM OF THE ARM.

Creating a Program Name

1. If **F1 CREATE A PRGM** is not displayed on the LCD screen Press **ESC**. Once **F1 CREATE A PRGM** appears press **ENTER**.
2. **PRGRM CYCLE NAME** will appear on the LCD screen. Press **ENTER** to create a new program name.
3. **Pxx NO NAME** will flash. (The program number (Pxx) will be allocated automatically.) Begin typing the program name by using the numeric keyboard; press a numeric key until the desired character appears. Once the correct letter is displayed press **ENTER** and the cursor will move one space to the right. Upon completion of typing program name press **ENTER** two times. The newly typed program name will flash. Press **ENTER** to confirm. Your program name has been completed.
4. To set program features enter the program menu by pressing **ESC**. The newly created program name will appear on the LCD screen. Press **ENTER** if the displayed program name is the one needing to be set or modified. Or press the **SELECT** key to display other pre-set programs. Once the correct program name appears press **ENTER**. See *Setting Program Options, below for more information.*

Setting Program Options

Within each program three segments are available to set the tumbler times and speeds. A complete program duration may be up to 72 hours in length (24 hours per segment). For example, say you do not want to start tumbling immediately. **PRGRM SEGMENT #1** can be set for X amount of time with the **MESSAGE OFF** (no rotation will occur). Then **PRGRM SEGMENT #2** can be set for X amount of time with the **MESSAGE ON** (rotation will occur) at a set RPM (rotations per minute). Perhaps after this tumbling cycle you will want to tumble for X more amount of time but at a different speed. In **PRGRM SEGMENT #3** type this final tumbling time, **MESSAGE ON** and at what RPM. Depending on your tumbling needs, one, two or all three of the segments may be programmed. In short, the different cycles may be used for a pause in tumbling or tumbling at a different speed.

1. **PRGRM SEGMENT #1** will appear once a program name has been selected for modification or programming. To make changes to this segment press **ENTER**.
2. **SEGMENT TIME: 0h00** will appear. Enter the length of tumbling segment #1. Hours must be entered in two number increments (i.e. 01, 05, 12, etc. up to 24) followed by the minutes. In total, you must enter 4 numbers to set the tumbling cycle time. When completed the time will flash. Press **ENTER** to confirm and move to the next screen.
3. **MESSAGE ON: 0h00** will appear. Type the length of time you want to *tumble*. Type the same time as the **SEGMENT TIME** if tumbling is desired during this. If no time is entered the machine will not rotate. In this case **PRGRM SEGMENT #1** will act as a timer, delaying tumbling until the next segment is activated. Press **ENTER** to confirm time and/or move to the next screen.
4. **MESSAGE OFF: 0h00** will appear. This option is for producers who want to temporarily stop tumbling in a tumbling cycle. No time need be entered if a **MESSAGE ON** time has been entered. If no tumbling is desired in this segment, type the same time as **SEGMENT TIME**. Press **ENTER** to confirm time or move to next screen.

ESC to switch back to the function menus and follow the above directions to get back to the F4 Vacuum screen.

Note: If the % vacuum on the LCD screen does not increase, the lid is not sealed tight. Press ESC to stop the vacuum, tighten the lid and start vacuum again.

WARNING: DO NOT ROTATE THE TUMBLER WITH THE VACUUM HOSE IN PLACE.

Activating a Program

After drawing a vacuum the screen switches from functions to programs.

1. Press **ENTER** if the program name you want to run appears to activate.
2. To select a different program than the one on the screen, press the **SELECT** key.
3. Press **ENTER** after the correct program name appears.
4. The selected program will run until all segments have been completed, the safety sensor is tripped, or the programmed is manually stopped.

WARNING: STAY CLEAR OF MOVING PARTS.

Stopping a Program

1. To interrupt a program in progress press the Stop/Start button. Doing so only stops the rotation of the tumbler. The machine will remember how much time has elapsed.
2. Push the Stop/Start button again to continue, if so desired.
3. Press **ESC** to access the function menus if you would like to clear out the program memory from a program manually stopped before completion.
4. Press the **SELECT** key to scroll to **F3 UNLOCK A PRGM** and then press **ENTER**. The name of the current program will appear.
5. Press **ENTER** to reset the counters. At this point another program may be accessed.

*A program is locked from the beginning of execution through completion to prevent any unintentional modification to the status of the current program.

Removing Product

1. After the tumbler has stopped, *jog* the tumbler into an unloading position (*see reverse tumbling section below*).
2. Open valve to allow tank pressure to re-stabilize and remove lid.
3. The product may now be removed.

Deleting a Program

1. To delete a pre-set program from the tumbler's memory access the function menus and scroll to **F2 DELETE A PRGM** and press **ENTER**.
2. The first program in memory will blink. Press **ENTER** to delete or the **SELECT** key to move to the next program.
3. Once the program needing to be deleted appears press **ENTER**.
4. Press **ESC** to unconfirm a deletion and/or to exit the delete function.

MAINTENANCE

1. UNPLUG THE MACHINE FROM ITS POWER SOURCE BEFORE DOING ANY MAINTENANCE.
2. CHECK THE CHAIN TENSION AND GEAR REDUCER OIL LEVEL ON A MONTHLY BASIS.
3. REMOVE THE HOOD COVER TO CHECK AND ADJUST THE CHAIN TENSION. DO NOT OVERTIGHTEN, REMOVE EXCESSIVE SLACK ONLY OR PREMATURE WEAR TO BEARINGS AND SEALS WILL OCCUR.
4. LUBRICATE THE CHAIN MONTHLY.
5. GREASE THE TUMBLER SHAFT BEARINGS EVERY 400 HOURS

INSTALLATION, MAINTENANCE, AND LUBRICATION

INSTALLATION

When installing CANIMEX reducers, make sure to have a rigid mounting to maintain alignment.

Flexible couplings are recommended because they minimize bearings and gears wear caused by misalignment.

Mounting of reducers on bases, subject to vibration, should be avoided.

STARTING UP

Check oil level. Some speed reducers are shipped dry. Oil must be added prior to operation.

It may take many hours of running, under full load, for the gears to reach their highest efficiency. The gear may, if necessary, be put to work under full load immediately. However, it is better for the ultimate life of the gear to be run under gradually increasing loads (reaching the full load after about 20 to 40 hours).

Reasonable precautions should be taken to avoid overloads in the early stage of running.

Temperature rise on the initial run will be higher than the temperature eventually reached after the gear is fully run-in.

MAINTENANCE

Shut off power before inspection. The oil level, in the worm gear unit, should be checked at least once a month. Never mix two different types of oil. If uncertain, change lubricant. False reading will be avoided by examining the oil level on stationary gears.

To maintain free ventilation of the unit, the breather hole in the filler plug (air-vent) should be kept clear at all times.

Inspect regularly set screw and reducer mounting bolts for tightness because loose fasteners can cause misalignment and excessive wear.

CHANGING LUBRICANT

After first 100 hours of running, a new worm gear unit should be drained, flushed and refilled with proper oil.

Thereafter, oil should be changed at least every 2 500 operating hours or every 6 months, whichever occurs first.

Never mix two different types of oil. Be sure to drain and wash before using another type of oil.

SELECTION OF LUBRICANT

Lubricating oil must have a viscosity sufficient to reduce friction and allow the speed reducer to operate smoothly under high load and impact. Consult table below for the choice of lubricant.

Where a wide temperature range is expected, the synthetic oil EXXON SHC 629 is recommended.

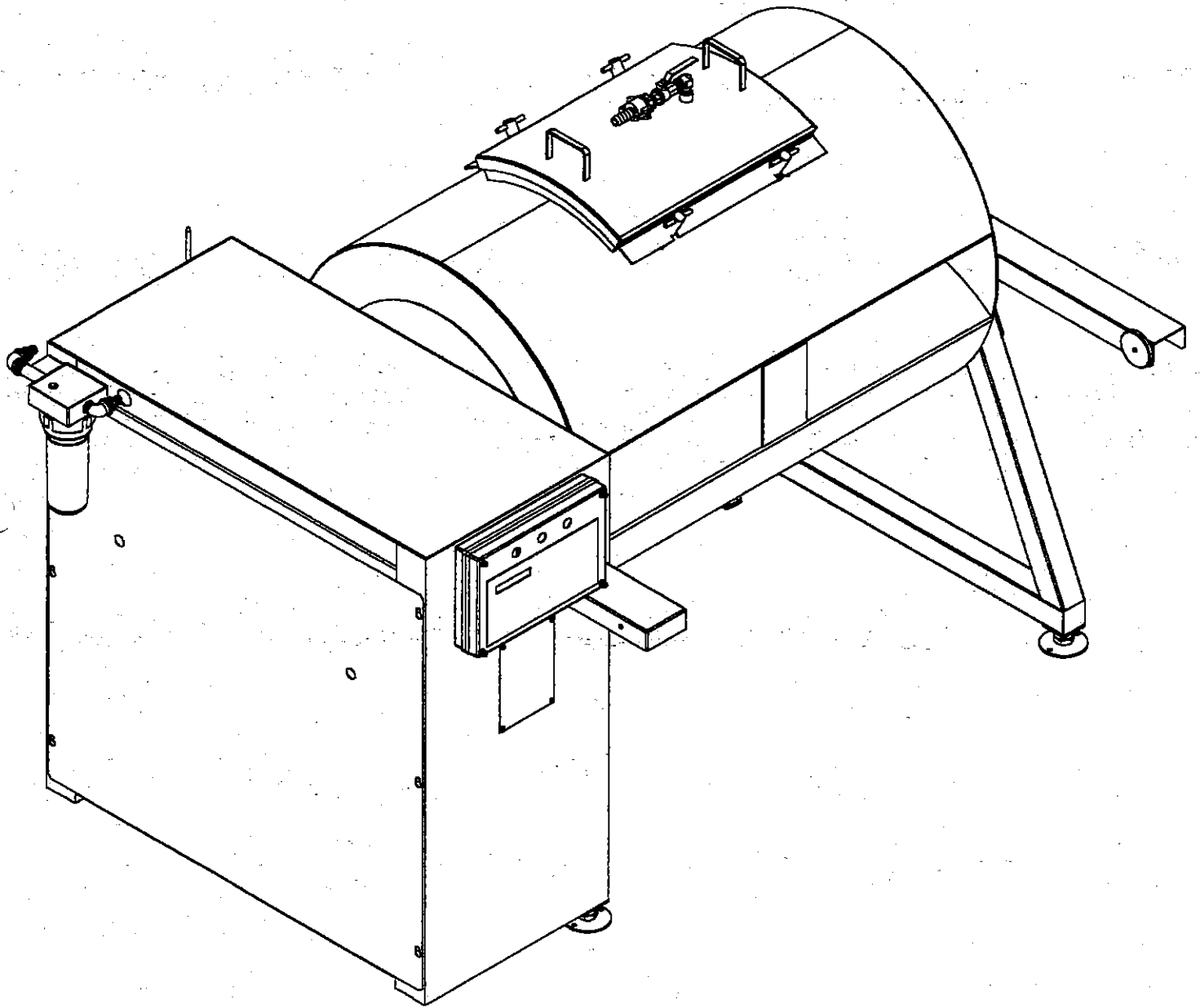
Please keep in touch with our engineering department, especially when operating the CANIMEX reducers under special conditions such as high or low speed, high temperature, or heavy loads.

Lubrication

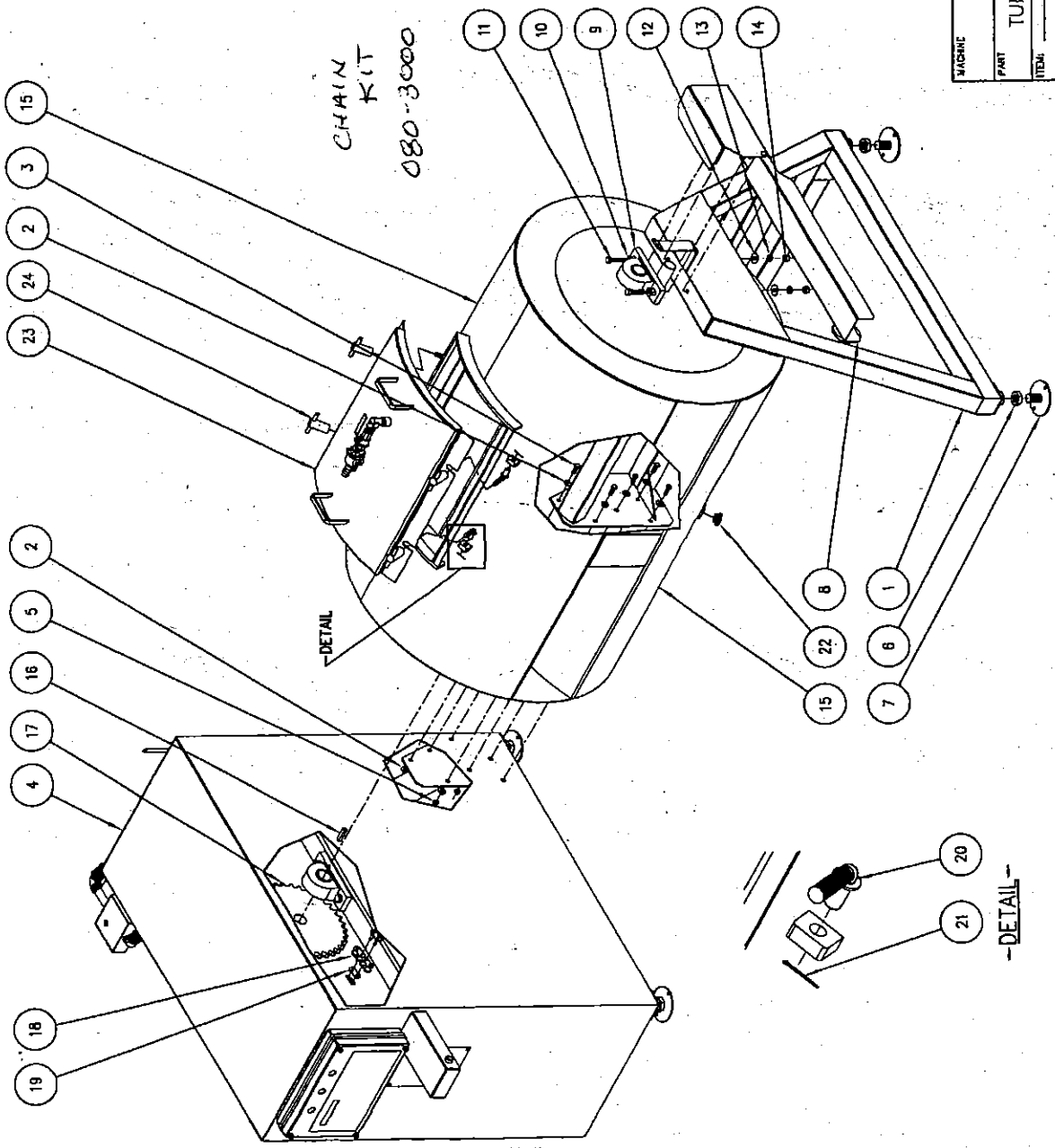
Room temperature (C)	Operating temperature (C)	OIL GRADE	TEXACO	SHELL	EXXON
-30 to 0	Under 70	80W90	Mopora 150	Omala 150	Spartan 150
	70 to 100	80W110	Mopora 320	Omala 320	Spartan 320
0 to 25	Under 70	80W110	Mopora 320	Omala 320	Spartan 320
	70 to 100	80W110	Mopora 320	Omala 320	Spartan 320
Over 25	Under 70	80W140	Mopora 460	Omala 460	Spartan 460
	70 to 100	80W140	Mopora 460	Omala 460	Spartan 460

5-C

629



ITEM	PART#	DESCRIPTION	QTY
1	004-0873	RIGHT FRAME SIDE PRE-ASSY	1
2	051-0783	WASHER 3/8" FLAT THICK S/S	14
3	051-0380	BOLT 3/8" -16 x 1" S/S	7
4	005-0684	STRUCTURE ASSEMBLY	1
5	051-0620	NUT 3/8" -16 S/S	7
6	051-0685	HALF NUT 1" -8 S/S	2
7	004-0874	LEG PRE-ASSEMBLY	2
8	005-0682	REFLECTOR ARM ASSEMBLY	1
9	075-1540	PILLOW BLOC 1 1/2" HGP-208-24	1
10	051-0792	WASHER 1/2" FLAT THICK S/S	2
11	051-0444	BOLT 1/2" -13 x 2" S/S	2
12	051-0790	WASHER 1/2" FLAT S/S	2
13	051-0791	LOCK WASHER 1/2" S/S	2
14	051-0630	NUT 1/2" -13 S/S	2
15	004-0864	CYLINDER ASSEMBLY	1
16	002-0842	CYLINDER DRIVE SHAFT KEY	1
17	003-0148	SPROCKET PRE-ASSEMBLY	1
18	080-2610	CHAIN #80 1" PITCH (58 LINKS)	1
19	080-5020	MASTER LINK #80 1" PITCH	1
20	004-0450	COVER FIXATION PRE-ASSY	2
21	058-0115	COITER PIN 1/16" x 1" S/S	2
22	102-0750	PLASTIC DRUM PLUG 3/4" NPT NYLON	1
23	005-0688	CYLINDER DOOR ASSEMBLY	1
24	004-0419	DOOR HANDLE ASSEMBLY	4

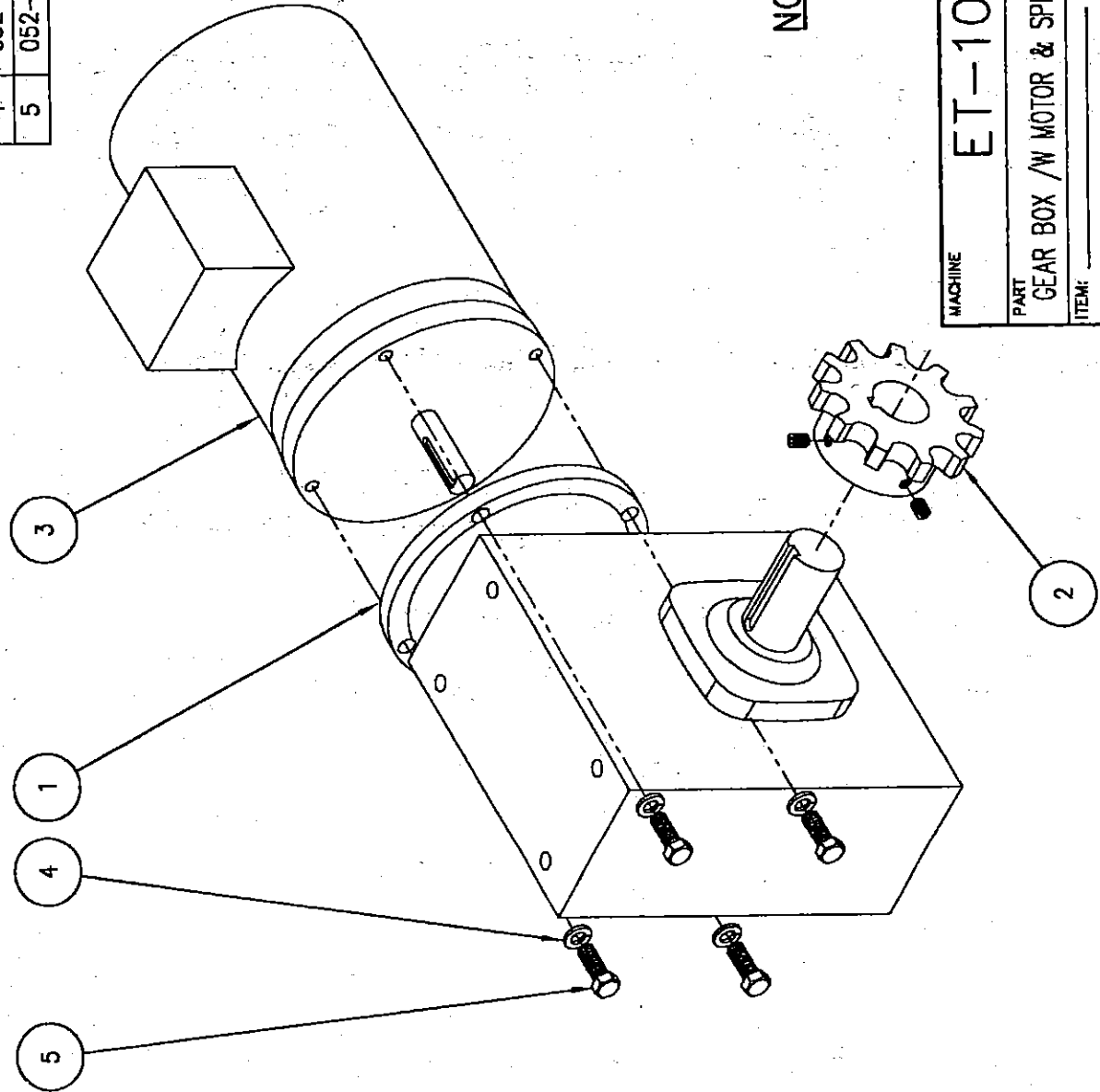


MACHINE	ET-10	QTY	1
PART	TUMBLER ASSEMBLY	NO.	005-0690
ITEM	ENG	DATE	01-03-19
DATE	DATE	DATE	DATE
BY	BY	BY	BY
APP.	APP.	APP.	APP.
LET.	MODIFICATION	DATE	INT.

SIPROMAC
ST-GERMAIN DE GRANTHAM
QUEBEC CANADA

004-0866

ITEM	PART#	DESCRIPTION	QT
1	037-6015	GEARBOX REDUCER 60:1 1-3/8" OUTPUT	1
2	003-0147	SPROCKET PRE-ASSEMBLY	1
3	037-0104	1 Hp MOTOR 230V 3Ø 60 Hz	1
4	052-2065	WASHER 3/8" LOCK ZINC	4
5	052-0650	BOLT 3/8"-16 x 1" ZC	4



NOTE:

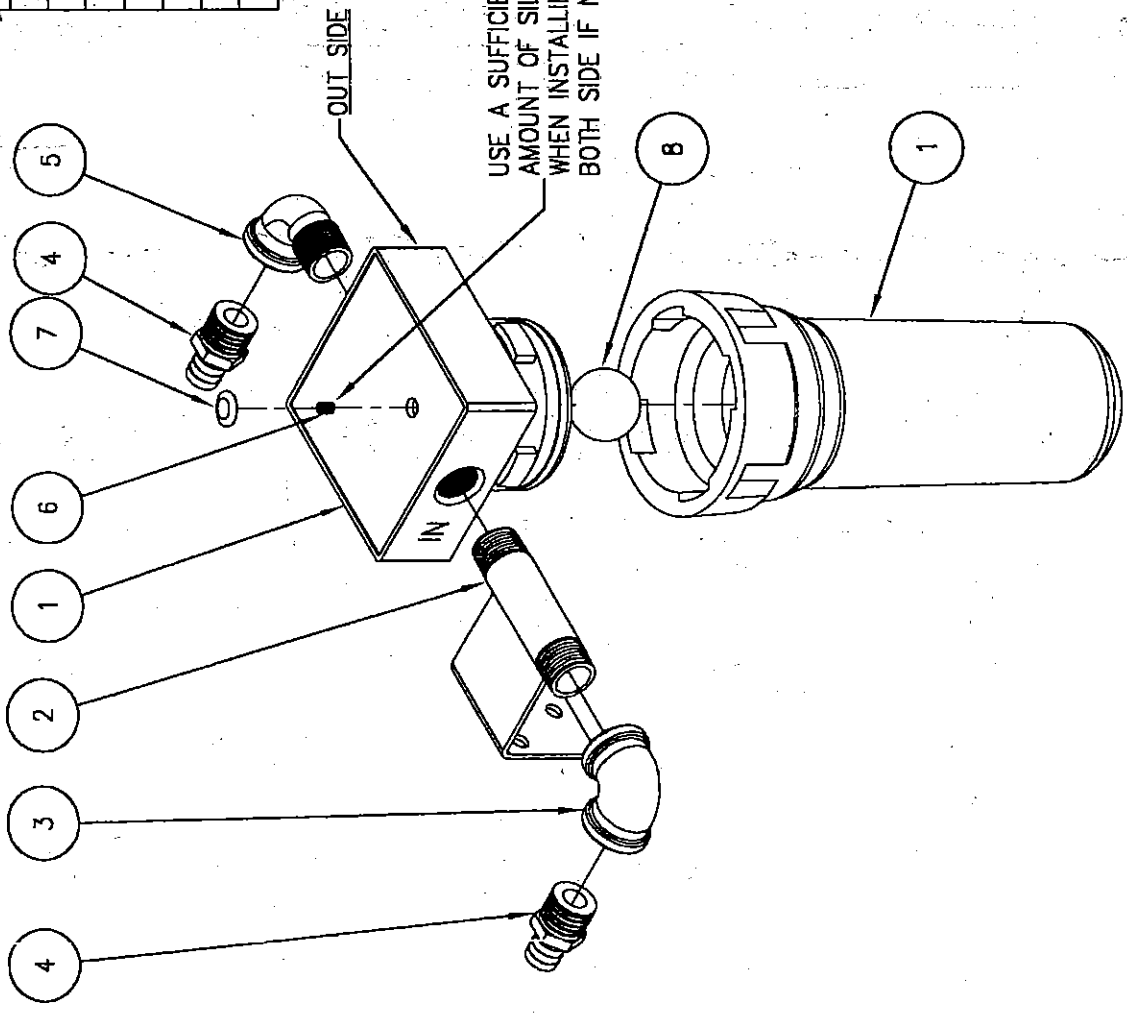
- KEY ON MOTOR SHAFT SUPPLIED /W MOTOR
- KEY ON GEAR BOX SHAFT SUPPLIED /W GEAR BOX
- SET SCREW ON SPROCKET SUPPLIED /W SPROCKET

MACHINE	ET-10		METRIC TOLERANCE	INCH TOLERANCE	SIPROMAC
PART	GEAR BOX /W MOTOR & SPROCKET ASSY		0. ± .05 .0 ± .005 .00 ± .0005 ANGLE ± 1°	0. ± .015 .0 ± .005 .00 ± .0005 N.T.S.	ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
ITEM:	CNC:		M		QT: 1
MAT:	DATE	J.G.	DATE	NO.	
	01-02-26	LT	01-02-26	004-0866	

LET.	MODIFICATION	DATE	INT.
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1005-0586

ITEM	PART #	DESCRIPTION	QT
1	003-0106	SEPARATOR BODY	1
2	004-0372	SEPARATOR SUPPORT PRE-ASSY	1
3	101-0631	ELBOW 90° 3/4" FNPT CAST BRASS	1
4	101-0280	STRAIGHT 3/4" MNPT x 3/4" HOSE BARB	2
5	101-0681	ELBOW STREET 90° 3/4" NPT CAST BRASS	1
6	051-0182	SCREW 1/4"-20 x 5/16" SKT SET S/S	1
7	057-0440	PLUG 3/8" PLASTIC	1
8	154-0300	PING PONG BALL	1

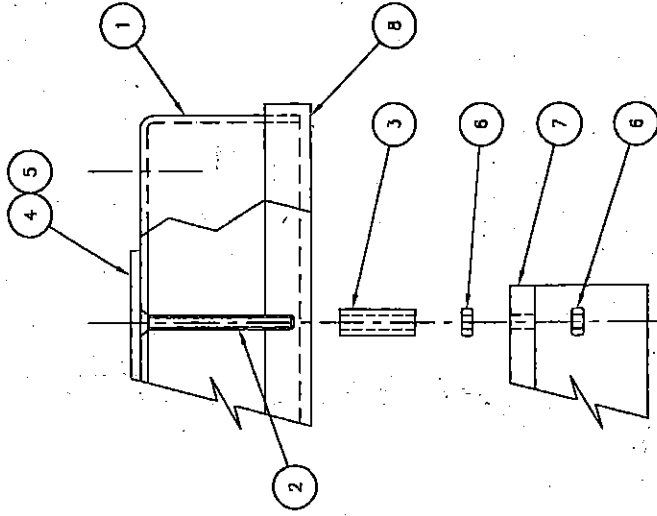
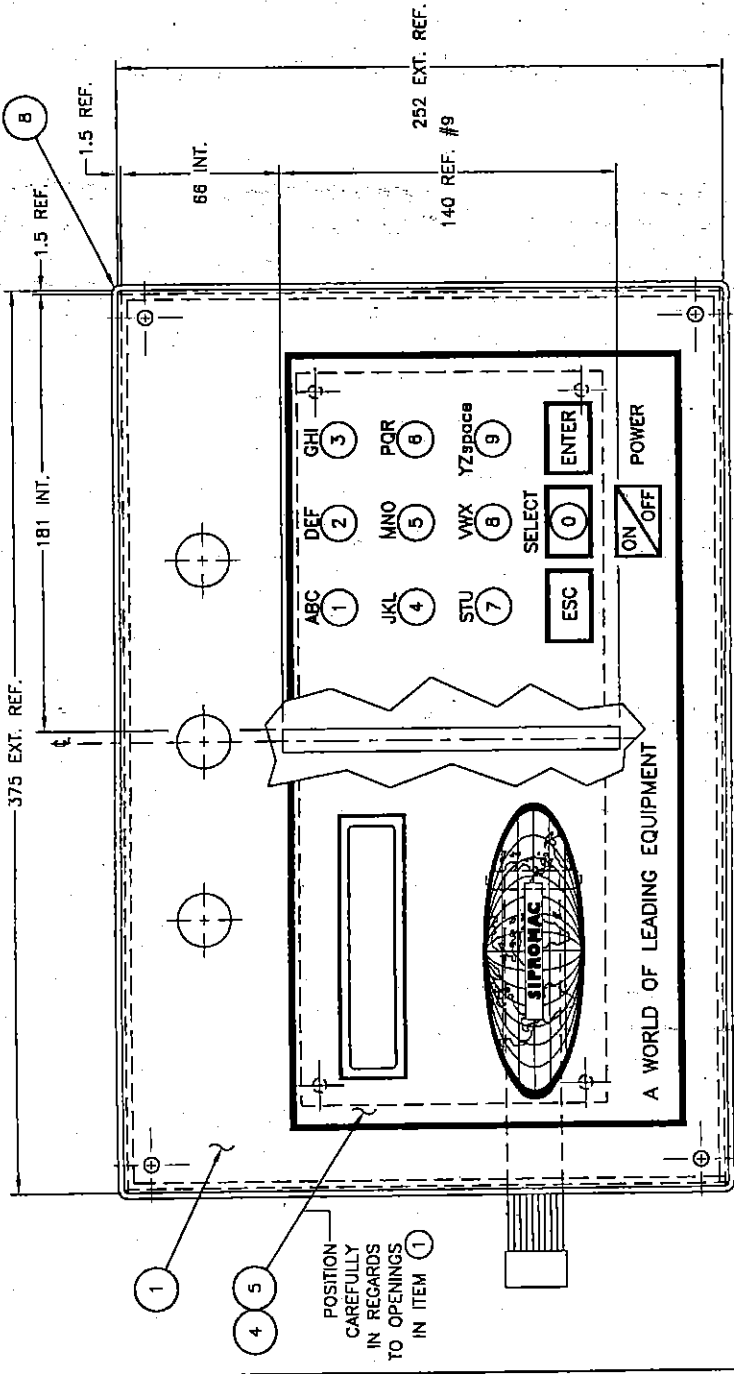


MACHINE	T-200, T-300, T-500 & ET-10	INCH TOLERANCE	.0 ± .015"	METRIC TOLERANCE	0. ± .5	STIPROMAC
PART	SEPARATOR ASSEMBLY	.0 ± .05	.00 ± .005"	.0 ± .05	.00 ± .005"	ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
ITEM:		.000 ± .0005	N.T.S.	ANGLE ± 1'		
MAT:						
DATE	01-03-07					
INT.						
MODIFICATION						
REDRAWN MDT						
ADDED ET-10						
LET.						

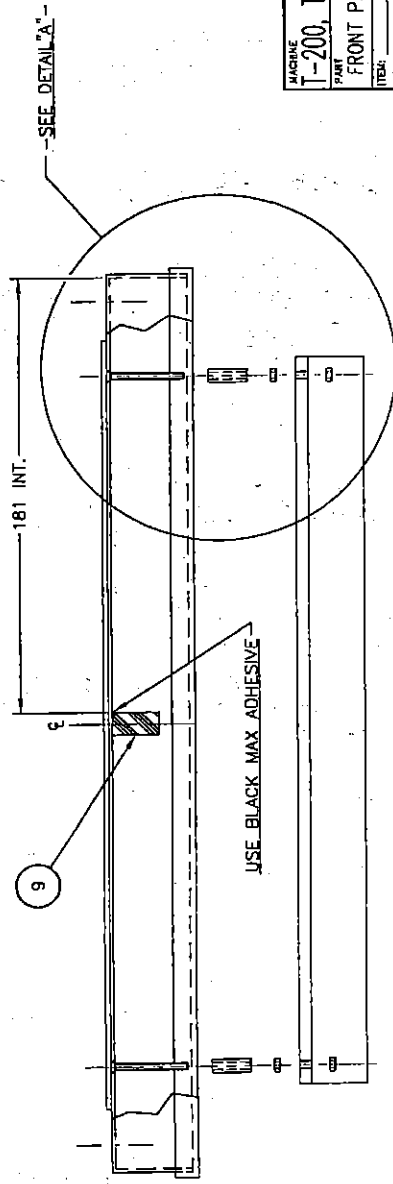
DATE	01-03-07	J.G.	
INT.			
MODIFICATION			
REDRAWN MDT			
ADDED ET-10			
LET.			
DATE	01-03-07	J.G.	
INT.			
MODIFICATION			
REDRAWN MDT			
ADDED ET-10			
LET.			

005-0586

ITEM	PART #	DESCRIPTION	QTY
1	004-0433	FRONT P.C. BOARD SUPPORT PRE-ASSY	1
2	051-0092	SCREW 4-40 X 1 1/4" FLAT SLOT S/S	4
3	058-0120	CPVC SPACER 0.120" X 1/4" X 5/8"	4
4	033-0015	MC-40 KEYBOARD "SIPROMAC"	1
5	033-	MC-40 KEYBOARD "OPTION"	1
6	051-0540	NUT #4-40 S/S	8
7	033-3000	MC-40 DIGITAL P.C. BOARD	1
8	179-0014	RUBBER 1/4" X 3/8" X 1/16" "U SHAPED"	1
9	179-0006	SILICONE RUBBER 3/8" X 3/4" X 1/4"	1



-DETAIL "A"-

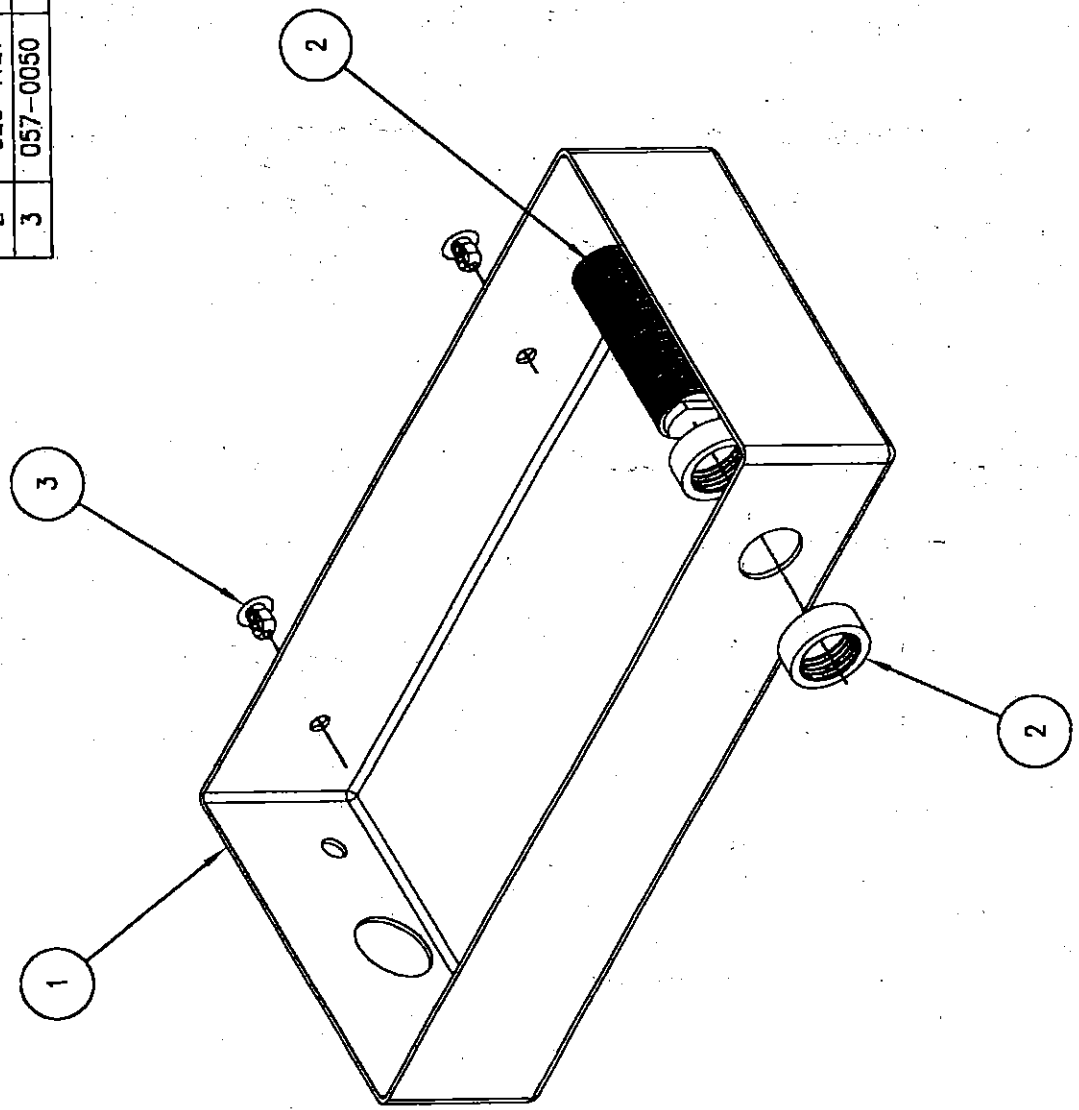


MACHINE	T-200, T-300, T-500 & ET-10	INCH TOLERANCE	0 ± .015 .015 ± .005 .030 ± .005 .060 ± .005 N. T. S.	SCALE	1
PART	FRONT P.C. BOARD SUPPORT ASS'Y	METRIC TOLERANCE	0 ± .015 .015 ± .005 .030 ± .005 .060 ± .005 N. T. S.	DATE	98-05-25
ITEM		DATE	98-05-25	NO.	005-0588
APP.		DATE			

LET.	A	ADDED ET-10	01-03-08	J.G.
		MODIFICATION	DATE	INT.

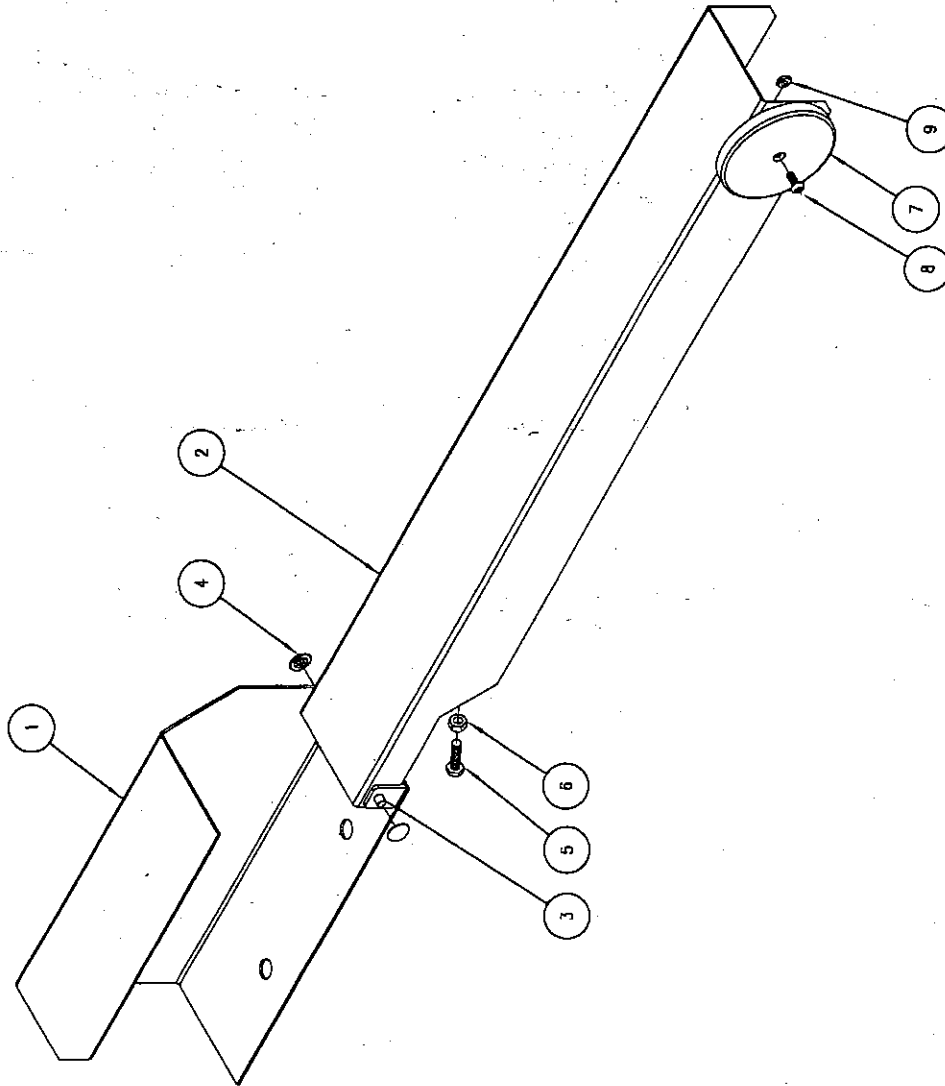
005-0689

ITEM	PART#	DESCRIPTION	QT
1	004-0432	DETECTOR GUARD PRE-ASS'Y	1
2	026-1121	DETECT.PHOTOELECTRIQUE DROIT 24VAC	1
3	057-0050	NYLON FLAT TIE HOLDER	2



MACHINE	ET-10		SIPROMAC	ST-GERMAIN DE GRANTHAM QUEBEC CANADA
PART	DETECTOR GUARD ASSEMBLY		METRIC TOLERANCE 0 ± .005 .00 ± .005 .000 ± .0005 ANGLE ± 1°	INCH TOLERANCE 0 ± .015 .00 ± .005 .000 ± .0005 N.T.S.
ITEM:	CNC	DATE	01-03-13	NO.
MAT:	BY: J.G.	DATE		
	APP. LT	DATE		
LET.	MODIFICATION	DATE	INT.	005-0689

ITEM	PART#	DESCRIPTION	QT
1	004-0879	PILLOW BLOCK GUARD PRE-ASSY	1
2	004-0871	REFLECTOR ARM PRE-ASSY	1
3	002-0546	REFLECTOR SUPPORT AXIS	1
4	056-0022	PUSH CAP 1/4" S/S	2
5	051-0210	BOLT 1/4"-20 x 1" HEX. S/S	1
6	051-0580	NUT 1/4"-20 S/S	1
7	026-1131	REFLECTEUR (PHOTO-CELL) 80mm	1
8	051-0144	SCREW 10-24 x 1/2" PAN PHIL. S/S	1
9	051-0571	NUT #10-24 S/S	1

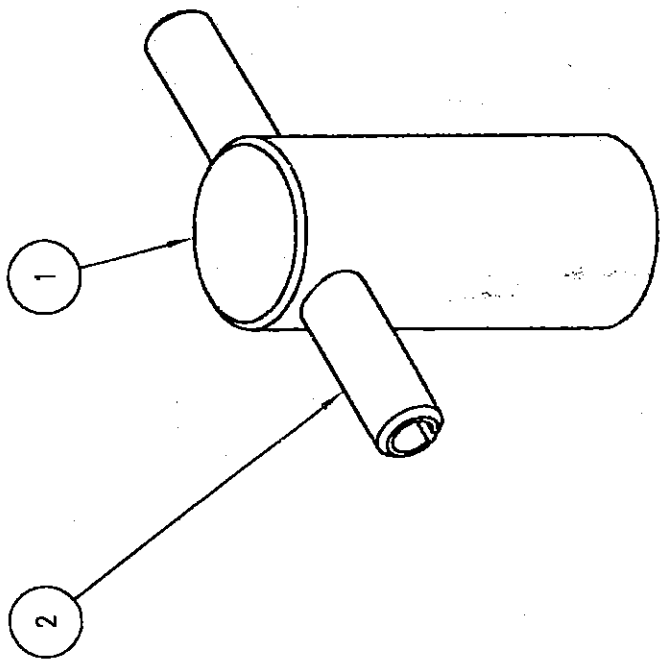


MACHINE	ET-10		SIPROMAC	
PART	REFLECTOR ARM ASSEMBLY		ST-GERMAIN DE GRANITHAM QUEBEC CANADA	
ITEM:	DWG:	DATE: 01-03-01	M:	QT: 1
MAT:	J.C. APP.	DATE:	NO:	005-0682

LET.	MODIFICATION	DATE	INT.
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004-0419

ITEM	PART#	DESCRIPTION	QT
1	008-0480	DOOR HANDLE EXTENSION	1
2	056-0058	SPRING PIN 3/8" x 3" S/S	1



NOTE:

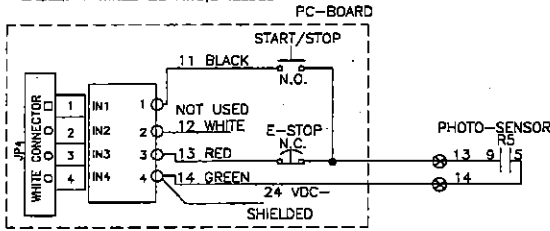
-STEP TO FOLLO

1- INSTALL SPRING PIN AS SHOWN
(W/ GROOVE DOWN)

2- USE CLEAR SILICON TO SEAL
UP CRACK & ENDS OF SPRING PIN.

E	ADDED	ET-10	01-02-22	J.G.	MACHINE	TUMBLER	METRIC TOLERANCE	INCH TOLERANCE	SIPROMAC
D	ADDED	T-4000	00-08-21	S.L.			0 ± .05 .0 ± .005 .000 ± .0005	0 ± .015 .00 ± .005 .000 ± .0005	ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
C	056-0058 WAS 008-0479 & REMOVE NOTE: CENTER PUNCH ON TOP TO LOCK HANDLE IN PLACE		99-10-06	S.L.		DOOR HANDLE ASSEMBLY	N.T.S.		
B	ADDED	T-1000, T-2000 & T-8000 WAS 004-0473	99-08-25	S.L.					
A	REDRAWN	CAD	98-04-16	A.P.					
LET.	MODIFICATION		DATE	INT.					
					ITEM:	CNC:	DATE 01-02-22		NO. 004-0419
					MAT:	J.G.	DATE		QT. 4
					APP.		DATE		

INPUT FOR 2 SPEEDS AND VARIABLE SPEED.
CABLE: 4 WIRES 22 AWG, SHIELDED



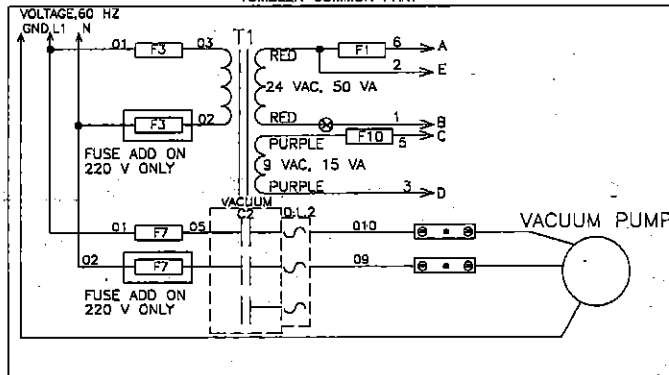
VSD 17U09P16 TELEMECANIQUE
PARAMETER SETTING:

ITEM	PARAMETER NAME	SETTING
8	ACCEL	5 SEC.
9	DECEL	5 SEC.
11	MAX FREQ	90 HZ
17	MOTOR OL	100 %
19	FX BOOST	5.3 %
27	ROTATION	FWD & REV.
29	MANUAL	0-10 VDC
30	CONTROL	REMOTE
31	HZ UNITS	HZ
32	HZ MULT	1.81
33	SPEED DP	XXX.X
40	TB5 MAX	88.30
48	TB13C	STRT REV

VSD 07U09P10 TELEMECANIQUE
PARAMETER SETTING:

ITEM	PARAMETER NAME	SETTING
Q2	freq de decoup.	Q3
05	ref. de vit. stand.	Q3
10	fonction de TB13A	Q4
19	accel	5 SEC.
20	decel	5 SEC.
24	max. freq.	70 HZ
28	fx boost	5
29	boost decel	5
30	comp. gliss.	5

TUMBLER COMMON PART



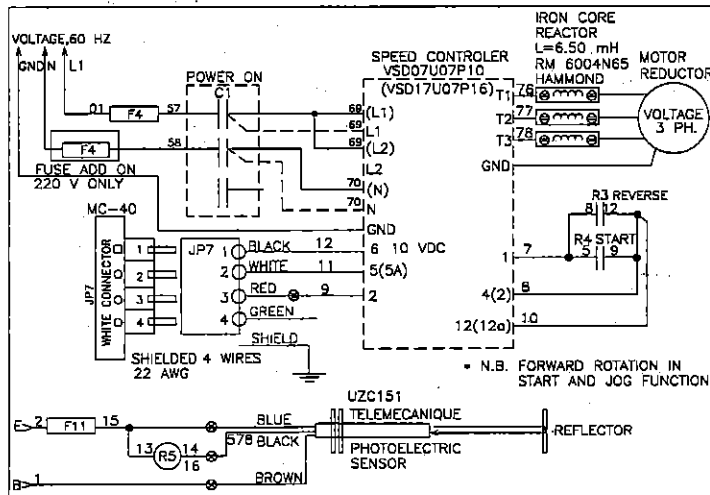
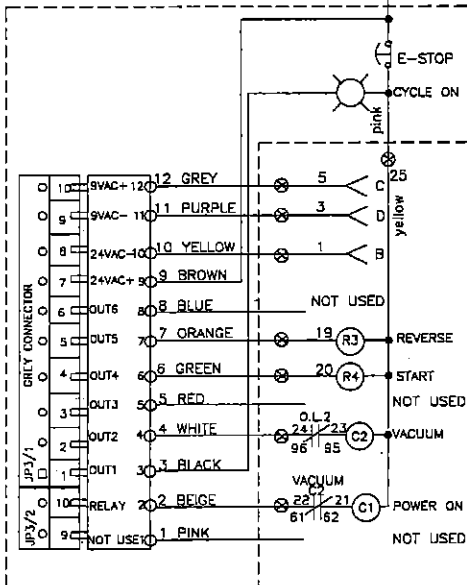
For VSD07 AND VSD17 model.

FUSE	120 V 10	220 V 10
F1	BDC 4	BDC 4
F3	BDC .75	BDC .75
F4	KTK 15	KTK 15
F7	MEN 20	MEN 10
F10	BDC 1	BDC 1
F11	BDC .75	BDC .75

0.5HP REDUCTOR
1HP REDUCTOR
KB20,B21 PUMP

CABLE: 12 WIRES 20 AWG, UNSHIELDED

MC-40

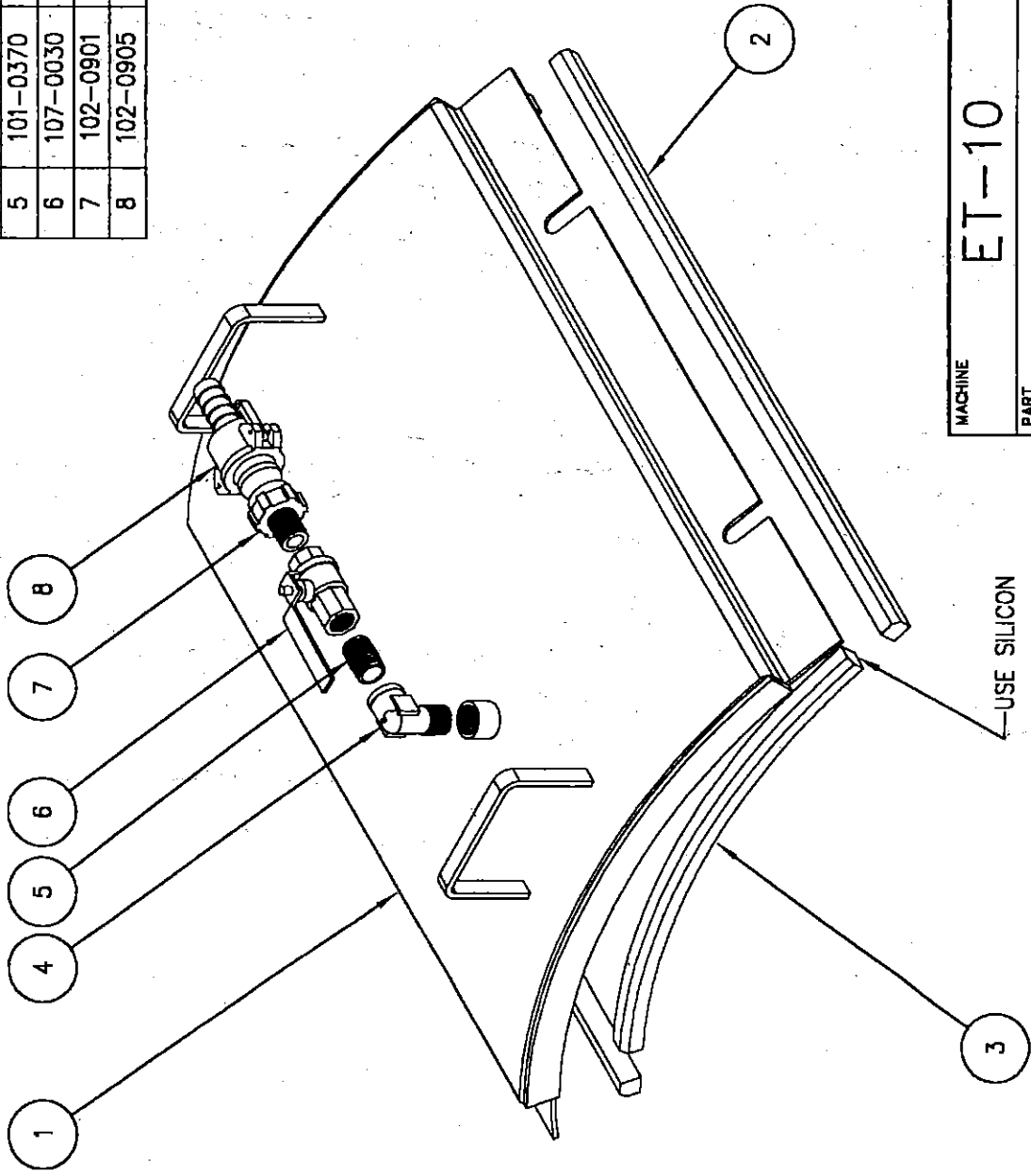


MACHINE	TUMBLER MC-40		SIPROMAC
PIECE	ELECTRIC DIAGRAM 1 PH.		
QT.	EDH. SCALE	NE PAS MESURER /N.T.S.	ST-GERMAIN DE GRANTHAM, QUEBEC CANADA
MAT.	DESS. D.L.	DATE 26/03/2001	006-0120
	APP.	DATE	

0710-900

005-0688

ITEM	PART #	DESCRIPTION	QT
1	004-0865	CYLINDER DOOR PRE-ASSEMBLY	1
2	008-0477	CYLINDER DOOR HOR. RUBBER	2
3	008-0557	CYLINDER DOOR VERT. RUBBER	2
4	101-0670	ELBOW STREET 90° 1/2" NPT BR.	1
5	101-0370	CLOSE NIPPLE 1/2" NPT BRASS	1
6	107-0030	BALL VALVE 1/2" NPT BRASS	1
7	102-0901	MALE ADAPTER 3/4" x 1/2" MNPT (PPF50)	1
8	102-0905	FEMALE COUPLER 3/4" x 3/4" HOSE BLACK	1



MACHINE	ET-10		INCH TOLERANCE	.0 ± .015"	SIPROMAC
PART	CYLINDER DOOR ASSEMBLY		METRIC TOLERANCE	.0 ± .05 .00 ± .005 ANGLE ± 1°	ST-GERMAIN DE GRANTHAM QUEBEC CANADA
ITEM:	CNC:		N.T.S.		M
MAT:	BY	J.G.	DATE	01-02-26	QT. 1
	APP.		DATE		

LET.	MODIFICATION	DATE	INT.

005-0688