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## 1. FEATURE

- Heavy-duty, stainless steel spiral agitator and bowl, designed to Baking Industry Sanitation Standards.
- Instant termination of operation if safety guard is lifted. Operation is possible only when safety guard is in place.
- Minimal-Maintenance, high-power motor. Speed is altered without shifting gear.
- High-efficiency, 2-speed mixing achieves through blending of ingredients to achieve desired results consistently within 7-10 minutes.
- Accurate timers automatically control mixing time. Machine is still operational even if timer is interrupted.
- New, dual-direction mixing technology, speed is synchronized with reverse-rotating bowl to mix ingredients and blend dough hydraulically downward. This keeps dough cooler, and achieves desired results more efficiently.
- Powerful spiral mixing increases water absorption by dough, thus increasing volume and assuring uniform texture.
- instant-response servo-limit switch for safety.
- Bowl may be set to rotate either forward or backward.

## 2. SAFETY PRECAUTIONS

**WHEN USING THIS MACHINE, ALWAYS MAKE SURE THE FOLLOWING CONDITIONS OR OPERATIONS ARE IN EFFECT. FAILURE TO THIS WILL MAY BE THE CAUSE OF ACCIDENTS.**

- **KEEP HAND, CLOTHING & RIGID OBJECTS AWAY FROM BOWL AND HUB ATTACHMENTS WHEN IN OPERATION.**
- **DO NOT USE THIS MACHINE FOR ANY APPLICATIONS OTHER THAN FOOD PROCESSING.**
- **USE THE MACHINE ONLY WITH THE ELECTRICAL SERVICE SPECIFIED ON ITS NAMEPLATE.**
- **DISCONNECT THE MACHINE FROM ITS POWER SOURCE BEFORE CARRYING OUT ANY MAINTENANCE.**
- **DO NOT DISABLE OR REMOVE THE SAFETY MECHANISMS INCLUDED WITH THE MACHINE.**
- **DO NOT LEAVE THE MACHINE IN OPERATION UNATTENDED.**
- **OBSERVE MAINTENANCE AND SAFETY INSPECTION SCHEDULES.**

### 3. SPECIFICATIONS

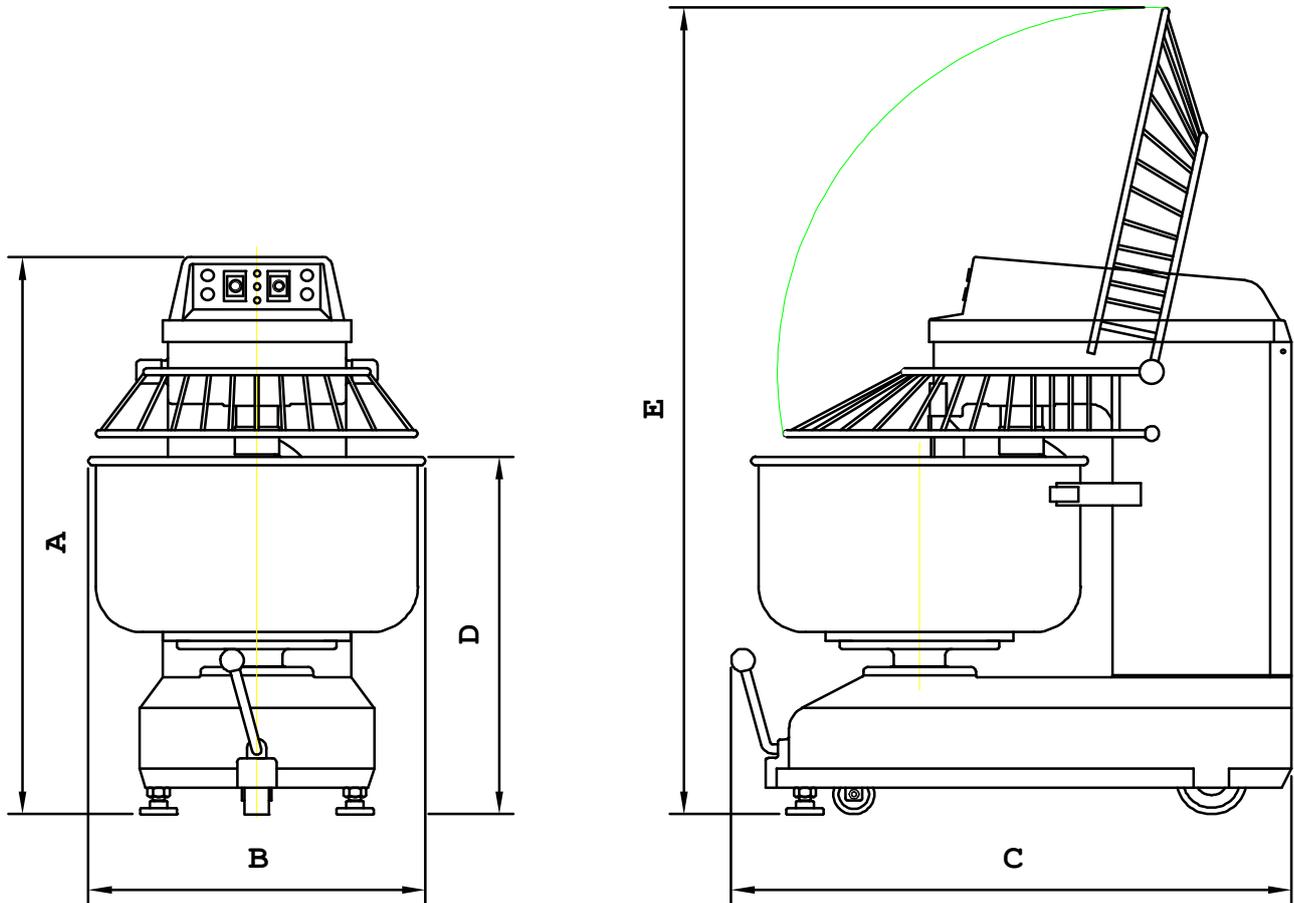
- MOTOR** Three phase motor. Bowl and spiral agitator are driven by separate motors.
- ELECTRICAL**  200V/60HZ, three phase.  
 220V/60HZ, three phase.  
 380V/50HZ, three phase.  
 415V/50HZ, three phase.  
 440V/60HZ three phase.
- TRANSMISSION** Pulley drive to special fiber belt
- TIMER** 2 standard 60 MIN. Timer. (HL-17015K & HL-17020K ARE OPTIONAL.)
- SAFETY GUARD** Stainless steel safety guard is standard. Instant termination of operation to protect operator if safety guard is lifted.

#### SPEED

Model No.	60 Hz		50 HZ	
	Low	High	Low	High
HL-17015K	131	262	110	220
HL-17020K	131	262	110	220
HL-17025K	131	262	110	220
HL-17040K	131	262	110	220
HL-17045K	131	262	110	220
HL-17066K	131	262	110	220
HL-17125K	131	262	110	220

Model No.	Flour (Kg)	Dough (Kg)	Bowl (Liter)	Packing Size (Cm)	Net Weight (Kg)	Gross Weight (Kg)	Motor (HP)	
							Agitator	Bowl
HL-17015K	15	30	50	95*60*120	150	200	2	0.5
HL-17020K	25	40	70	100*65*130	180	230	2.5	0.5
HL-17025K	30	50	80	121*70*138	400	500	3	1
HL-17040K	40	60	100	125*85*141	450	550	4	1
HL-17045K	50	80	120	133*88*152	520	620	5	2
HL-17066K	80	120	180	140*97*159	550	650	8.5	3
HL-17125K	125	180	240	176*106*182	1000	1150	15	5

#### 4. INSTALLATION DIAGRAM (CM)



	A	B	C	D	E
HL-17015K	99	54	88	57	134
HL-17020K	105	54	88	67	140
HL-17025K	114	55	104	78	147
HL-17040K	114	66	104	81	152
HL-17045K	120	71	114	81	170
HL-17066K	130	81	122	86	180
HL-17125K	155	94	160	100	210

## 5. INSTALLATION

Your DYNASTY® SPIRAL MIXER is shipped fully assembled, and ready for installation. The machine must be installed on a horizontally-level floor. It should be placed in a location that is convenient for both operation and maintenance. The machine's safety features make it possible to stand close to the machine during operation.

## 6. CLEANING

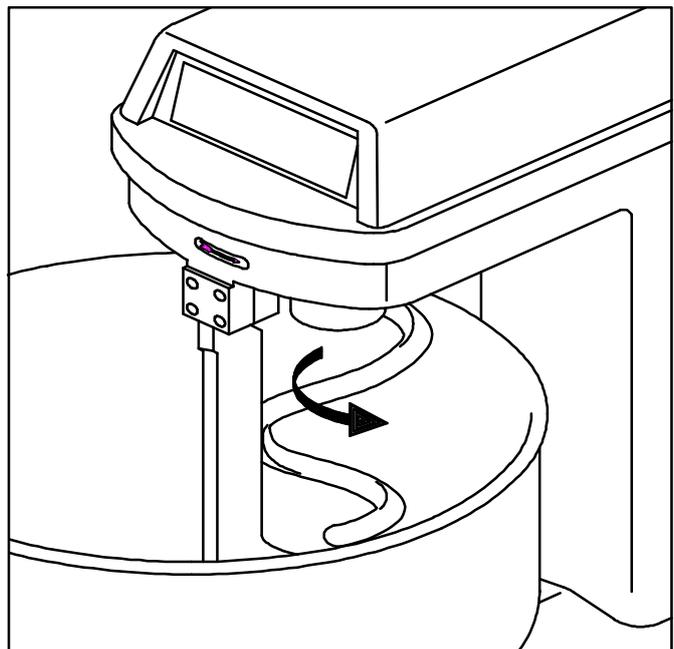
**WARNING - UNPLUG MACHINE BEFORE CLEANING OR SERVICING.**

- After each day's use, wash the mixer bowl and agitator thoroughly with hot water and a mild soap solution and rinse with either a mild soda or vinegar solution. rinse thoroughly with a clean damp cloth.
- Clean under machine occasionally. To clean American Eagle models, disconnect power cord, raise stabilizing feet and move machine.

## 7. ELECTRICAL CONNECTIONS

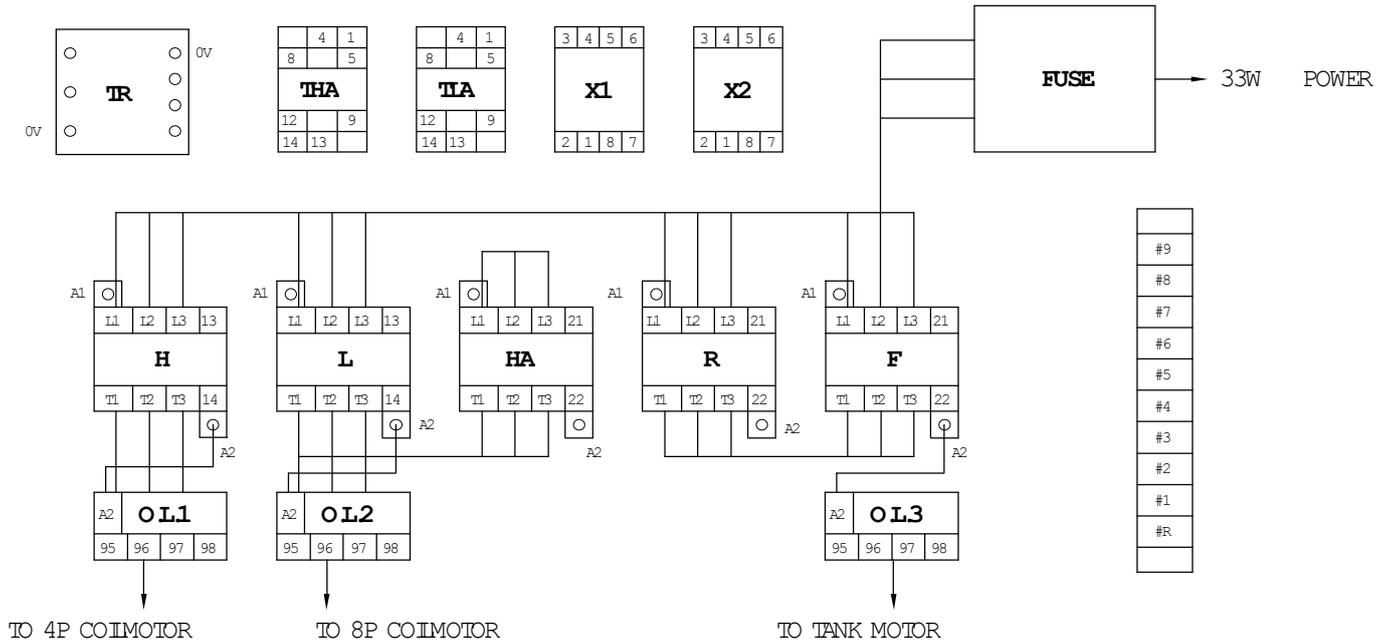
**WARNING:** BEFORE CONNECTING YOUR MACHINE TO ANY SOURCE OF ELECTRICAL POWER, READ THE SPECIFICATIONS ON THE MACHINES NAME PLATE CAREFULLY AND BE SURE THEY COINCIDE WITH THOSE OF YOUR POWER SOURCE.

- Electrical connections should be made by qualified personnel in accordance with applicable codes and regulations.
- Appropriate fuse must be installed to provide adequate protection in case of a short circuit.
- Special attention should be given to making the correct electrical connection regarding the direction of rotation of the spiral agitator. The direction of rotation is indicated by an arrow on the front of mixer.



## 8. ELECTRIC PARTS DIAGRAM & MAIN CIRCUIT (EXCEPT SIMPLE TYPE)

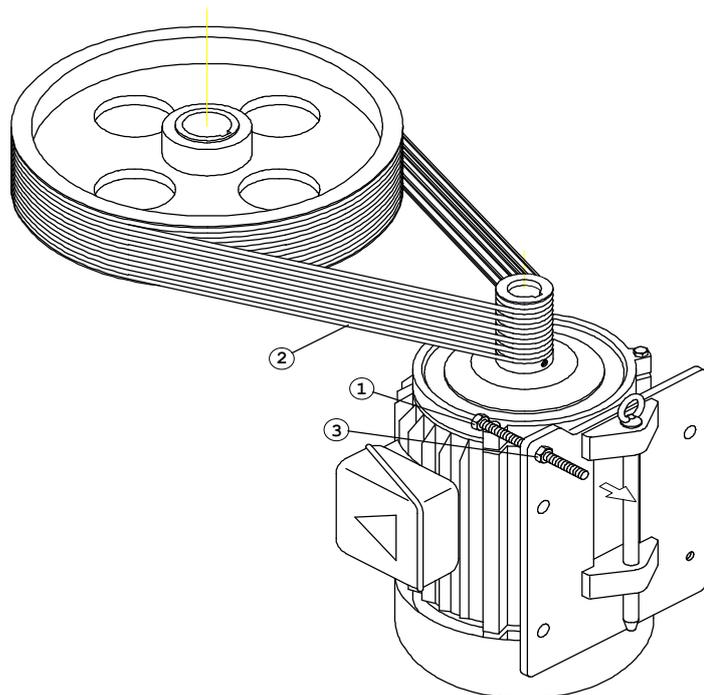
ELECTRIC PARTS DIAGRAM & MAIN CIRCUIT



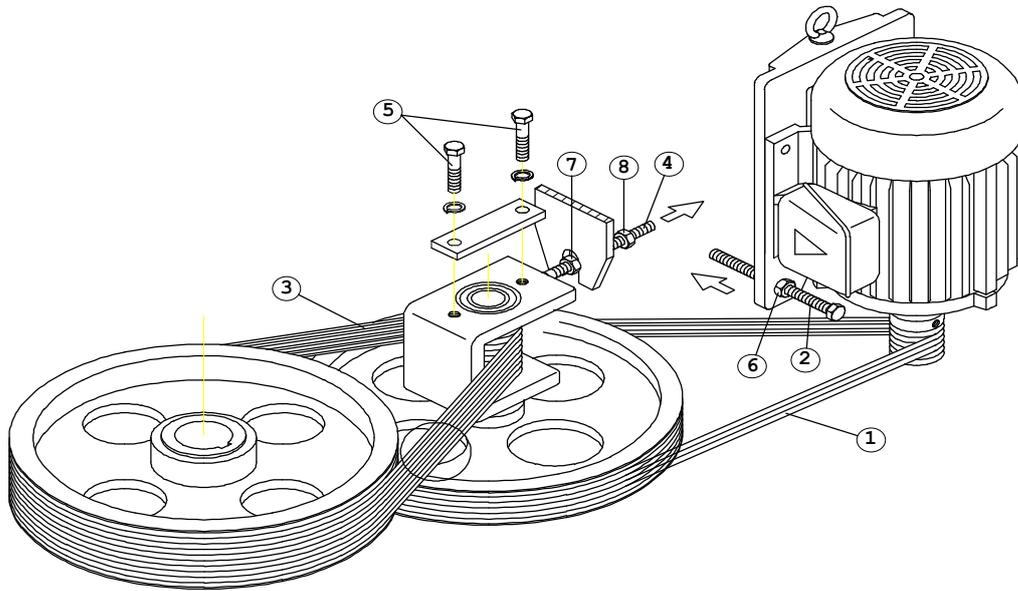
## 9. TECHNICAL NOTES

### DRIVEN BELT

- The drive belt should be installed with sufficient tension to avoid excessive slack.
- Agitator drive belts may be adjusted by means of a screw No.1 on motor support plate.



- Bowl drive belts may be adjusted by adjusting the screw nut No. 7 & 8.

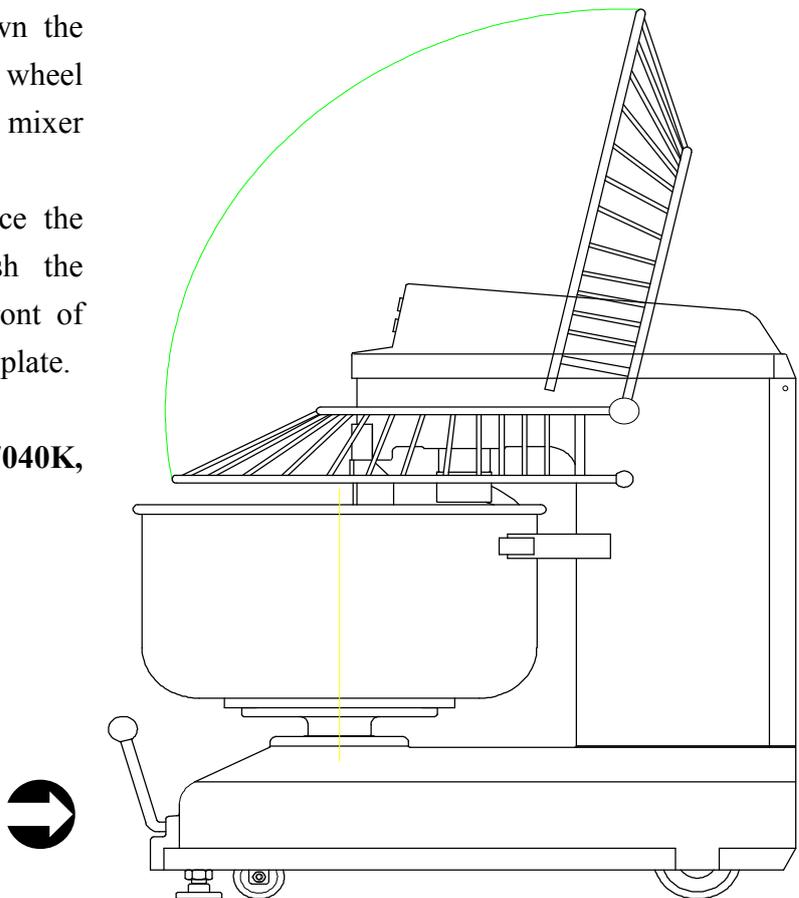


- Drive belts for the bowl drive motor may be adjusted by means of the screw No. 2 on lower motor support plate.

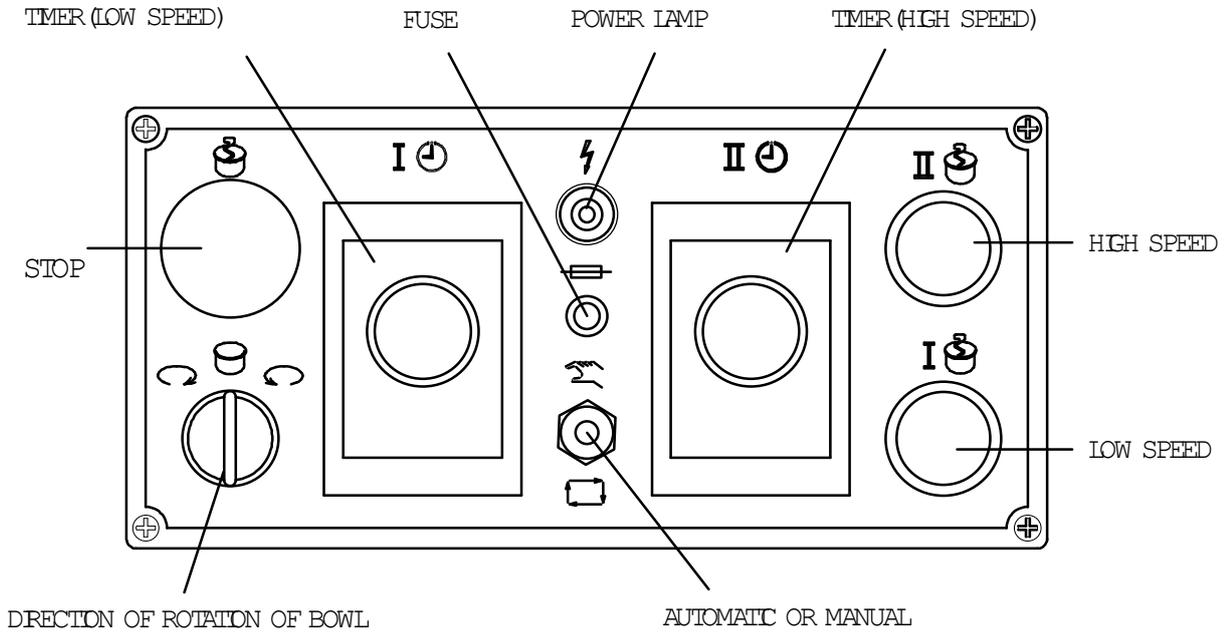
## 10. MOVING THE MIXER

- To move the mixer, push down the ball-knob lever until the front wheel touches the front so that the mixer may be moved.
- To retract the front wheel once the mixer has been moved, push the ball-knob lever up until the front of the mixer rests on the front foot plate.

**NOTE: HL-17025K, HL-17040K, HL-17045K & HL-17066K ONLY**



### 11. CONTROL (EXCEPT SIMPLE TYPE)



FUNCTION DESIRED	DO THIS	RESULT
Manual (Continuous) Mixing	Turn TOGGLE SWITCH to MANUAL  Press LOW SPEED BUTTON or Press HIGH SPEED BUTTON  Press STOP	Manual control  Starts low speed mixing  Starts high speed mixing  Mixing pause. To continue mixing press HIGH SPEED or LOW SPEED BUTTON.

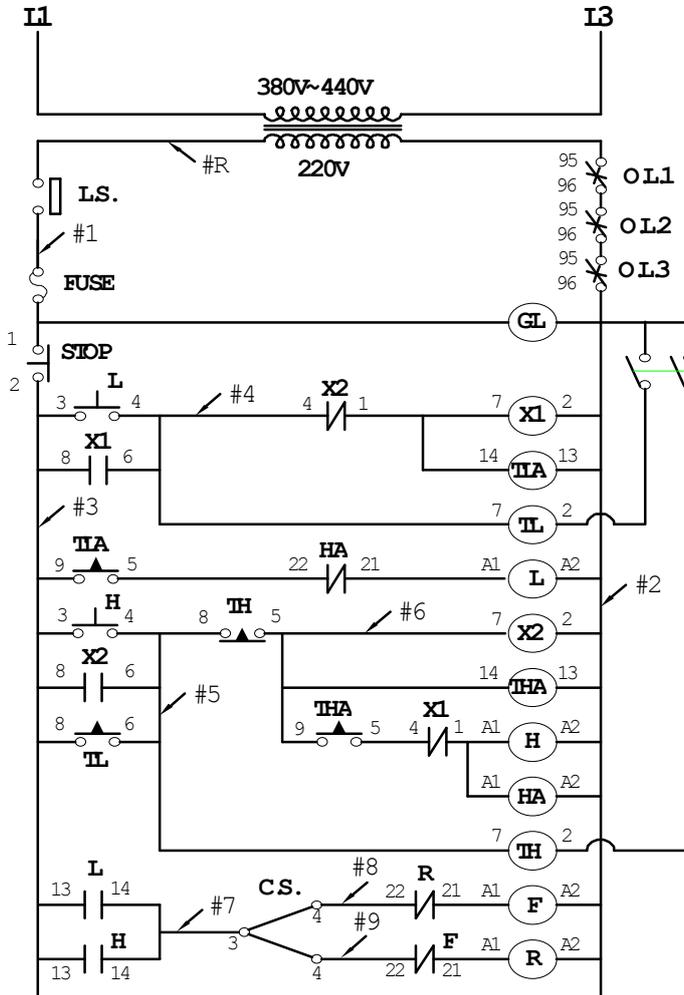
**DYNASTY ® BAKERY EQUIPMENT-Spiral Mixer Owner's Manual**

<p>Timed Mixing at Low Speed</p>	<p>Turn TOGGLE SWITCH to AUTOMATIC</p> <p>Set Timer (LOW SPEED) to desired time and set Timer (HIGH SPEED) to ZERO</p> <p>Press LOW SPEED BUTTON</p> <p>If press STOP</p>	<p>Automatic control</p> <p>Time has been set already</p> <p>Starts low speed mixing. Time out and Mixer stop automatically.</p> <p>Mixing pauses. To continue mixing reset time and press start</p>
<p>Timed Mixing at high Speed</p>	<p>Turn TOGGLE SWITCH to AUTOMATIC</p> <p>Set Timer (HIGH SPEED) to desired time and set Timer (LOW SPEED) to ZERO</p> <p>Press HIGH SPEED BUTTON</p> <p>If press STOP</p>	<p>Automatic control</p> <p>Time has been set already</p> <p>Starts high speed mixing. Time out and Mixer stop automatically.</p> <p>Mixing pauses. To continue mixing reset time and press start</p>
<p>Timed Mixing at Two speed</p>	<p>Turn TOGGLE SWITCH to AUTOMATIC</p> <p>Set both Timer (LOW SPEED) and Timer (HIGH SPEED) to desired time.</p> <p>Press LOW SPEED BUTTON</p> <p>If press STOP</p>	<p>Automatic control</p> <p>Two Timers have been set already.</p> <p>Starts low speed mixing. When mixing time for low speed expires, control automatically switches to high speed. When mixing time for high speed expires, Mixer stops</p> <p>Mixing pauses. To continue mixing reset time and press start</p>

## 12. TROUBLESHOOTING AFTER MIXING

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>
Mixer will not start	<ol style="list-style-type: none"><li>1. Check to see that bowl guard is in lower position.</li><li>2. If the POWER LAMP is not on, check electric cord to see if it is plugged into receptacle.</li><li>3. Check electrical supply at breaker ( fuse ) box.</li></ol>

## 13. ELECTRICAL WIRING DIAGRAM



**source pilot lamp**

manual/auto

**low speed auxiliary relay**

**low speed auto delay-relay 0.8 sec.**

**low speed timer (set point)**

**low speed main m.c.**

**high speed auxiliary relay**

**high speed auto delay relay**

**high speed main m.c.**

**high speed main aux. m.c.**

**high speed timer (set point)**

**tank forward**

**tank backward**