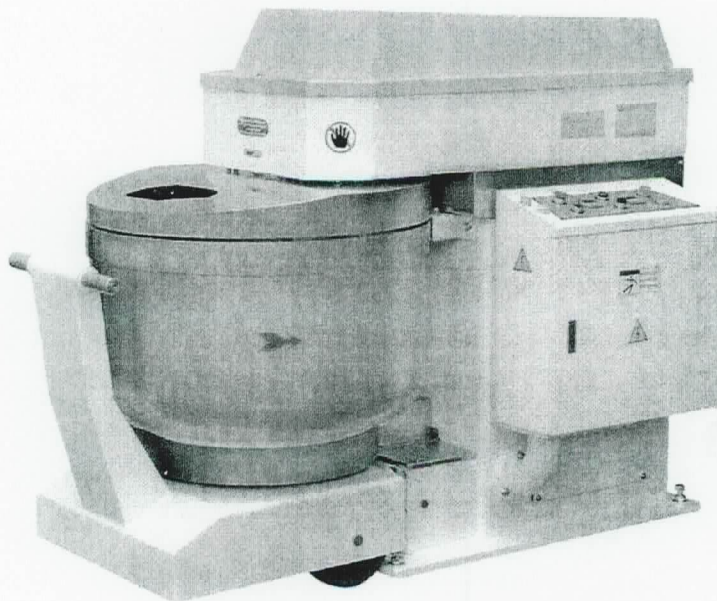


Automatic Spiral Mixer (removable bowl style)



Operation Manual



BMRS200
BMRS240
BMRS280
BMRS320

SPIRAL MIXER S300A/350A/400A/450A

IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

DANGER
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
CAREFULLY FOLLOW THESE INSTRUCTIONS.

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CHAPTER 1

IMPORTANT RECEPTION OF THE MERCHANDISE

Take care to verify that the received equipment is not damaged before signing the delivery receipt. If damage or a lost part is noticed, write it clearly on the receipt. If it is noticed after the carrier has left, contact immediately the freight company in order that they do their inspection.

NAME PLATE

Each machine has a nameplate fixed on the machine, with the general characteristics of the machine.

1. Serial number
2. Model
3. Date
4. Phase
5. Amperage
6. Volts
7. Frequency

CHAPTER 2

GENERAL DESCRIPTION

The Automatic Spiral Mixers are designed to be used by qualified people in the Bakery production. The particular shapes and speeds of the spirals and bowls allow you to have in a short period of time, very smooth dough, even when small quantities of water are used. It also has a very simple control panel, easy to work with. You may choose between the automatic or manual mode, each mode come with two speeds.

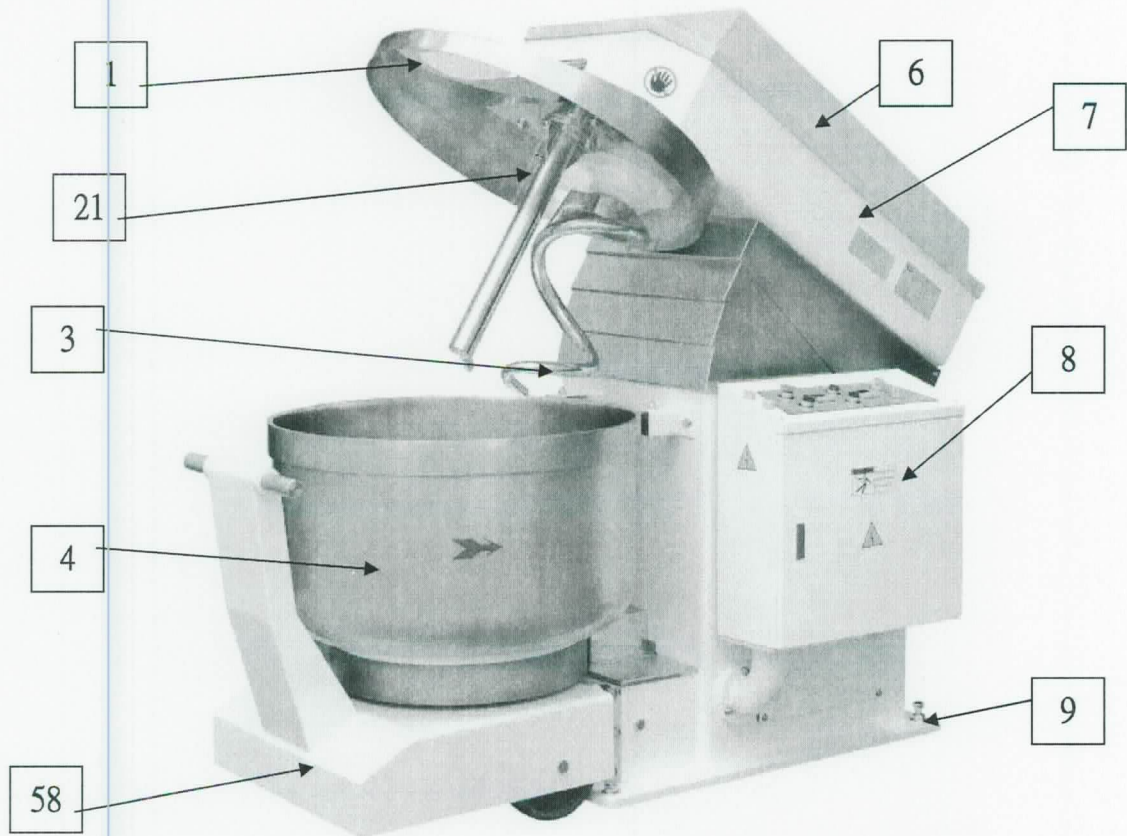
Our spiral mixer is not only used in bakery and pastry productions but also in inks productions, chemist's shops, etc. For your safety, this equipment has been verified by qualified technicians and carefully crated before shipment.

The freight company assumes full responsibility concerning the delivery in good condition of the equipment in accepting to transport it.

CHAPTER 3

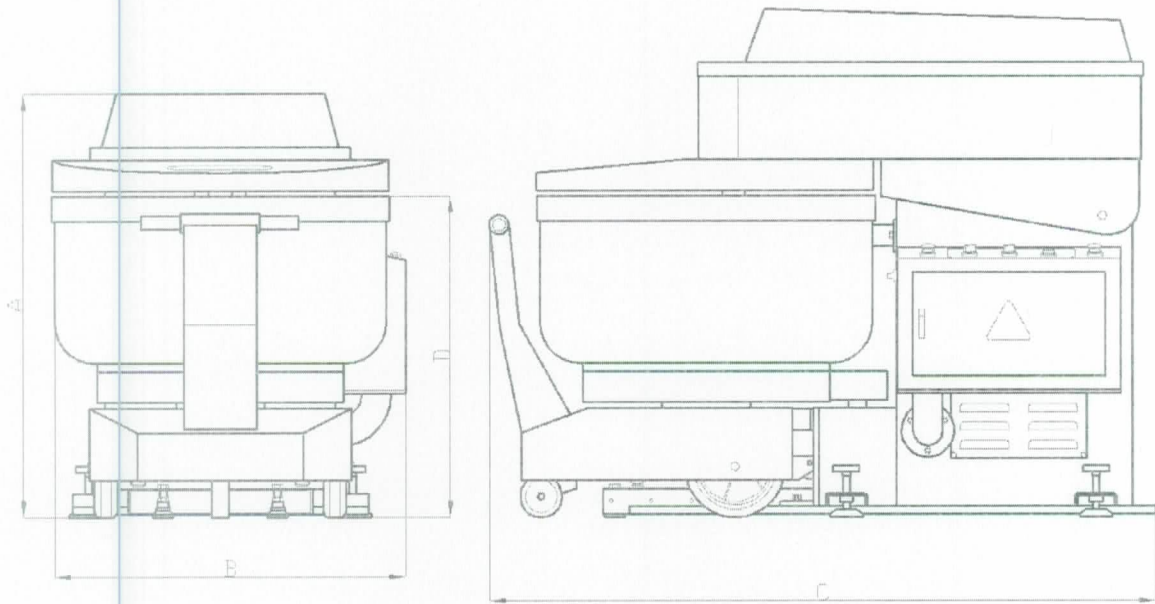
TECHNICAL DATA

3.1 General Description



1	Security guard	4	Stainless steel bowl	7	Head
2	Breaker bar	5	Bowl bottom	8	Control box
3	Agitator	6	Top cover	9	Floor fixer

3.2 Specification of the mixers:



Model	Flour	Hp	A/cm	B/cm	C/cm	D/cm	Bowl size (mm)	Weight
BMRS200	125KG	10-2-1HP	142	96	183	90	850-500	1400KGS
BMRS240	150KG	12-2-1HP	146	99	189	93	900-500	1460KGS
BMRS280	175KG	15-2-1HP	146	104	194	96	950-500	1500KGS
BMRS320	200KG	15-3-1HP	152	109	204	96	1000-500	1600KGS

3.3 Technical Characteristics

- Steel body.
- Independent electric motors for stainless steel spiral and bowl.
- Belt driven transmission.
- Two speeds on stainless steel spiral.
- Two speeds on stainless steel bowl.
- Security guard with micro switch
- Manual and automatic digital control.
- Heavy-duty painting.

3.4 Electrical Characteristics

- The spiral mixers are 208 – 240 / 480 volt.
- Speed –
- Frequency – 60 Hz.
- 3 phase.
- 4 wires (3 lines + ground).

3.5 The manufacturer is not responsible for the mixers' damages in the following situations:

- Bad use of the mixers.
- Using them out of the national laws.
- Problems with electric power.
- Non-authorized changes.
- Deficient upkeep.
- Use of unoriginal parts and products of the mixers.
- Not following this manual.
- Repairs made by unauthorized technicians.

3.6 Electric installation

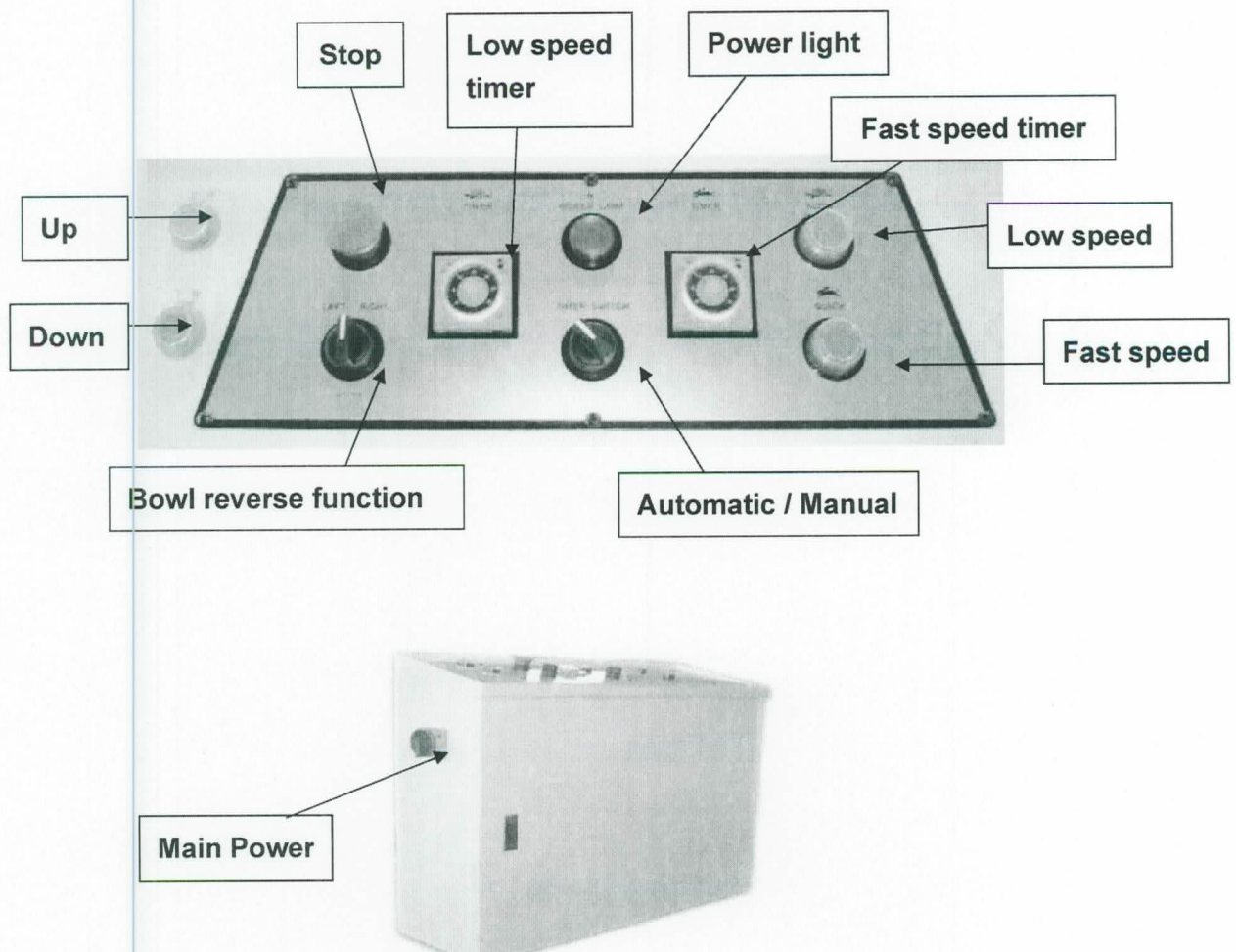
- The mixers have an electric installation in compliance with the American (ANSI/UL std. 763), Canadian (CSA std. C22.2 no. 1335.2.14) and European rules (CE).

3.7 Security system

- The potentially most dangerous area on these mixers is the one that surrounds the moving spiral. So, there is a safety guard that obstructs the entry in this area. This safety guard is designed in a way to allow the user to watch the dough. If you lift the safety guard, the machine will activate the micro switch and stop immediately. To restart it, close the safety guard and press the green button "start". It is forbidden to remove, modify or damage the mixers' security guard.

3.8 Control panel

- Star button (GREEN): If you push it, the machine will start.
- Stop button (RED): If you push it, the mixer will stop.
- Selector switch: (1) For automatic and manual running, (2) For bowl clockwise and reverse function.
- Timer: For setting time on low speed and fast speed running.
- Main power: the all power of the mixer.
- Up button: To rise up the mixing head.
- Down button: To down the mixing head.



CHAPTER 4

OPERATION START

4.1 Electric information

- Electrical supply installation must be in accordance with the electrical rating on the nameplate.
- The plug should be near the mixers and easily accessible.

4.2 First start

1. Turn on the main power and press down the mixing head and security guard.
2. Turn the selector switch into automatic or manual mode.
3. Press the green button and verify if the bowl and spiral rotation is the same as indicated by the arrow. If not, stop immediately the mixer, unplug it, open the electric plug and reverse one phase for another.
4. Verify if the red emergency STOP is not worked.
5. When the mixer starts working, verify if the safety guard work correctly. If not, stop it, unplug it and contact a technician.
6. When the machine is new, you should, before starting production, try it with some dough. This will remove the lubricator's residuum, which may remain in the bowl and on tools.

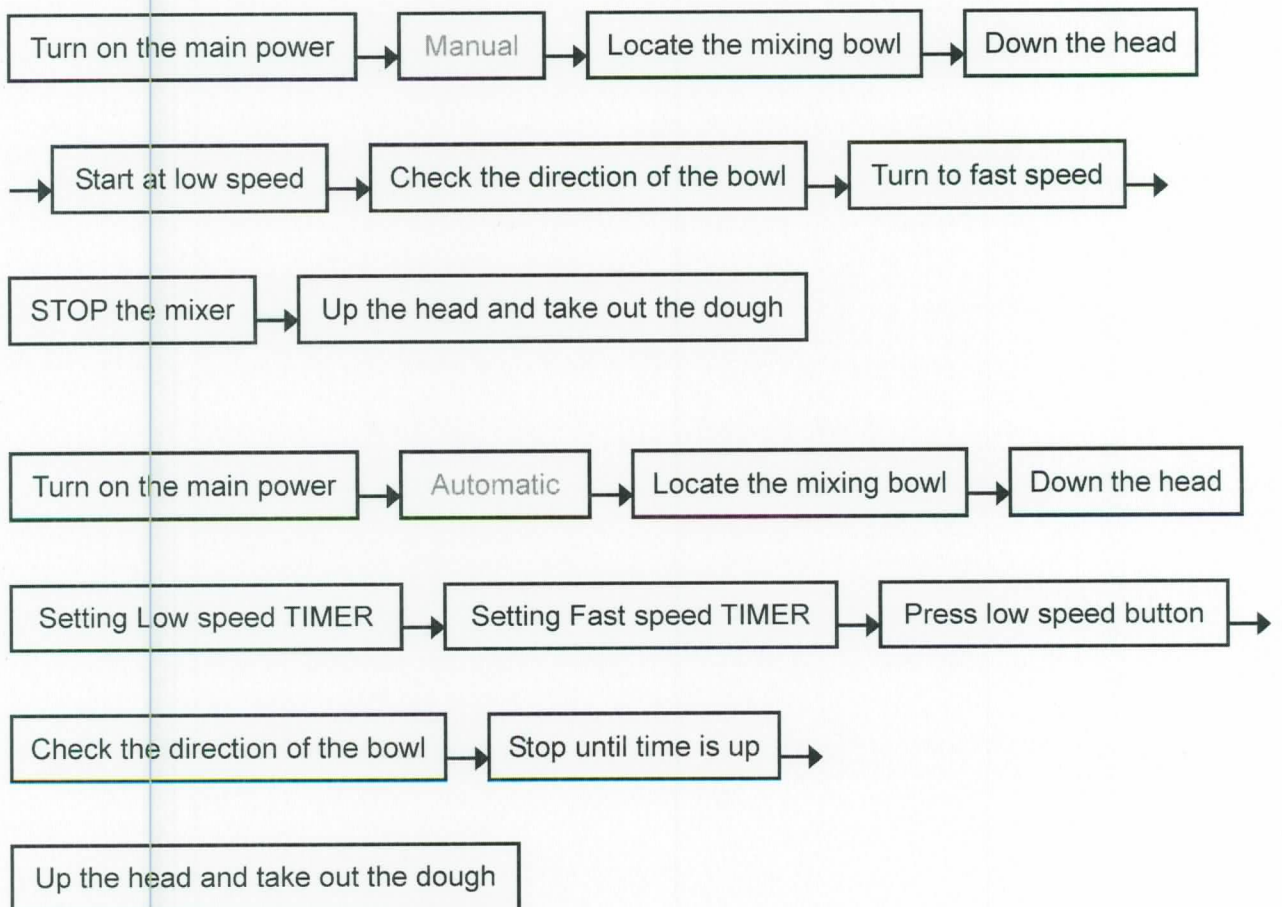
4.3 How to stop the spiral mixer

- Push the red stop button.
- Turn off the main power.

4.4 Work start

- Turn on the main power, the power light will lighten up.
- Press down the mixing head with safety guard.
- Turn the selector switch to the desired operation, automatic or manual.
- Setting timer to a working cycle under automatic mode and press start button to start the mixing.
- At the end of the working cycle, stop the mixer by pressing the red STOP button.
- You may stop the mixer at any time, by pressing the red Emergency button.

4.5 Operation order



CHAPTER 5

MAINTENANCE AND CLEANING

Attention: Before doing maintenance and cleaning, switch off the machine with the main power and unplug it, some operations might be dangerous. If you need to remove some protections, do not start working without them.

5.1 When the mixer is new

1. When the machine is new, you should, before starting production, try it with some dough. This way, it will remove some lubricator's residuum, resultant of the manufacture.
2. After the first working month, you have to check the belts tension:
 - a) The transmission's belts of the spiral may be examined by opening the cover of the machine.
 - b) The transmission's belts of the bowl may be examined by removing the access panel on the bottom side of the machine.
 - c) To verify if the belt needs to be stretched, press the finger in the middle of the belt, and if the looseness is superior to $\frac{1}{2}$ in. (1 cm), there is a need to stretch it.
3. The electric equipment can be checked by lifting the cover of the machine and opening the electric board.
4. The motor can be checked by removing the access panel in the back of the machine.

5.2 Every day

The machine must be cleaned every day, especially in the areas that have contact with the dough (bowl, spiral, side board). To clean the machine does not use knives, sandpaper, metallic objects, hard brushes or any tool that may damage its surface. You may use plastic tools or soft sponges.

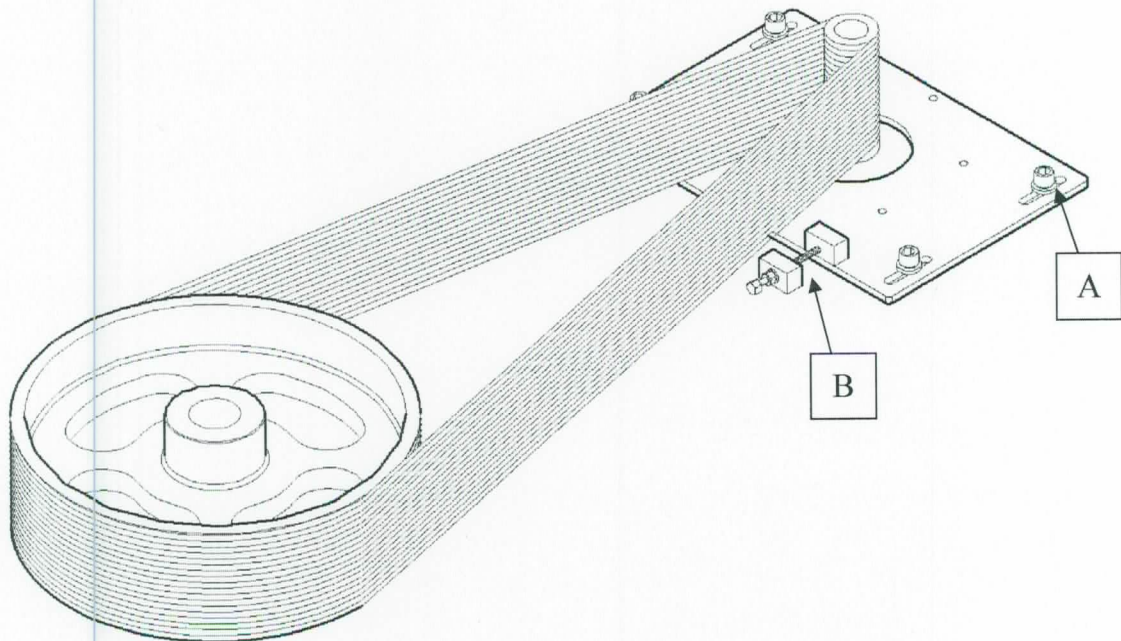
Do not use: toxic products, solvents, abrading agents or any products that may damage the surfaces or the dough's composition.

5.3 Every 6 months

- Control of belt's stretching

It is necessary to control the belts' stretching every 6 months in all transmissions. If the belts are too loose, the machine will lose power.

- a) The transmission's belts of the spiral can be examined by opening the cover of the machine.
 - b) The transmission's belts of the bowl can be examined by removing the access panel on the bottom side of the machine.
 - c) To verify if the belt needs to be stretched, press a finger in the middle of the belt, and if the looseness is superior to $\frac{1}{2}$ " (1 cm), there is a need to stretch it.
 - d) To stretch it, it is necessary to call an authorized technician.
-
- To loose four fixed screws on the motor as part (A).
 - Adjust the screw as part (B) to move the belt stretched backward.
 - Lock the four fixed screws on the motor.



5.4 Check the problem

Before doing the maintenances, please confirm and shut off the main power. All the repair work must contact with qualified professional technician, distributor or manufacturer.

Item	Problem	Method	Person
1	no action	1. Check the electric power and power light. 2. Check the location of the bowl.	Operator
2	Stop while mixing	1. Check the timer. 2. Check the electric power (main power and light). 3. Check fuse on the electric board. It may shortcut. 4. It may mix overload. You have to stop the mixers in 4 minutes. Then start the machine again. (Don't overload and hard dough).	Operator
3	Lower mixing production	1. Check the belt loose or linking gear.	Technician
4	Shaking	1. Please check the bowl position.	

CHAPTER 6

SAFETY INSTRUCTIONS

Safety instructions

- The machine must be used only for the functions that it has been conceived for. We will not be responsible for the damages caused by an improper, bad or irrational use of the machine.
- Before cleaning or doing maintenance, turn the main switch off and unplug it.
- Do not remove security parts of the machine.
- If the machine has inactive security units, do not turn it on.

- The work of the machine may be stopped by using the red stop switch.
- If you detect any damages or bad functions of the machine, turn it off immediately and call for an authorized technician, otherwise it may cause irreversible damages in the machine.

Hazards

- Spiral

The spiral in movement is the most dangerous part of the machine. The safety guard does not allow the access to this area. You must not remove it, damage it or modify it.

- Transmissions

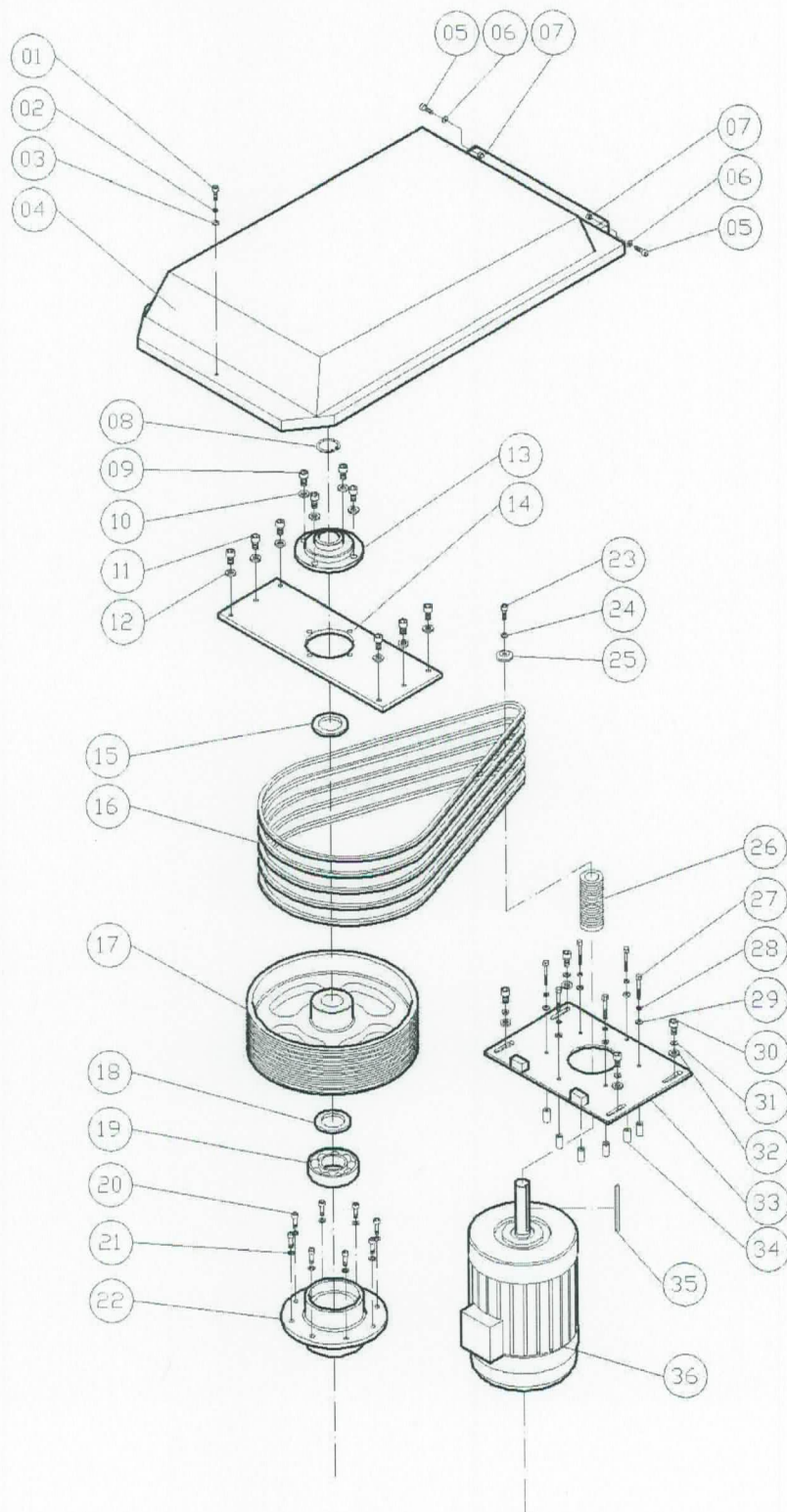
Danger, the transmission must be protected with fixed protections. In order to have access to them, you must respect the instructions of the manual.

ELECTRIC HAZARDS

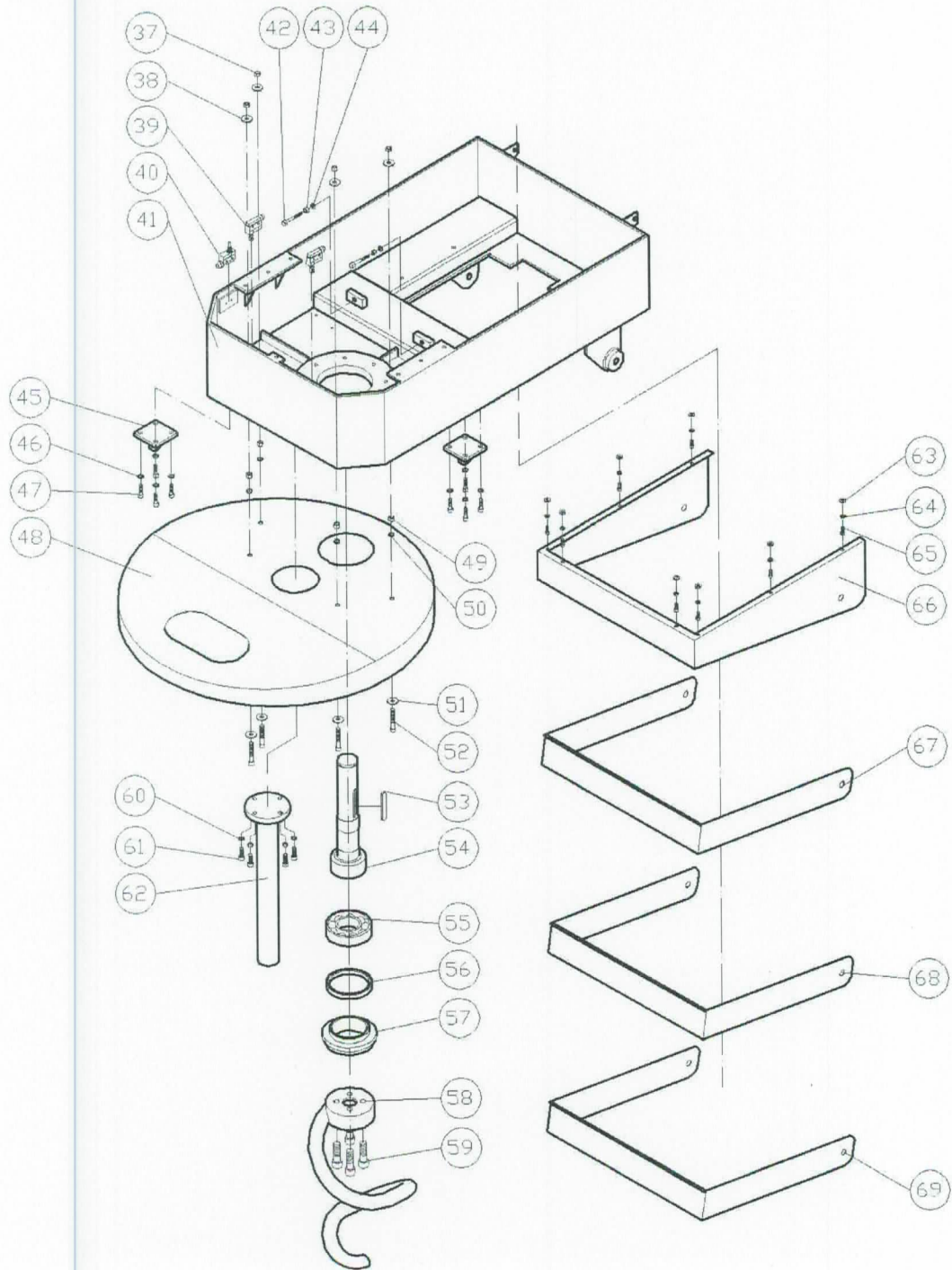
The electric installation follows the Canadian, American and European security rules. Nevertheless, respect the basic security rules in a way to avoid the risk of fire, electric shocks, personal and material damages. Only qualified people may access the parts that have electric current, which are obliged to:

1. Stop the machine
2. Turn off the main switch
3. Unplug the machine
4. Do the necessary operations
5. Plug the machine again

Decomposition - 1 (parts drawing)



Decomposition - 2 (parts drawing)



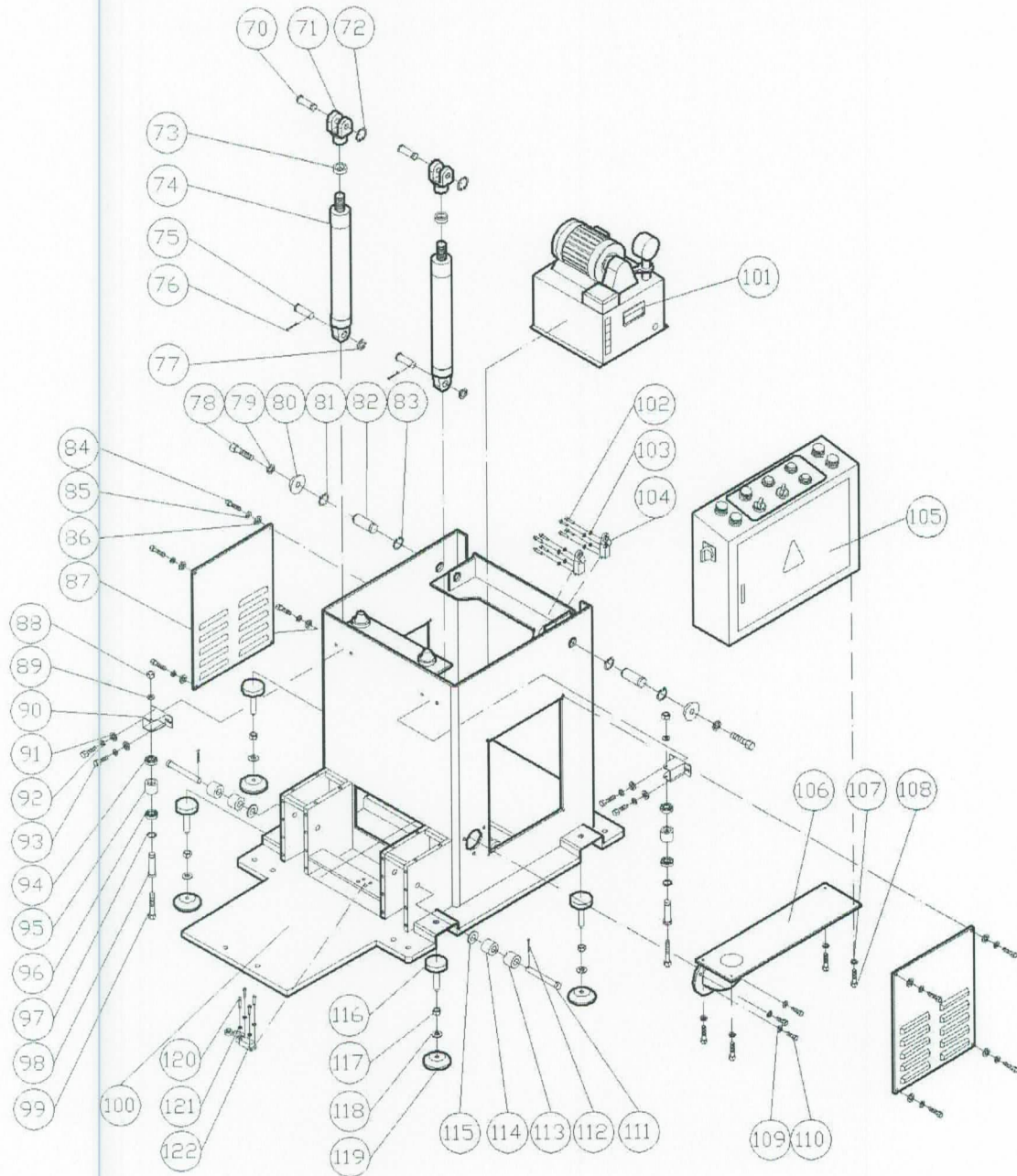
No.	Name	Quantity
1	Screw	1
2	Washer	1
3	Washer	1
4	Top cover	1
5	Screw	2
6	Washer	2
7	Nut	2
8	Ring	1
9	Screw	4
10	Washer	4
11	Screw	6
12	Washer	6
13	Bearing	1
14	Plate	1
15	Shaft sleeve	1
16	Belt	18
17	Pulley	1
18	Bearing sleeve	1

No.	Name	Quantity
19	Bearing	1
20	Screw	8
21	Washer	8
22	Bearing base	1
23	Screw	1
24	Washer	1
25	Washer	1
26	Pulley	1
27	Screw	6
28	Washer	6
29	Washer	6
30	Screw	4
31	Washer	4
32	Washer	4
33	Motor base	1
34	Shaft sleeve	6
35	Slot key	1
36	Motor	1

No.	Name	Quantity
37	Screw	4
38	Washer	4
39	Micro switch	2
40	Micro switch	1
41	Head	1
42	Screw	2
43	Nut	2
44	Washer	2
45	Oil pressure plate	2
46	Washer	8
47	Screw	8
48	Stainless steel guard	1
49	Spring	4
50	Washer	4
51	Washer	4
52	Screw	4
53	Slot key	1

No.	Name	Quantity
54	Spindle	1
55	Bearing	1
56	Oil seal	1
57	PE cover	1
58	Spiral hook	1
59	Screw	1
60	Washer	4
61	Screw	1
62	Breaker bar	1
63	Washer	8
64	Washer	8
65	Screw	8
66	Stainless steel plate	1
67	Stainless steel plate	1
68	Stainless steel plate	1
69	Stainless steel plate	1

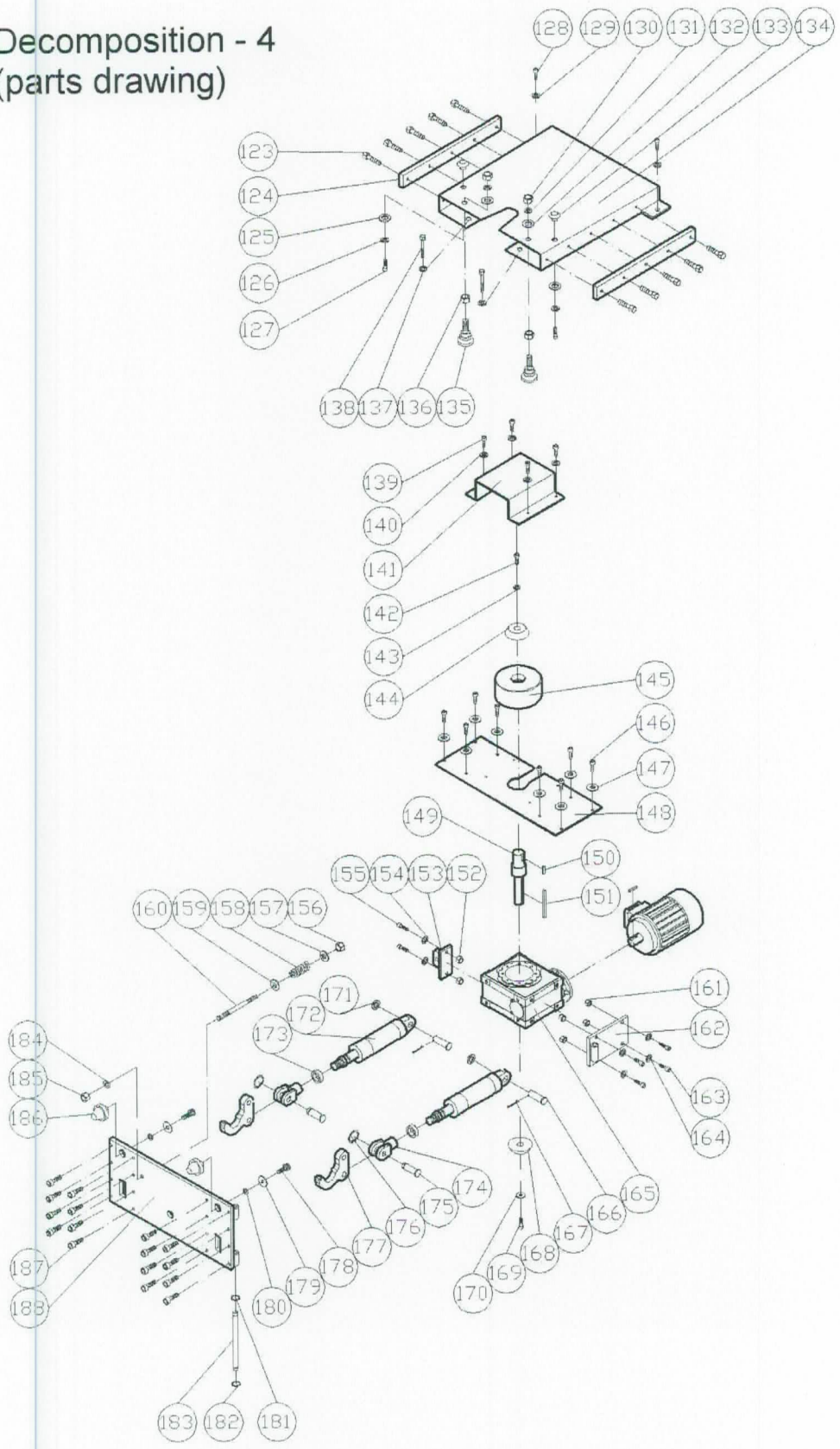
Decomposition - 3 (parts drawing)



No.	Name	Quantity
70	Pin	2
71	Y connector	2
72	Ring	2
73	Nut	2
74	Oil pressure shaft	2
75	Pin	2
76	Pin	2
77	Washer	2
78	Screw	2
79	Washer	2
80	Washer	2
81	Ring	2
82	Ring	2
83	Screw	2
84	Screw	8
85	Washer	8
86	Washer	8
87	Side cover	2
88	Nut	2
89	Washer	2
90	Hinder base	2
91	Washer	4
92	Washer	4
93	Screw	4
94	Bearing	2
95	PU wheel	2
96	Bearing	2

No.	Name	Quantity
97	Ring	2
98	Axle	2
99	Screw	2
100	Machine body	1
101	Oil tank	1
102	Screw	8
103	Washer	8
104	Micro switch	2
105	Control box	1
106	Plate	1
107	Washer	1
108	Screw	4
109	Washer	3
110	Screw	3
111	Axle	2
112	Pin	2
113	Axle sleeve	2
114	Axle sleeve	2
115	Washer	2
116	Screw	4
117	Nut	4
118	Washer	4
119	Floor fixer	4
120	Screw	4
121	Washer	4
122	Micro switch	1

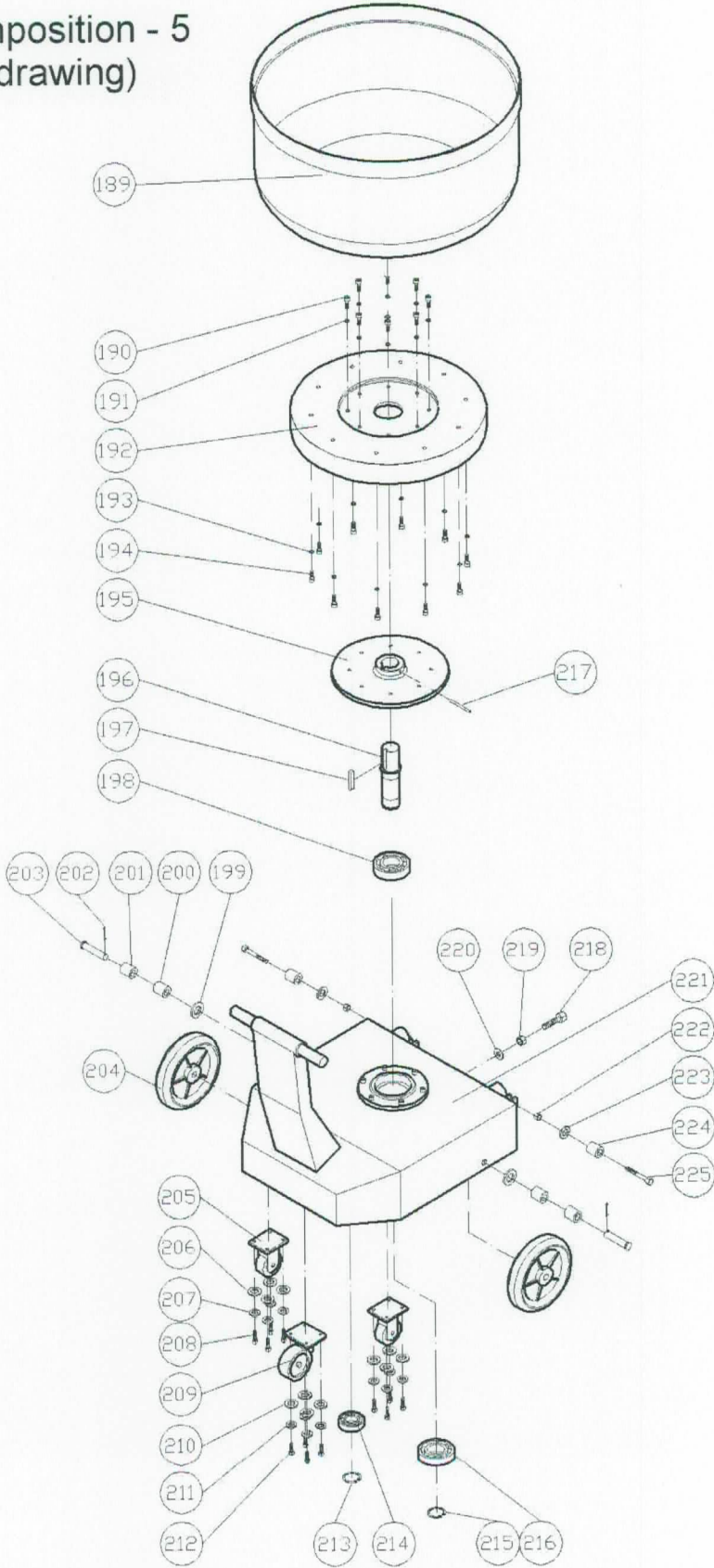
Decomposition - 4
(parts drawing)



No.	Name	Quantity
123	Screw	10
124	PE plate	2
125	Washer	2
126	Washer	2
127	Screw	2
128	Screw	2
129	Washer	2
130	Nut	2
131	Washer	2
132	Washer	2
133	Nut	2
134	Bottom	1
135	Floor fixer	2
136	Nut	2
137	Washer	2
138	Screw	2
139	Screw	4
140	Washer	4
141	Stainless steel cover	1
142	Screw	1
143	Washer	1
144	Washer	1
145	PU wheel	1
146	Screw	8
147	Washer	8
148	Plate cover	1
149	Shaft	1
150	Slot key	1
151	Slot key	1
152	Nut	2
153	Side cover	1
154	Washer	2
155	Screw	2

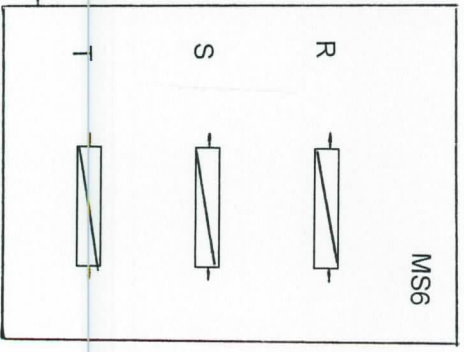
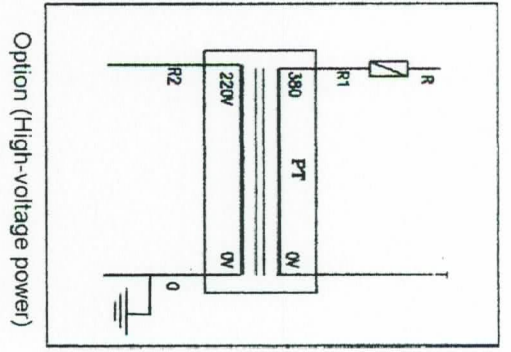
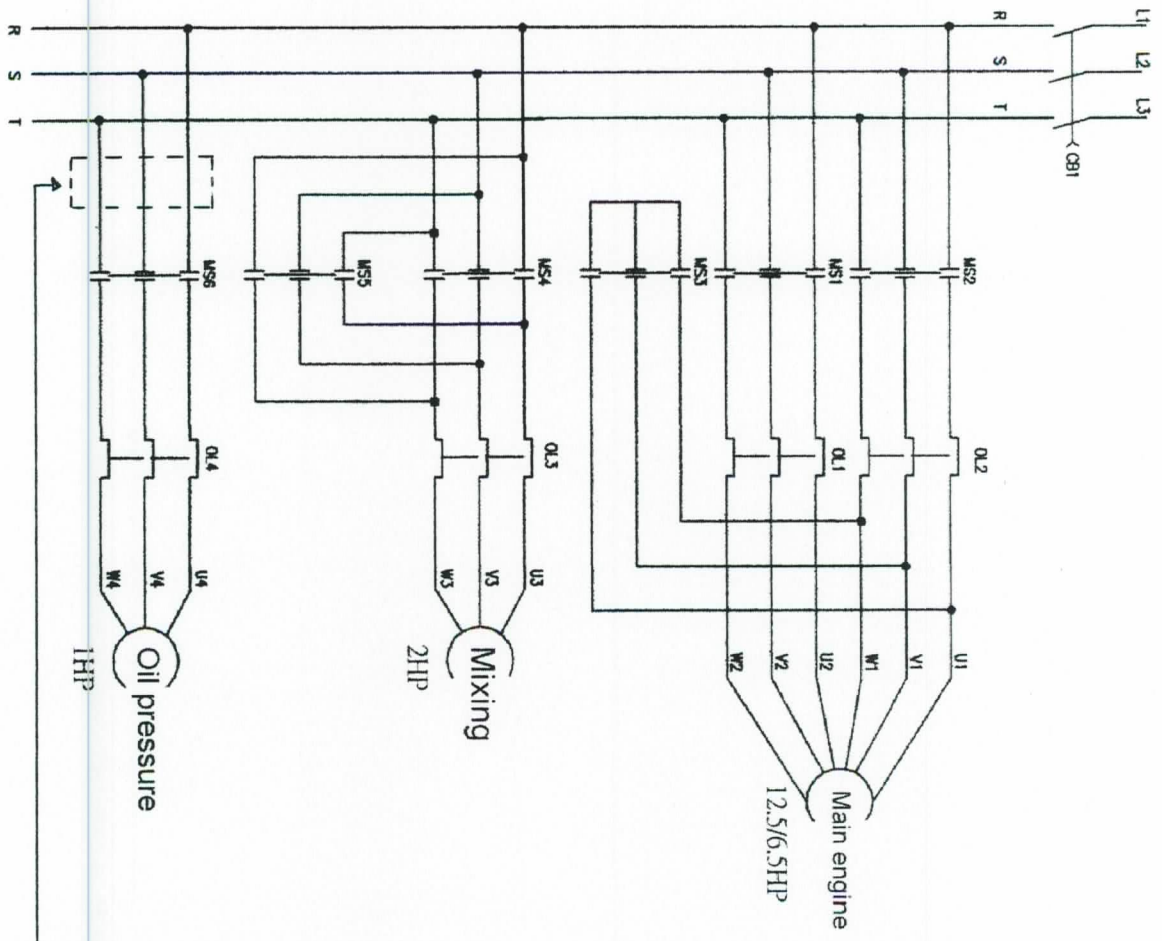
No.	Name	Quantity
156	Nut	1
157	Washer	1
158	Spring	1
159	Washer	1
160	Pillar	1
161	Nut	4
162	Side cover	1
163	Screw	4
164	Washer	4
165	Reducer	1
166	Pin	2
167	Pin	2
168	Washer	1
169	Screw	1
170	Washer	1
171	Washer	2
172	Oil pressure shaft	2
173	Nut	2
174	Y connector	2
175	Axle	2
176	Ring	2
177	Bowl locker	2
178	Screw	2
179	Washer	2
180	Washer	2
181	Ring	1
182	Ring	1
183	Axle	1
184	Washer	1
185	Nut	1
186	Fixed bolt	2
187	Screw	16
188	Side cover	1

Decomposition - 5
(parts drawing)

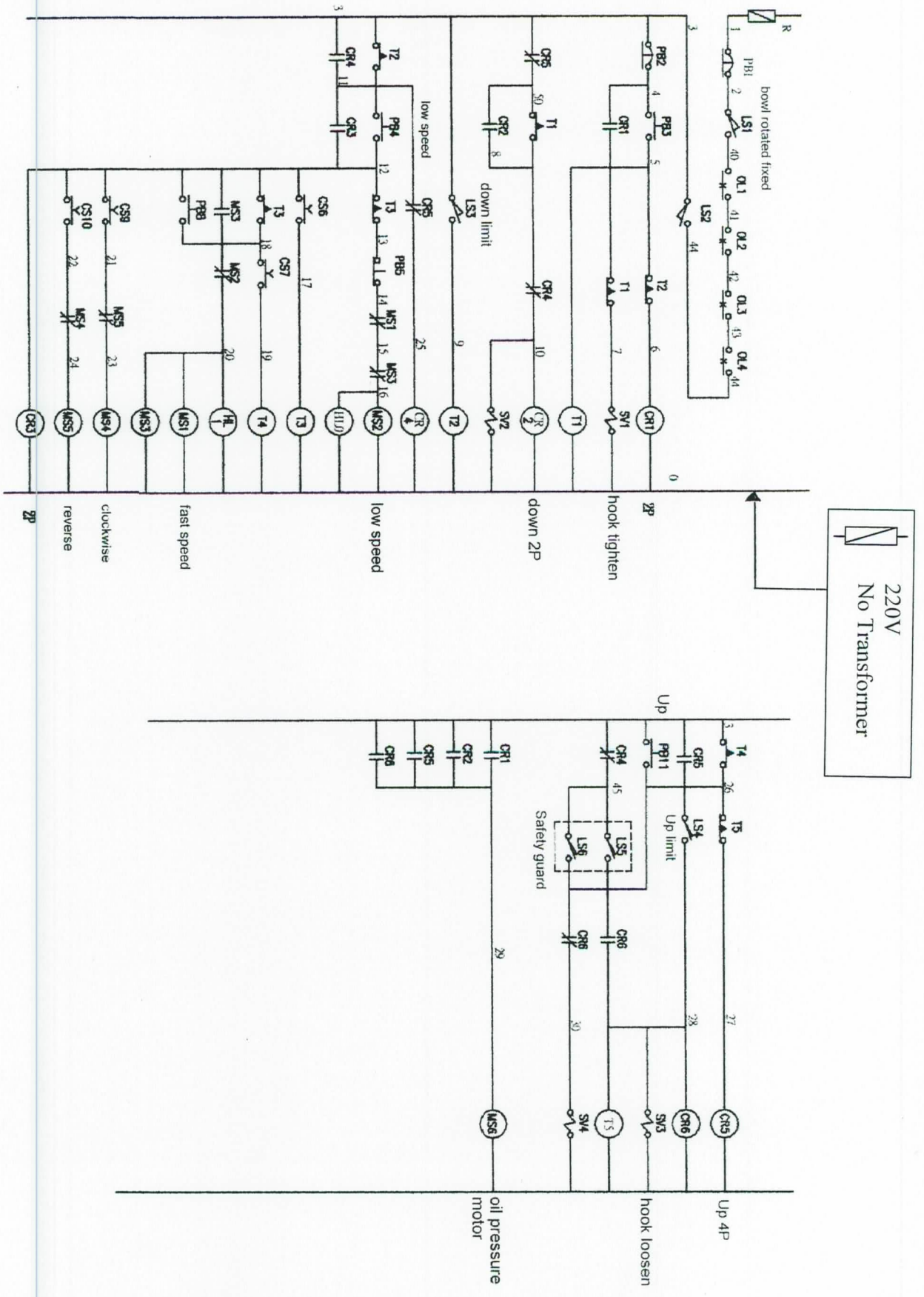


No.	Name	Quantity
189	Mixing bowl	1
190	Screw	8
191	Washer	8
192	Transmission wheel	1
193	Washer	10
194	Screw	10
195	Dolly cover	1
196	Dolly Shaft	1
197	Slot key	1
198	Bearing	1
199	Washer	1
200	Axle sleeve	1
201	Axle sleeve	2
202	Pin	2
203	Axle	2
204	Moving wheel	2
205	Moving wheel	2
206	Washer	8
207	Washer	8

No.	Name	Quantity
208	Screw	8
209	Moving wheel	1
210	Washer	4
211	Washer	4
212	Screw	4
213	Ring	1
214	Bearing	1
215	Ring	1
216	Bearing	1
217	Pin	1
218	Screw	1
219	Nut	1
220	Washer	1
221	Dolly bottom	1
222	Nut	2
223	Washer	2
224	Axle sleeve	2
225	Screw	2



220V No Transformer
Oil Pressure 1 HP



Warranty



www.bakemax.com

BakeMax® is a Reg. Trademark licensed to
TVI (Titan Ventures International Inc.)

- SPECIAL TERMS & CONDITIONS**
- BakeMax® reserves the right to make improvements or equipment specification changes without prior notice.
 - Set up and installation is client's responsibility.
 - Failure to follow all instructions in operations manual, properly install, maintain equipment, follow capacity charts, or electrical information may void warranty.

Titan Ventures International Inc.
PO Box 23083, Moncton NB, E1A 6S8
Toll Free: 1-800-565-BAKE
Telephone: 1-506-858-8990
Fax: 1-506-859-6929

- One year Parts and Labor limited warranty.
- Warranty begins at date of installation, delays of installation and extended warranty must be approved.
- All equipment must be properly installed and connected by qualified professionals if not a standard Plug 'N Go* operation.
- All equipment must be used within tolerance limits of machine.
- Any abuse of equipment or improper use of machine will void the warranty.
- Accessories or attachments have 90 day warranty to be repaired or replaced.
- Repairs include Parts and Labor only, excluded are the following:
 - Electrical components such as fuses, bulbs, elements switches are not covered by this warranty.
 - Overtime labor rates.
 - Expedited freight for parts.
 - Travel charges.
- All defective parts must be returned to BakeMax® for credit.
- BakeMax® is not responsible for production downtime or product losses.
- Repairs must be pre-authorized by BakeMax® prior to work commencing.
- Emergency service 24/7 at 1-800-565-2253

*Plug 'N Go operation requires machine be properly connected to proper wall outlet.

Think Quality, Value, Service.... Think

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