



DOUGH ROLLER

CONTENTS

A	GENERAL INFORMATION	Page 2
A1	PRODUCT DESCRIPTION	Page 3
A2	TECHNICAL INFORMATION	Page 3
A3	TRANSPORTATION	Page 4
A4	UNPACKING	Page 4
B	INSTALLATION	Page 4
C	SAFETY INSTRUCTIONS	Page 5
D	OPERATION	Page 6
E	CLEANING & MAINTENANCE	Page 7
F	TROUBLESHOOTING	Page 8
G	SPARE PART LIST- EXPLODING DRAWINGS	Page 9
H	ELECTRIC CIRCUIT SCHEMA	Page 17

A GENERAL INFORMATION

Before installing the appliance, read operation and maintenance instructions carefully. Wrong installation and part changing may damage the product or may cause injury on people. These are not in our company's responsibility to damage the appliance intentionally, negligence, detriments because of disobeying instructions and regulations, wrong connections. Unauthorized intervention to appliance invalidates the warranty.

1. This instruction manual should be kept in a safe place for future reference.
2. **Installation should be made in accordance with ordinances and security rules of that country by a qualified service personnel.**
3. This appliance has to be used by trained person.
4. Please turn off the appliance immediately in the event of malfunction or failure. The appliance should be repaired only by authorized service personnel. Please demand original spare part.

DOUGH ROLLER

A1 PRODUCT DESCRIPTION

*Professional Dough Roller ,that provides high efficiency has been designed to be used in industrial kitchens.

Product Code	Dimensions (mm)	Weight (kg)	Packaging Dimensions (mm)
EMP.HA.01	530x550x650	41	550x500x800
EMP.HA.02	430x550x650	37	560x520x770
EMP.HA.01.Y	530x550x650	41	600x550x770
EMP.HA.02.Y	430x550x650	37	560x600x770
EMP.HA.03	910x575x535	63	950x630x550
EMP.HA.04	542x396x366	24	550x400x370
EMP.HA.05	442x396x366	21	450x400x370

A2 TECHNICAL INFORMATION

Product Code	Roller Dimensions (mm)	Operating Frequency (Hz)	Power (Kw)	Operating Voltage (V)	Cable (mm ²)	Fuse (A)
EMP.HA.01	400	50-60	0,25	220-240	3x1,5	16
EMP.HA.02	300	50-60	0,25	220-240	3x1,5	16
EMP.HA.01.Y	400	50-60	0,25	220-240	3x1,5	16
EMP.HA.02.Y	300	50-60	0,25	220-240	3x1,5	16
EMP.HA.03	550	50-60	0,75	220-240	3x1,5	16
EMP.HA.04	400	50-60	0,18	220-240	3x1,5	16
EMP.HA.05	300	50-60	0,18	220-240	3x1,5	16

A3 TRANSPORTATION

*This appliance can be moved by hand from area to area. Do not crash and drop the appliance while transporting.

A4 UNPACKING

*Please unpack the package according to the security codes and ordinances of current country and get rid from the pack. Parts which contacts with food are produced by stainless steel. All plastic parts are marked by material's symbol.

*Please check that all the parts of appliance had come completely and if they are damaged or not during the shipping.

B INSTALLATION

*Please place the product to the straight and sturdy ground, please take necessary steps against possibility of overturn.

*Technician who will serve for installation and service for the appliance must be professional on this subject and must have installation and service licenses by the company.

*Connection to Electric Power Supply must be done by authorized person.

*Please be sure that the voltage connected to appliance must be equal with the voltage which is on appliance's label.












This appliance must be connected to an earthed outlet in accordance with safety rules and standards.

*Appliance's earthing must be connected to earthing line on panel which is nearest to electric installation.

*Connection to the main fuse and leak current fuse must be done in accordance with the current regulations.

DOUGH ROLLER

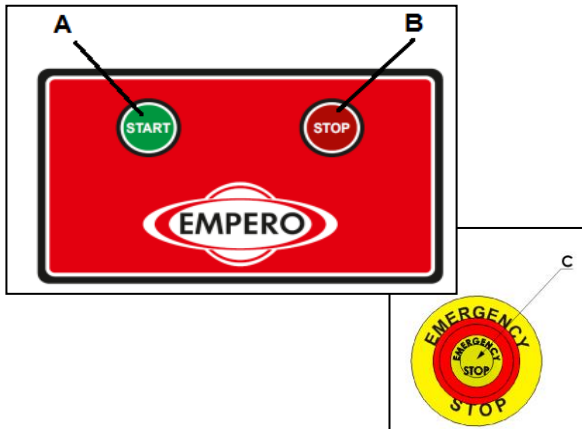
C SAFETY INSTRUCTIONS

-  *Do not use the appliance in insufficient lighted place.
-  *Do not touch the moving attachments while the appliance operates.
-  *Do not install the appliance in the presence of flammable or explosive materials.
-  *Do not operate the appliance when the machine is empty.
-  *Do not load so less or more than appliance's capacity.
-  *Do not attempt to use the appliance without suitable protective equipments.
-  *Because of any reason if there is a fire or flame flare where the appliance is used, turn off all gas valves and electric contactor switch quickly and use fire extinguisher. Never use water to extinguish the fire.
-  *All the damages because of not having earthing connection will not be on warranty.
-  *Do not put your hands between rollers while the appliance is going on dough rolling process.

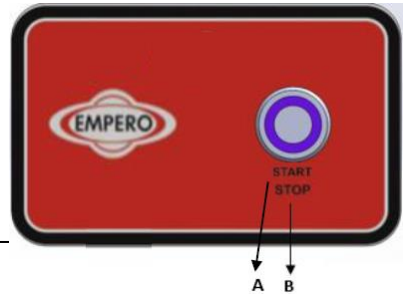
D OPERATION

*Control Panel;

EMP.HA.01, EMP.HA.02, EMP.HA.03



EMP.HA.04,EMP.HA.05



A : START Button
B : STOP Button
C : Urgent Stop Button

*Operating;

- Before operating, clean the rollers and body with a wet cloth and dry.
- For adjusting the thickness of dough, pull the latches near the roller slowly to unsettle the pin. In this way when you turn the latch up; the dough will be thin, when you turn the latch down; the dough will be thick.
- After adjusting the thickness provide the latch pin to pass into circular places.
- For operating the appliance be sure that URGENT STOP BUTTON must be unpressed and press the START BUTTON.
- In order to prevent the dough pieces to stick on the rollers, be sure that the rollers are floured.
- Keep upper roller at least 2 stage thicker than lower roller in order to prevent the dough to wrap up the roller and to provide dough balls pass through roller.
- In order to obtain pitta dough, provide the dough balls pass through upper roller, if you reach desired thickness provide it pass through lower roller.
- In order to obtain the pizza dough ; dough balls that pass through upper roller must be turned to opposite way that it comes and it should be enlarged by passing through upper roller and then it should be passed through lower roller.
- Turn off the appliance by pressing STOP button after dough rolling process.



DOUGH ROLLER

E CLEANING & MAINTENANCE

➤ CLEANING AND MAINTENANCE AFTER EVERY USE

- Always turn off the appliance and disconnect from the power supply before cleaning.
- Clean outer surface of appliance and rollers with wet cloth and dry after every use.
- Do not clean the rollers with blade or cutting tool. Otherwise circular forms of rollers may be disrupted.
- Do not use abrasive cleaning chemicals as these can leave harmful residues.
- Do not clean the appliance by spraying water directly, otherwise electric motor may get damaged.

➤ PERIODIC CLEANING AND MAINTENANCE

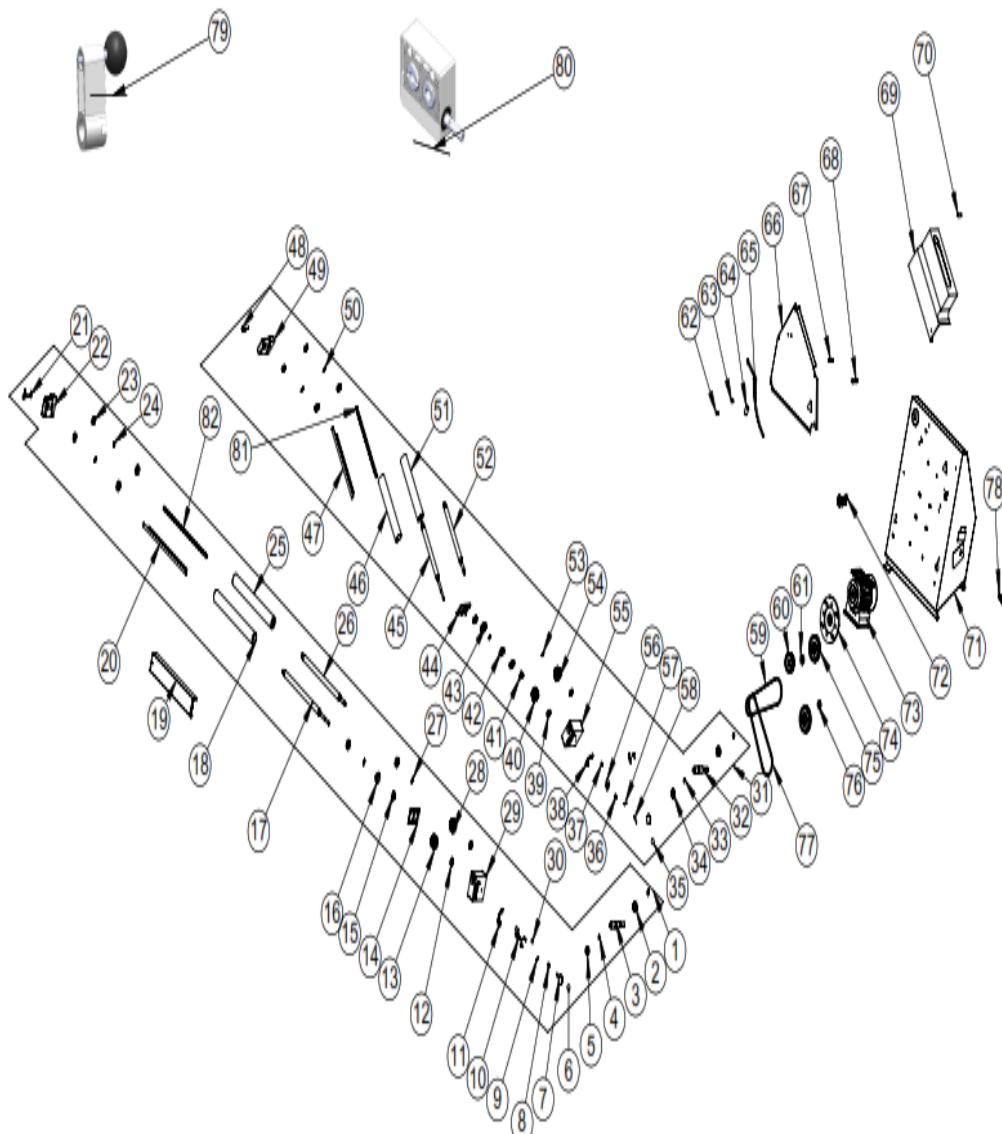
- Maintenance should be done by qualified person.
- Get the periodic maintenance of the appliance once in every 15 days.
- Dough Roller requires low maintenance (Motor and ball bearings are lubricated).
- Gear Boxes must be lubricated particularly once in a month with grease .
- Maintenance of appliance's contactor should be done by compressed air according to frequency of use.
- When there is dough residues accumulated on roller scraper, clean the rollers by ripping off the springs .

F TROUBLESHOOTING

THE APPLIANCE DOESN'T OPERATE	<ol style="list-style-type: none"> 1. Check if the appliance is plugged in. 2. Check the electrical connections and voltage. 3. Check the urgent stop button. 4. Check the start button if it works or not. 5. Check that if there is problem with contactor.
ROLLERS STOPPED	<ol style="list-style-type: none"> 1. If the rollers stop during the operation, check the tension of belt.
DOUGH IS NOT ROLLED DESIRED THICKNESS	<ol style="list-style-type: none"> 1. Check thickness setting of rollers. 2. Check the latch pins.
<ul style="list-style-type: none"> • If dough rolling is not done at suitable quality • If any function of security doesn't work <ul style="list-style-type: none"> ➤ Do not use the appliance. 	

*If these problems are still going on, contact with our authorized service.

G SPARE PART LIST- EXPLODING DRAWINGS





DOUGH ROLLER

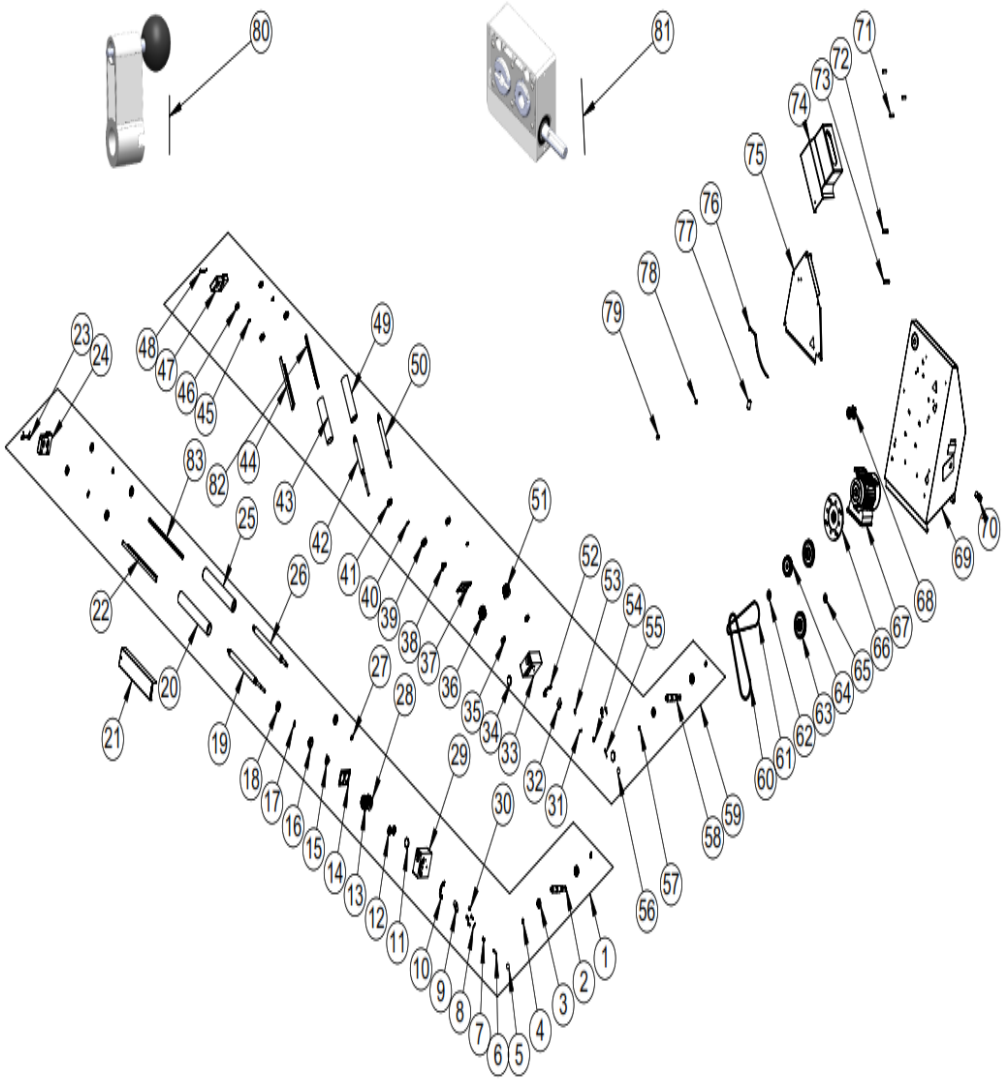
G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE: EMP.HA.01.Y		
NO	PRODUCT NAME	P.CODE
1	LOWER ROLLER	ARA-EMP.HA-0002
2	BEARING (6202 2RS)	M.RLM-NRM-003
3	ENDLESS SHAFT	M.MON-DSL-008
4	RING 471-15	B-SEG-SYH-002
5	BEARING (6200 2RS)	M.RLM-NRM-011
6	SPHERE KNOB	M.AKS-KLP-BKL-008
7	ROLL PIN	YTL-ERS.HA-KS-0003
8	PIN SPRING	M.YAY-ERS-003
9	PIN 4*20	B-PIM-SYH-YAR-4*20
10	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
11	SETTING SHEET	YSC-ERS.HA-LZ-0005
12	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
13	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
14	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
15	STAMP	M.ENJ-ERS-ALM-001
16	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
17	LOWER FRONT ROLLER SHAFT	YTL-ERS.HA-KS-0004
18	LOWER FRONT ROLL	YTL-ERS.HA-KS-0042
19	HAND PROTECTION SHEET	YSC-ERS.HA-LZ-0015
20	LOWER RIGHT BLADE (450MM)	YMH-ERS.HA-KS-0002
21	BIG BOW	M.YAY-ERS-015
22	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
23	BEARING (6003 2RS)	M.RLM-NRM-012
24	RING 471-10	ERS.B-SEG-SYH-010
25	LOWER REAR ROLL	YTL-ERS.HA-KS-0041
26	LOWER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0005
27	RING 471-17	B-SEG-SYH-011
28	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
29	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
30	GREASE SUPPORT	ERS.M.MUH-022
31	UPPER ROLL	ARA-EMP.HA-0001
32	ENDLESS SHAFT	M.MON-DSL-008
33	RING 471-15	B-SEG-SYH-002
34	BEARING (6200 2RS)	M.RLM-NRM-011
35	SPHERE KNOB	M.AKS-KLP-BKL-008
36	PIN SPRING	M.YAY-ERS-003
37	GREASE SUPPORT	ERS.M.MUH-022
38	SETTING SHEET	YSC-ERS.HA-LZ-0005

39	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
40	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
41	STAMP	M.ENJ-ERS-ALM-001
42	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
43	BEARING (6003 2RS)	M.RLM-NRM-012
44	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
45	UPPER FRONT ROLL SHAFT	YTL-ERS.HA-KS-0001
46	UPPER FRONT ROLL	YTL-ERS.HA-KS-0043
47	UPPER RIGHT BLADE (325MM)	YMH-ERS.HA-KS-0001
48	SMALL SPRING	M.YAY-ERS-016
49	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
50	RING 471-10	ERS.B-SEG-SYH-010
51	UPPER REAR ROLL	YTL-ERS.HA-KS-0044
52	UPPER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0002
53	RING 471-17	B-SEG-SYH-011
54	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
55	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
56	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
57	PIN 4*20	B-PIM-SYH-YAR-4*20
58	ROLL PIN	YTL-ERS.HA-KS-0003
59	STRAP (8*675)	M.KYS-VKY-003
60	ENGINE PULLEY	YDK-ERS.HA-CN-0002
61	SUPPORT WASHER	YTL-ERS.HA-KS-0040
62	DOUGH GUIDE PIN	YTL-ERS.HA-KS-0009
63	BUSH	YBR-ERS.HA-KS-0001
64	Dough guiding element	YTL-ERS.HA-KS-0008
65	DOUGH DIRECTION SHEET	YSC-ERS.HA-LZ-0008
66	BOTTOM SLIDE SHEET	YSC-ERS.HA-LZ-0029
67	SHORT PIN	YTL-ERS.HA-KS-0006
68	LONG PIN	YTL-ERS.HA-KS-0007
69	HAND PROTECTION	M.ENJ-ERS-FLK-017
70	TOP SCROLL PIN	M.ENJ-ERS-PLS-HA-008
71	CHASSIS	-
72	EMERGENCY STOP BUTTON	M.ELK-SLT-BTL-003
73	ELECTRIC MOTOR	M.ELK-MTR-RSM-060
74	ENGINE FLANGE	YDK-ERS.HA-CN-0001
75	TRANSMISSION PULLEY	YDK-ERS.HA-CN-0003
76	BUSH	YTL-ERS.HA-KS-0039
77	STRAP (8*725)	M.KYS-VKY-004
78	GREEN BUTTON (PERMANENT)	M.ELK-SLT-BTL-009
79	ECCENTRIC ARM	ARA-EMP.HA-0008
80	LOWER TRANSMISSION	ARA-EMP.HA-0007

DOUGH ROLLER

G SPARE PART LIST- EXPLODING DRAWINGS



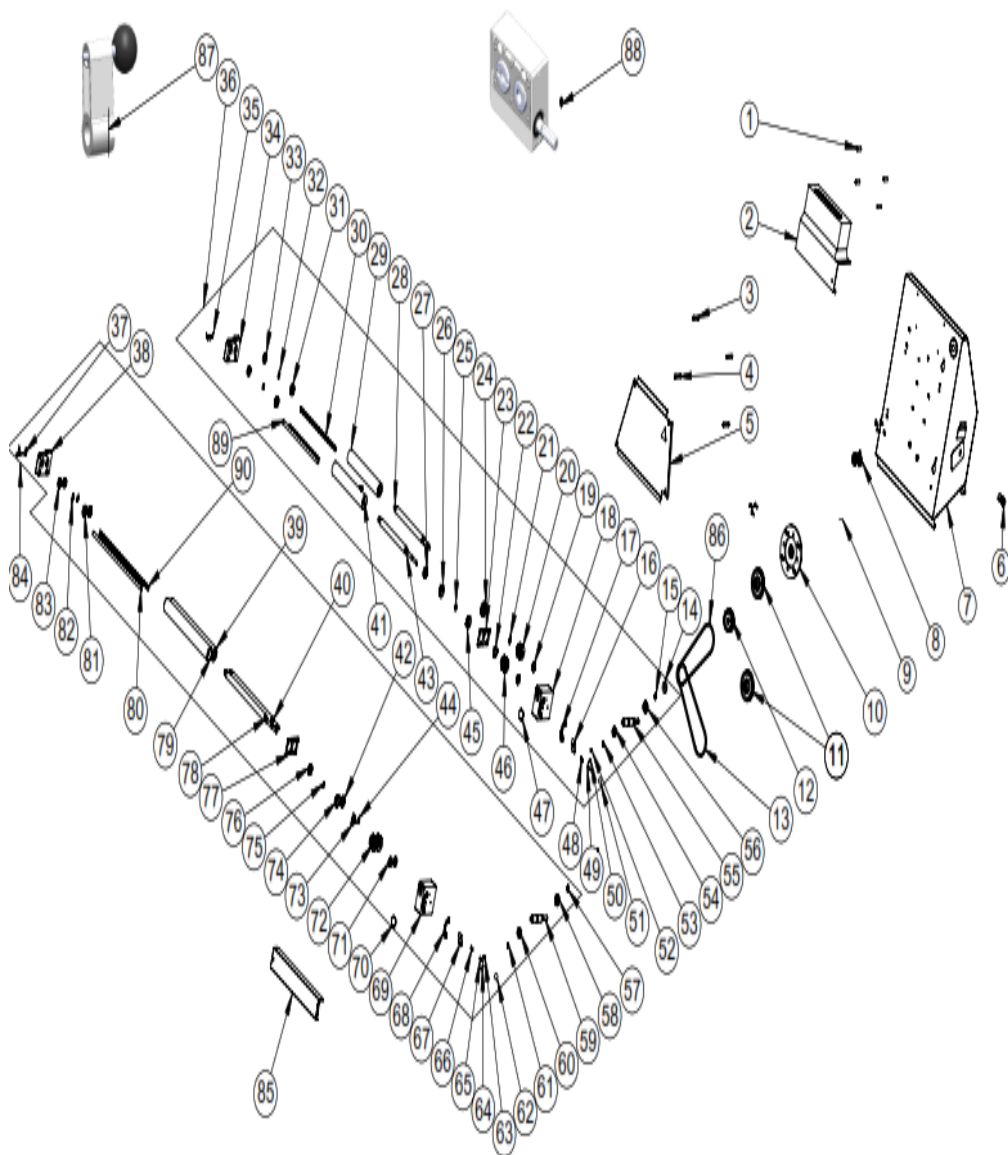
G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE: EMP.HA.02.Y		
NO	PRODUCT NAME	P.CODE
1	LOWER ROLLER	ARA-EMP.HA-0004
2	ENDLESS SHAFT	M.MON-DSL-008
3	BEARING (6202 2RS)	M.RLM-NRM-003
4	RING 471-15	B-SEG-SYH-002
5	SPHERE KNOB	M.AKS-KLP-BKL-008
6	ROLL PIN	YTL-ERS.HA-KS-0003
7	PIN SPRING	M.YAY-ERS-003
8	PIN 4*20	B-PIM-SYH-YAR-4*20
9	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
10	SETTING SHEET	YSC-ERS.HA-LZ-0005
11	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
12	BEARING (6200 2RS)	M.RLM-NRM-011
13	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
14	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
15	STAMP	M.ENJ-ERS-ALM-001
16	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
17	RING 471-10	ERS.B-SEG-SYH-010
18	BEARING (6003 2RS)	M.RLM-NRM-012
19	LOWER FRONT ROLLER SHAFT	YTL-ERS.HA-KS-0011
20	LOWER FRONT ROLL	YTL-ERS.HA-KS-0046
21	HAND PROTECTION SHEET	YSC-ERS.HA-LZ-0016
22	LOWER RIGHT BLADE (350MM)	YMH-ERS.HA-KS-0004
23	BIG BOW	M.YAY-ERS-015
24	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
25	LOWER REAR ROLL	YTL-ERS.HA-KS-0048
26	LOWER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0010
27	RING 471-17	B-SEG-SYH-011
28	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
29	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
30	GREASE SUPPORT	ERS.M.MUH-022
31	PIN 4*20	B-PIM-SYH-YAR-4*20
32	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
33	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
34	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
35	BEARING (6202 2RS)	M.RLM-NRM-003
36	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
37	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
38	STAMP	M.ENJ-ERS-ALM-001
39	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005

DOUGH ROLLER

40	RING 471-15	B-SEG-SYH-002
41	BEARING (6200 2RS)	M.RLM-NRM-011
42	UPPER FRONT ROLL SHAFT	YTL-ERS.HA-KS-0013
43	UPPER FRONT ROLL	YTL-ERS.HA-KS-0047
44	UPPER RIGHT BLADE (225MM)	YMH-ERS.HA-KS-0003
45	RING 471-10	ERS.B-SEG-SYH-010
46	BEARING (6003 2RS)	M.RLM-NRM-012
47	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
48	SMALL SPRING	M.YAY-ERS-016
49	UPPER REAR ROLL	YTL-ERS.HA-KS-0045
50	UPPER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0012
51	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
52	SETTING SHEET	YSC-ERS.HA-LZ-0005
53	GREASE SUPPORT	ERS.M.MUH-022
54	PIN SPRING	M.YAY-ERS-003
55	ROLL PIN	YTL-ERS.HA-KS-0003
56	SPHERE KNOB	M.AKS-KLP-BKL-008
57	RING 471-17	B-SEG-SYH-011
58	ENDLESS SHAFT	M.MON-DSL-008
59	UPPER ROLL	ARA-EMP.HA-0003
60	STRAP (8*675)	M.KYS-VKY-003
61	STRAP (8*700)	M.KYS-VKY-006
62	SUPPORT WASHER	YTL-ERS.HA-KS-0040
63	TRANSMISSION PULLEY	YDK-ERS.HA-CN-0003
64	ENGINE PULLEY	YDK-ERS.HA-CN-0002
65	BUSH	YTL-ERS.HA-KS-0039
66	ENGINE FLANGE	YDK-ERS.HA-CN-0001
67	ELECTRIC MOTOR	M.ELK-MTR-RSM-060
68	EMERGENCY STOP BUTTON	M.ELK-SLT-BTL-003
69	CHASSIS	-
70	GREEN BUTTON (PERMANENT)	M.ELK-SLT-BTL-009
71	TOP SCROLL PIN	M.ENJ-ERS-PLS-HA-008
72	SHORT PIN	YTL-ERS.HA-KS-0006
73	LONG PIN	YTL-ERS.HA-KS-0007
74	HAND PROTECTION PLASTIC	M.ENJ-ERS-FLK-018
75	BOTTOM SLIDE SHEET	YSC-ERS.HA-LZ-0031
76	DOUGH DIRECTION SHEET	YSC-ERS.HA-LZ-0012
77	Dough guiding element	YTL-ERS.HA-KS-0008
78	BUSH	YBR-ERS.HA-KS-0001
79	DOUGH GUIDE PIN	YTL-ERS.HA-KS-0009
80	ECCENTRIC ARM	ARA-EMP.HA-0008
81	LOWER TRANSMISSION	ARA-EMP.HA-0007

G SPARE PART LIST- EXPLODING DRAWINGS



DOUGH ROLLER

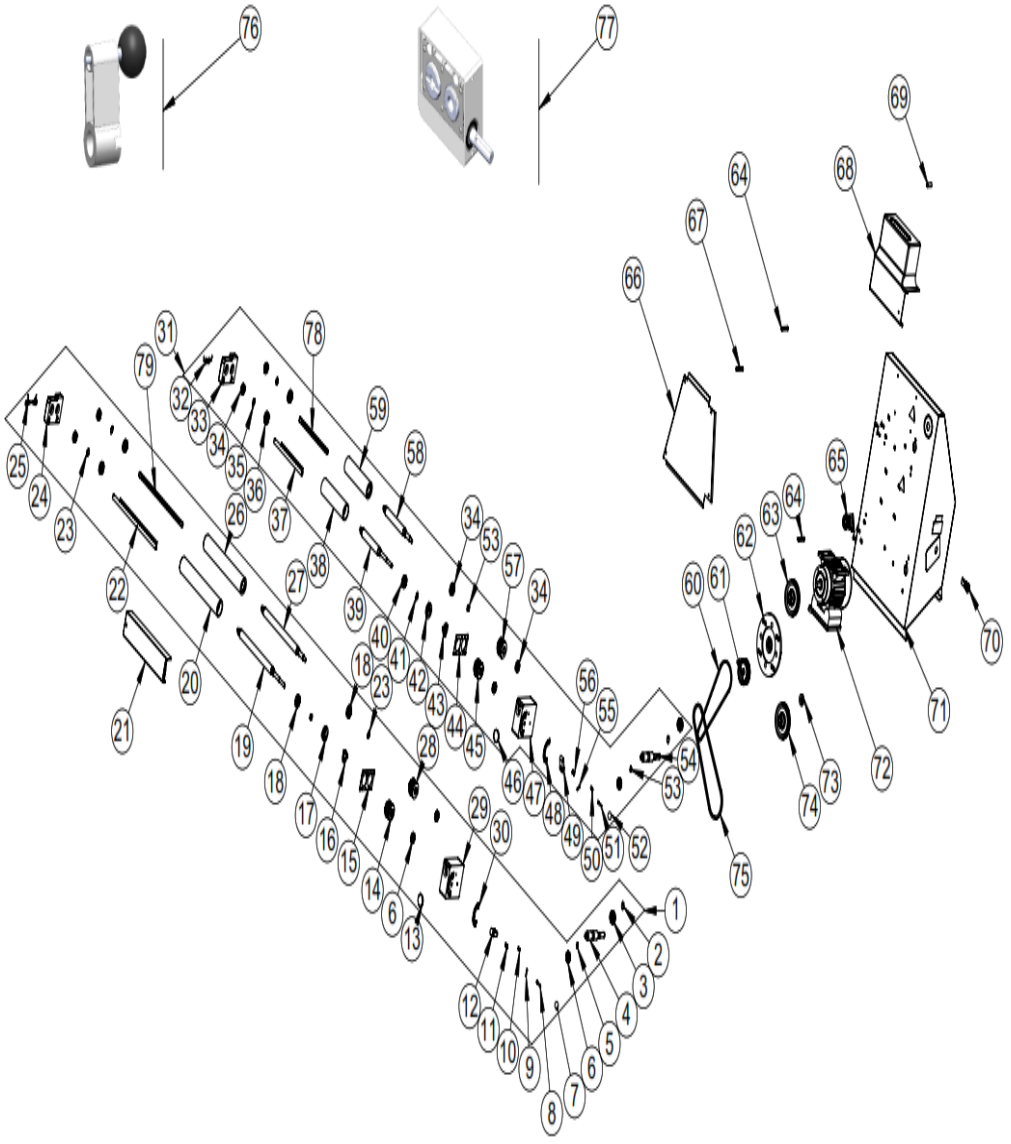
G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE: EMP.HA.01		
NO	PRODUCT NAME	P.CODE
1	TOP SCROLL PIN	M.ENJ-ERS-PLS-HA-008
2	HAND PROTECTION	M.ENJ-ERS-FLK-017
3	SHORT PIN	YTL-ERS.HA-KS-0006
4	LONG PIN	YTL-ERS.HA-KS-0007
5	BOTTOM SLIDE SHEET	YSC-ERS.HA-PN-0005
6	GREEN BUTTON (PERMANENT)	M.ELK-SLT-BTL-009
7	CHASSIS	-
8	EMERGENCY STOP BUTTON	M.ELK-SLT-BTL-003
9	ELECTRIC MOTOR	M.ELK-MTR-RSM-060
10	ENGINE FLANGE	YDK-ERS.HA-CN-0001
11	TRANSMISSION PULLEY	YDK-ERS.HA-CN-0003
12	ENGINE PULLEY	YDK-ERS.HA-CN-0002
13	STRAP (8*675)	M.KYS-VKY-003
14	SUPPORT WASHER	YTL-ERS.HA-KS-0040
15	RING 471-15	B-SEG-SYH-002
16	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
17	SETTING SHEET	YSC-ERS.HA-LZ-0005
18	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
19	BEARING (6200 2RS)	M.RLM-NRM-011
20	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
21	RING 471-17	B-SEG-SYH-011
22	STAMP	M.ENJ-ERS-ALM-001
23	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
24	BEARING (6003 2RS)	M.RLM-NRM-012
25	RING 471-17	B-SEG-SYH-011
26	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
27	BEARING (6003 2RS)	M.RLM-NRM-012
28	UPPER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0002
29	UPPER REAR ROLL	YTL-ERS.HA-KS-0044
30	UPPER RIGHT BLADE (325MM)	YMH-ERS.HA-KS-0001
31	BEARING (6003 2RS)	M.RLM-NRM-012
32	RING 471-17	B-SEG-SYH-011
33	BEARING (6200 2RS)	M.RLM-NRM-011
34	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
35	SMALL SPRING	M.YAY-ERS-016
36	UPPER ROLL	ARA-EMP.HA-0001
37	BIG BOW	M.YAY-ERS-015
38	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
39	LOWER REAR ROLL	YTL-ERS.HA-KS-0041
40	LOWER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0005
41	UPPER FRONT ROLL	YTL-ERS.HA-KS-0043
42	BEARING (6003 2RS)	M.RLM-NRM-012

43	UPPER FRONT ROLL SHAFT	YTL-ERS.HA-KS-0001
44	RING 471-17	B-SEG-SYH-011
45	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
46	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
47	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
48	PIN SPRING	M.YAY-ERS-003
49	ROLL PIN	YTL-ERS.HA-KS-0003
50	PIN 4*20	B-PIM-SYH-YAR-4*20
51	SPHERE KNOB	M.AKS-KLP-BKL-008
52	GREASE SUPPORT	ERS.M.MUH-022
53	RING 471-10	ERS.B-SEG-SYH-010
54	BEARING (6200 2RS)	M.RLM-NRM-011
55	ENDLESS SHAFT	M.MON-DSL-008
56	BEARING (6202 2RS)	M.RLM-NRM-003
57	RING 471-15	B-SEG-SYH-002
58	BEARING (6202 2RS)	M.RLM-NRM-003
59	ENDLESS SHAFT	M.MON-DSL-008
60	BEARING (6200 2RS)	M.RLM-NRM-011
61	RING 471-10	ERS.B-SEG-SYH-010
62	SPHERE KNOB	M.AKS-KLP-BKL-008
63	GREASE SUPPORT	ERS.M.MUH-022
64	PIN 4*20	B-PIM-SYH-YAR-4*20
65	ROLL PIN	YTL-ERS.HA-KS-0003
66	PIN SPRING	M.YAY-ERS-003
67	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
68	SETTING SHEET	YSC-ERS.HA-LZ-0005
69	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
70	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
71	BEARING (6200 2RS)	M.RLM-NRM-011
72	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
73	STAMP	M.ENJ-ERS-ALM-001
74	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
75	RING 471-17	B-SEG-SYH-011
76	BEARING (6003 2RS)	M.RLM-NRM-012
77	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
78	LOWER FRONT ROLLER SHAFT	YTL-ERS.HA-KS-0004
79	LOWER FRONT ROLL	YTL-ERS.HA-KS-0042
80	LOWER RIGHT BLADE (450MM)	YMH-ERS.HA-KS-0002
81	BEARING (6003 2RS)	M.RLM-NRM-012
82	RING 471-17	B-SEG-SYH-011
83	BEARING (6200 2RS)	M.RLM-NRM-011
84	LOWER ROLLER	ARA-EMP.HA-0002
85	HAND PROTECTION SHEET	YSC-ERS.HA-LZ-0015
86	STRAP (8*725)	M.KYS-VKY-004
87	ECCENTRIC ARM	ARA-EMP.HA-0008
88	LOWER TRANSMISSION	ARA-EMP.HA-0007

DOUGH ROLLER

G SPARE PART LIST- EXPLODING DRAWINGS



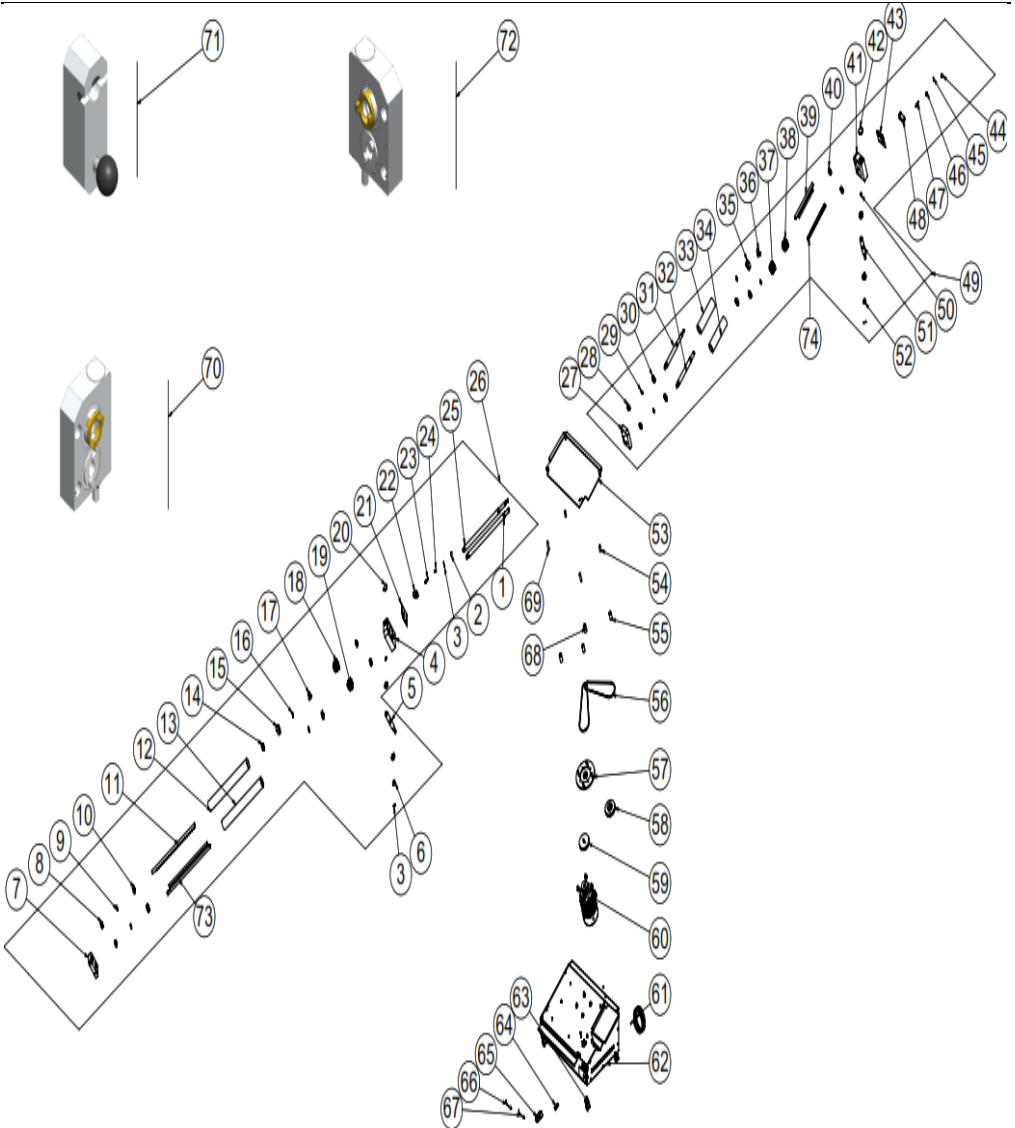
G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE: EMP.HA.02		
NO	PRODUCT NAME	P.CODE
1	LOWER ROLLER	ARA-EMP.HA-0004
2	RING 471-15	B-SEG-SYH-002
3	BEARING (6202 2RS)	M.RLM-NRM-003
4	ENDLESS SHAFT	M.MON-DSL-008
5	RING 471-10	ERS.B-SEG-SYH-010
6	BEARING (6200 2RS)	M.RLM-NRM-011
7	SPHERE KNOB	M.AKS-KLP-BKL-008
8	ROLL PIN	YTL-ERS.HA-KS-0003
9	PIN 4*20	B-PIM-SYH-YAR-4*20
10	GREASE SUPPORT	ERS.M.MUH-022
11	PIN SPRING	M.YAY-ERS-003
12	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
13	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
14	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
15	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
16	STAMP	M.ENJ-ERS-ALM-001
17	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
18	BEARING (6003 2RS)	M.RLM-NRM-012
19	LOWER FRONT ROLLER SHAFT	YTL-ERS.HA-KS-0011
20	LOWER FRONT ROLL	YTL-ERS.HA-KS-0046
21	HAND PROTECTION SHEET	YSC-ERS.HA-LZ-0016
22	LOWER RIGHT BLADE (350MM)	YMH-ERS.HA-KS-0004
23	RING 471-17	B-SEG-SYH-011
24	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
25	BIG BOW	M.YAY-ERS-015
26	LOWER REAR ROLL	YTL-ERS.HA-KS-0048
27	LOWER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0010
28	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
29	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
30	SETTING SHEET	YSC-ERS.HA-LZ-0005
31	UPPER ROLL	ARA-EMP.HA-0003
32	SMALL SPRING	M.YAY-ERS-016
33	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
34	BEARING (6200 2RS)	M.RLM-NRM-011
35	RING 471-15	B-SEG-SYH-002
36	BEARING (6003 2RS)	M.RLM-NRM-012
37	UPPER RIGHT BLADE (225MM)	YMH-ERS.HA-KS-0003

DOUGH ROLLER

38	UPPER FRONT ROLL	YTL-ERS.HA-KS-0047
39	UPPER FRONT ROLL SHAFT	YTL-ERS.HA-KS-0013
40	BEARING (6202 2RS)	M.RLM-NRM-003
41	RING 471-10	ERS.B-SEG-SYH-010
42	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
43	STAMP	M.ENJ-ERS-ALM-001
44	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
45	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
46	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
47	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
48	SETTING SHEET	YSC-ERS.HA-LZ-0005
49	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
50	GREASE SUPPORT	ERS.M.MUH-022
51	ROLL PIN	YTL-ERS.HA-KS-0003
52	SPHERE KNOB	M.AKS-KLP-BKL-008
53	RING 471-17	B-SEG-SYH-011
54	ENDLESS SHAFT	M.MON-DSL-008
55	PIN 4*20	B-PIM-SYH-YAR-4*20
56	PIN SPRING	M.YAY-ERS-003
57	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
58	UPPER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0012
59	UPPER REAR ROLL	YTL-ERS.HA-KS-0045
60	STRAP (8*700)	M.KYS-VKY-006
61	ENGINE PULLEY	YDK-ERS.HA-CN-0002
62	ENGINE FLANGE	YDK-ERS.HA-CN-0001
63	TRANSMISSION PULLEY	YDK-ERS.HA-CN-0003
64	SHORT PIN	YTL-ERS.HA-KS-0006
65	EMERGENCY STOP BUTTON	M.ELK-SLT-BTL-003
66	BOTTOM SLIDE SHEET	YSC-ERS.HA-PN-0013
67	LONG PIN	YTL-ERS.HA-KS-0007
68	HAND PROTECTION PLASTIC	M.ENJ-ERS-FLK-018
69	TOP SCROLL PIN	M.ENJ-ERS-PLS-HA-008
70	GREEN BUTTON (PERMANENT)	M.ELK-SLT-BTL-009
71	CHASSIS	-
72	ELECTRIC MOTOR	M.ELK-MTR-RSM-060
73	BUSH	YTL-ERS.HA-KS-0039
74	TRANSMISSION PULLEY	YDK-ERS.HA-CN-0003
75	STRAP (8*675)	M.KYS-VKY-003
76	ECCENTRIC ARM	ARA-EMP.HA-0008
77	LOWER TRANSMISSION	ARA-EMP.HA-0007

G SPARE PART LIST- EXPLODING DRAWINGS



DOUGH ROLLER

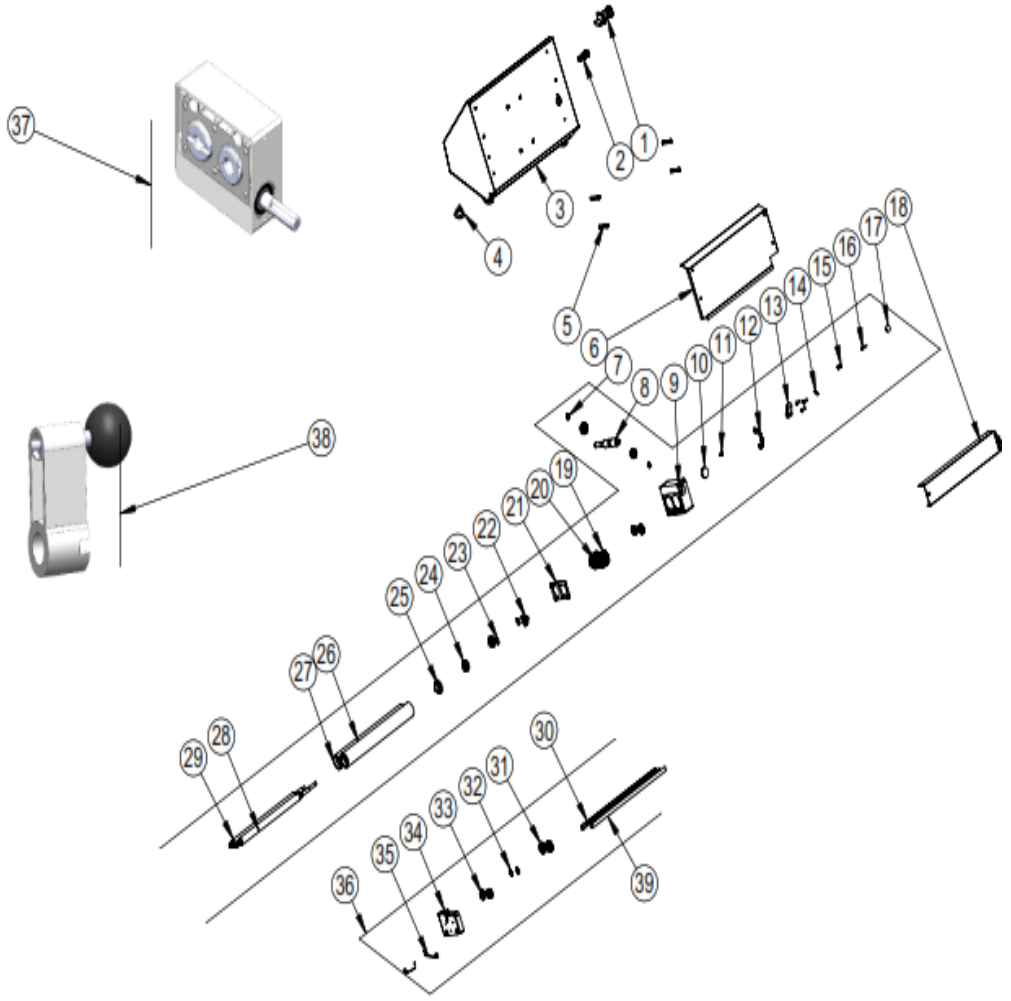
G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE: EMP.HA.03		
NO	PRODUCT NAME	P.CODE
1	LONG LOWER ROLLER SHAFT	YTL-ERS.HA-KS-0017
2	SPHERE KNOB	M.AKS-KLP-BKL-008
3	PIN 4*30	B-PIM-SYH-YAR-4*30
4	RIGHT TRANSMISSION	YMH-ERS.HA-CN-0001
5	ENDLESS SHAFT	M.MON-DSL-020
6	FITTING	YTL-ERS.HA-KS-0022
7	LEFT ROLL PLACE	YMH-ERS.HA-CN-0004
8	BEARING (6203 ZZ)	M.RLM-NRM-010
9	RING 471-25	B-SEG-SYH-005
10	BEARING (6004 ZZ)	M.RLM-NRM-018
11	LOWER RIGHT BLADE (350MM)	YMH-ERS.HA-KS-0005
12	LONG TOP ROLL	YTL-ERS.HA-KS-0052
13	LONG LOWER ROLLER	YTL-ERS.HA-KS-0051
14	BEARING (6005 2RS)	M.RLM-NRM-033
15	PLASTIC WASHER	YTL-ERS.HA-KS-0029
16	RING 471-17	B-SEG-SYH-011
17	STAMP	YBR-ERS.HA-KS-0002
18	FEMALE PLASTIC GEAR	M.MON-DSL-021
19	MALE PLASTIC GEAR	M.MON-DSL-022
20	COVER PLASTIC	YTL-ERS.HA-KS-0026
21	SETTING SHEET RIGHT	YSC-ERS.HA-LZ-0034
22	SETTING DISK	YTL-ERS.HA-KS-0038
23	SPRING PIN	YTL-ERS.HA-KS-0023
24	PIN SPRING	M.YAY-ERS-017
25	LONG UPPER ROLL SHAFT	YTL-ERS.HA-KS-0016
26	LOWER ROLLER	ARA-EMP.HA-0006
27	RIGHT ROLL PLACE	YMH-ERS.HA-CN-0003
28	BEARING (6203 ZZ)	M.RLM-NRM-010
29	RING 471-25	B-SEG-SYH-005
30	BEARING (6004 ZZ)	M.RLM-NRM-018
31	SHORT UPPER ROLL SHAFT	YTL-ERS.HA-KS-0018
32	SHORT LOWER ROLLER SHAFT	YTL-ERS.HA-KS-0019

33	SHORT TOP ROLL	YTL-ERS.HA-KS-0049
34	SHORT BOTTOM ROLL	YTL-ERS.HA-KS-0050
35	PLASTIC WASHER	YTL-ERS.HA-KS-0029
36	STAMP	YBR-ERS.HA-KS-0002
37	MALE PLASTIC GEAR	M.MON-DSL-022
38	FEMALE PLASTIC GEAR	M.MON-DSL-021
39	LOWER RIGHT BLADE (350MM)	YMH-ERS.HA-KS-0006
40	BEARING (6005 2RS)	M.RLM-NRM-033
41	LEFT TRANSMISSION	YMH-ERS.HA-CN-0002
42	COVER PLASTIC	YTL-ERS.HA-KS-0026
43	SETTING SHEET RIGHT	YSC-ERS.HA-LZ-0033
44	SPHERE KNOB	M.AKS-KLP-BKL-008
45	PIN 4*30	B-PIM-SYH-YAR-4*30
46	PIN SPRING	M.YAY-ERS-017
47	SPRING PIN	YTL-ERS.HA-KS-0023
48	SETTING DISK	YTL-ERS.HA-KS-0038
49	UPPER ROLL	ARA-EMP.HA-0005
50	RING 471-17	B-SEG-SYH-011
51	ENDLESS SHAFT	M.MON-DSL-020
52	FITTING	YTL-ERS.HA-KS-0022
53	ASH-BIN SHEET	YSC-ERS.HA-LZ-0035
54	REINFORCEMENT PLASTIC SHORT	YTL-ERS.HA-KS-0025
55	ENGINE BUSH	YTL-ERS.HA-KS-0021
56	STRAP (10*875)	M.KYS-VKY-035
57	ENGINE FLANGE	YDK-ERS.HA-CN-0004
58	TRANSMISSION PULLEY	YTL-ERS.HA-KS-0031
59	TRANSMISSION PULLEY	YTL-ERS.HA-KS-0032
60	ELECTRIC MOTOR	M.ELK-MTR-RSM-102
61	3*1,5 CABLE	M.ELK-PWR-PBK-003
62	CHASSIS	-
63	WHEEL WITH BRAKE	ERS.M.AKS-TKR-KFS-002
64	GREEN BUTTON (PERMANENT)	M.ELK-SLT-BTL-009
65	EMERGENCY STOP BUTTON	M.ELK-SLT-BTL-003
66	ENGINE BUSH	YTL-ERS.HA-KS-0020
67	REINFORCEMENT PLASTIC LONG	YTL-ERS.HA-KS-0024
68	TRANSMISSION	ARA-EMP.HA-0011
69	ECCENTRIC ARM	ARA-EMP.HA-0009
70	TRANSMISSION	ARA-EMP.HA-0010

DOUGH ROLLER

G SPARE PART LIST- EXPLODING DRAWINGS

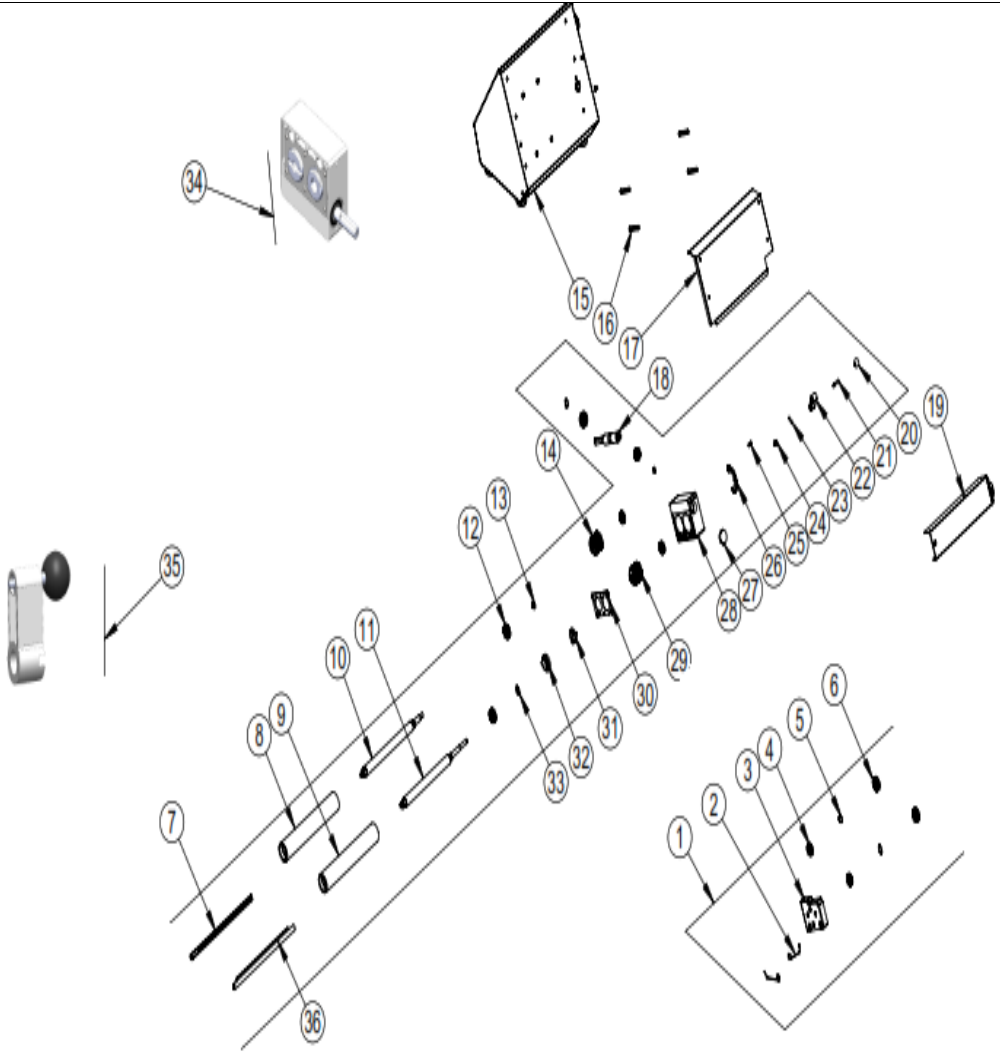


G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE :EMP.HA.04		
NO	PRODUCT NAME	P.CODE
1	EMERGENCY STOP BUTTON	M.ELK-SLT-BTL-003
2	GREEN BUTTON (PERMANENT)	M.ELK-SLT-BTL-009
3	CHASSIS	-
4	FOOT	M.AKS-AYK-PLS-007
5	LONG PIN	YTL-ERS.HA-KS-0007
6	FRONT SHEET	YSC-ERS.HA-PN-0033
7	RING 471-15	B-SEG-SYH-002
8	ENDLESS SHAFT	M.MON-DSL-008
9	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
10	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
11	GREASE SUPPORT	ERS.M.MUH-022
12	SETTING SHEET	YSC-ERS.HA-LZ-0005
13	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
14	PIN 4*20	B-PIM-SYH-YAR-4*20
15	PIN SPRING	M.YAY-ERS-003
16	ROLL PIN	YTL-ERS.HA-KS-0003
17	SPHERE KNOB	M.AKS-KLP-BKL-008
18	HAND PROTECTION SHEET	YSC-ERS.HA-LZ-0015
19	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
20	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
21	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
22	STAMP	M.ENJ-ERS-ALM-001
23	RING 471-10	ERS.B-SEG-SYH-010
24	BEARING (6202 2RS)	M.RLM-NRM-003
25	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
26	LOWER FRONT ROLL	YTL-ERS.HA-KS-0042
27	LOWER REAR ROLL	YTL-ERS.HA-KS-0041
28	LOWER FRONT ROLLER SHAFT	YTL-ERS.HA-KS-0004
29	LOWER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0005
30	LOWER RIGHT BLADE (450MM)	YMH-ERS.HA-KS-0002
31	BEARING (6200 2RS)	M.RLM-NRM-011
32	RING 471-17	B-SEG-SYH-011
33	BEARING (6003 2RS)	M.RLM-NRM-012
34	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
35	BIG BOW	M.YAY-ERS-015
36	LOWER ROLLER	ARA-EMP.HA-0002
37	LOWER TRANSMISSION	ARA-EMP.HA-0007
38	ECCENTRIC ARM	ARA-EMP.HA-0008

DOUGH ROLLER

G SPARE PART LIST- EXPLODING DRAWINGS



G SPARE PART LIST- EXPLODING DRAWINGS

P.CODE : EMP.HA.05		
NO	PRODUCT NAME	P.CODE
1	LOWER ROLLER	ARA-EMP.HA-0004
2	BIG BOW	M.YAY-ERS-015
3	LOWER ROLL LOCATION	M.ENJ-ERS-PLS-HA-004
4	BEARING (6202 2RS)	M.RLM-NRM-003
5	RING 471-15	B-SEG-SYH-002
6	BEARING (6200 2RS)	M.RLM-NRM-011
7	LOWER RIGHT BLADE (350MM)	YMH-ERS.HA-KS-0004
8	LOWER REAR ROLL	YTL-ERS.HA-KS-0048
9	LOWER FRONT ROLL	YTL-ERS.HA-KS-0046
10	LOWER REAR ROLLER SHAFT	YTL-ERS.HA-KS-0010
11	LOWER FRONT ROLLER SHAFT	YTL-ERS.HA-KS-0011
12	BEARING (6003 2RS)	M.RLM-NRM-012
13	RING 471-10	ERS.B-SEG-SYH-010
14	TRANSMISSION REAR-LEFT GEAR	M.MON-DSL-012
15	CHASSIS	-
16	LONG PIN	YTL-ERS.HA-KS-0007
17	FRONT SHEET	YSC-ERS.HA-PN-0034
18	ENDLESS SHAFT	M.MON-DSL-008
19	HAND PROTECTION SHEET	YSC-ERS.HA-LZ-0016
20	SPHERE KNOB	M.AKS-KLP-BKL-008
21	ROLL PIN	YTL-ERS.HA-KS-0003
22	ECCENTRIC PLASTIC	M.ENJ-ERS-PLS-HA-006
23	PIN 4*20	B-PIM-SYH-YAR-4*20
24	PIN SPRING	M.YAY-ERS-003
25	GREASE SUPPORT	ERS.M.MUH-022
26	SETTING SHEET	YSC-ERS.HA-LZ-0005
27	TRANSMISSION PLUG	M.ENJ-ERS-PLS-HA-007
28	LOWER TRANSMISSION	M.ENJ-ERS-PLS-HA-002
29	TRANSMISSION FRONT-RIGHT GEAR	M.MON-DSL-011
30	LOWER TRANSMISSION COVER SHEET	YSC-ERS.HA-LZ-0003
31	STAMP	M.ENJ-ERS-ALM-001
32	REDUCER WASHER	M.ENJ-ERS-PLS-HA-005
33	RING 471-17	B-SEG-SYH-011
34	LOWER TRANSMISSION	ARA-EMP.HA-0007
35	ECCENTRIC ARM	ARA-EMP.HA-0008

DOUGH ROLLER

H ELECTRIC CIRCUIT SCHEMA

