

Model PS21

Owner's Manual

Revised October 2019



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Thank you and congratulations on the purchase of your new Model PS21 Patty Molding Machine from Patty-O-Matic, Inc! The Model PS21 will form, interleave paper between, and stack patties. This machine is designed for easy operation and cleaning. Please become familiar with this manual and your machine will give you many years of service.

The Model PS21 is shipped to you in at least three cartons which contain the patty machine, feed tray, mold plate guard, spare parts box, receiving table, riser platform, and the manual. If you purchased your machine with any other accessories, such as a mobile table or patty paper, these items may be in a separate carton.

Your machine is equipped with two interlocks. One is located on the front of the machine and one is located on the top of the machine. The Mold Plate Guard must be installed on the machine to engage the interlock on the front of the machine and the Feed Tray including the guard must be installed on top of the Hopper to engage the interlock on top of the machine.

Installing Machine onto Riser Platform

Place machine on the riser platform making sure the 4 legs of the machine go into the 4 leg wells on the Riser Platform. The Picture shown shows the front view of the Riser Platform.

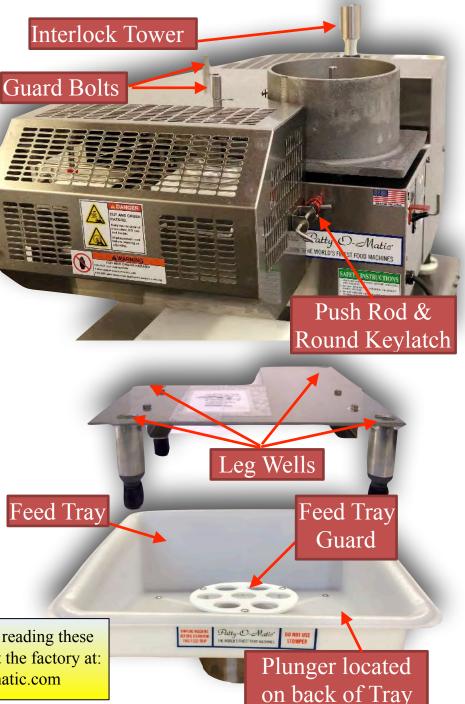
Installing the Mold Plate Guard

Loosen Guard Bolts on the Hopper and the rear post. Place Mold Plate Guard under the washers located under the bolt heads. Tighten bolts using the provided Speed Driver. To activate the interlock, slide push rod into the plunger, inside the keylatch, and turn rod to the right. This will lock the push rod in place and activate the interlock.

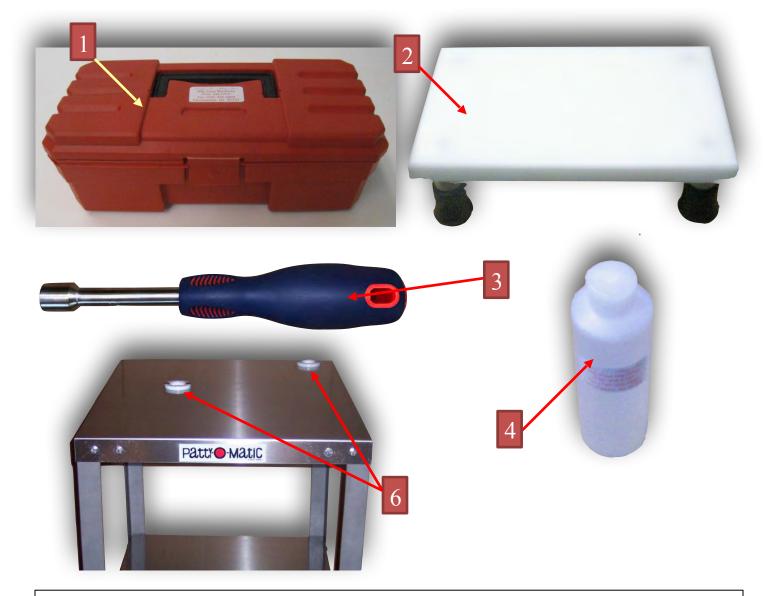
Installing the Feed Tray

Place stainless steel tube of Feed Tray over the Hopper. Make sure the Plunger on the bottom of Feed Tray depresses the Tower Stem inside the Tower Sleeve.

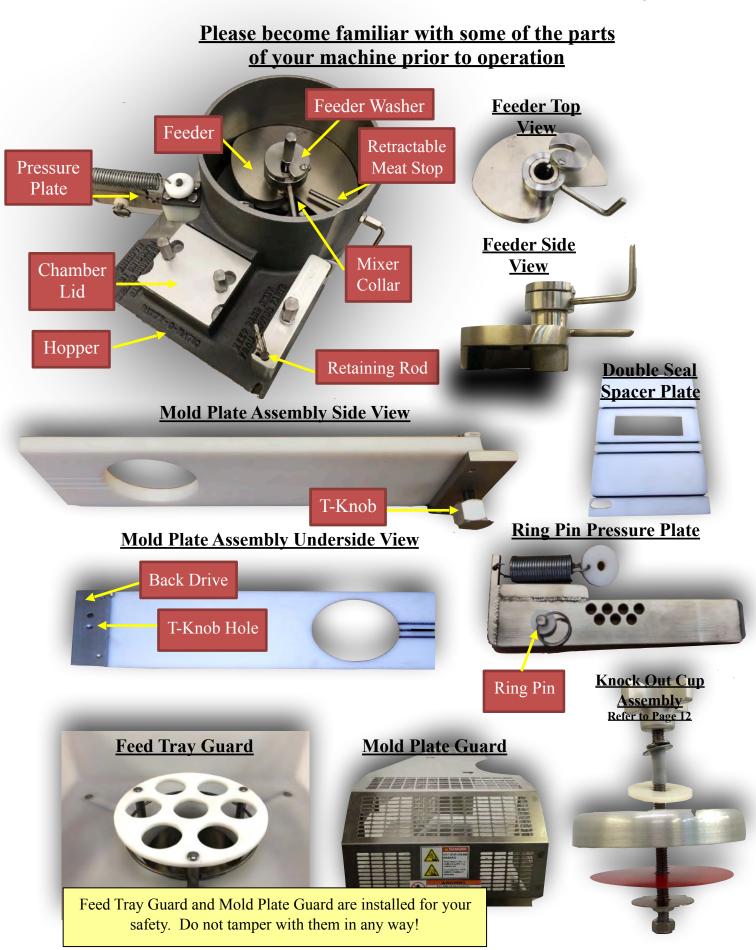
If you have any questions or concerns after reading these instructions, please do not hesitate to contact the factory at: 732-938-2757 or info@pattyomatic.com



Accessories Equipped with the Model PS21



Item#	Description	<u>Part #</u>
1	Spare Parts Box	655
	→ Holds Spare Parts, Patty Paper Sample, Machine Lubricant, S	Speed Driver, and
	Locator Rings c/w instructions	
2	Receiving Table	609-6
3	Speed Driver	544
4	8 Ounce Bottle of Machine Lubricant and Cleaner	600
5	Gallon of Machine Lubricant(Separate Order Only)	600A
6	Machine Locator Rings	610-2





<u>Item #</u>	A DANGER IF YOU CAN READ THIS SIGN. A	art#
1.	Do not operate with guard Removed. Do not operate with guard Removed. All guards MUST BE IN PLACE BEFORE CONSECTING TO POWER BOURCE.	514-09a
2.	Warning Orange	514-02
3.	Patty-O-Matic THE WORLD'S FINEST FOOD MACHINES	514-08
4.	Safety instructions Safety instructions . Bello of the second structure without called in place. . Bello of the second structure without called in place. . Bello of the second structure without second structure . Bello of the second structure . Bello of	514-06
5.	Danger Label 2	514-00
6.	Serial Tag For UL Machines	514-15UL
7.	Store Tool Store Peg	514-14
8.	Warning Manual	514-01
9.	Danger on/off	514-05
10.	Do Not Pressure Wash THIS MACHINE	SH 514-04
11.	Unplug Machine UNPLUG MACHINE Patty-O-Matic DO NO THIS FEED TRAY THE WORLD'S FINEST FOOD MACHINES STOM	
12.	Made in USA	514-19

Proper Procedure for Operating a PS21

When the Model PS21 is fully assembled with all guards secured in their proper place, put product to be molded in the Feed Tray. Push the product through the holes in the Feed Tray Guard, or under the Feed Tray guard and into the Hopper. **DO NOT PUT HANDS OR FINGERS, OR FOREIGN OBJECTS, SUCH AS STOMPERS OR PLUNGERS INTO THE HOPPER. THERE ARE NO STOMPERS OR PLUNGERS NECESSARY WHEN USING THIS UNIT, THEREFORE NONE ARE SUPPLIED.** After you allow product to drop into the Hopper turn the machine on by moving the On/Off switch down towards the on position. The machine may need to cycle a few times to prime the machine with product. As patties are being formed continue to push product through the holes and under the Feed Tray Guard. Patty paper may be added to the machine as needed. The machine can hold up to 1 inch of paper at a time, but no more.

As the Mold Plate moves back and forth to form patties, a thin coating of product may accumulate over its surface. This coating may also accumulate on the edges of the Knock Out Cup or on the front of the Hopper and Spacer Plate. This accumulation does occur on all molding machines. It is nothing to be concerned with. There are certain machine settings that may lessen this accumulation.

Setting the Ring Pin Pressure Plate for your Patty Size

The Purpose of the Pressure Plate is to entrap the amount of product necessary to form your patty. This part is also used in controlling the firmness of your patty. With the Pressure Plate set correctly you will in turn have:

- less leakage, oozing, and coating of parts
- less over working of your product
- and less strain on your machine.

If your patty weight is 8 ounces, keep the ring pin in the storage hole as described in the picture. This will allow the Pressure Plate to move all the way into the Hopper and stop on the welded stop, which traps the most product and is the maximum volume setting.

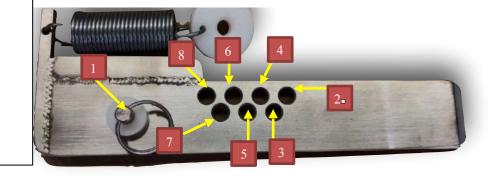
If your mold cavity is for 4 ounces, remove the ring pin from the storage hole and place it in the 4 ounce hole.

If your mold cavity is for 6 ounces, place the ring pin in the 6 ounce hole.

If you would like to have a tightly packed patty, move the ring pin to a higher than recommended setting for that particular weight.

THESE ARE ONLY RECOMMENDED SETTINGS. A VARIETY OF CIRCUMSTANCES MAY CALL FOR YOU TO INSERT THE RING PIN IN A DIFFERENT LOCATION.

- 1 Ring Pin in storage hole
- 2 2 ounce hole
- 3 3 ounce hole
- 4 4 ounce hole
- 5 5ounce hole
- 6 6 ounce hole
- 7 7 ounce hole



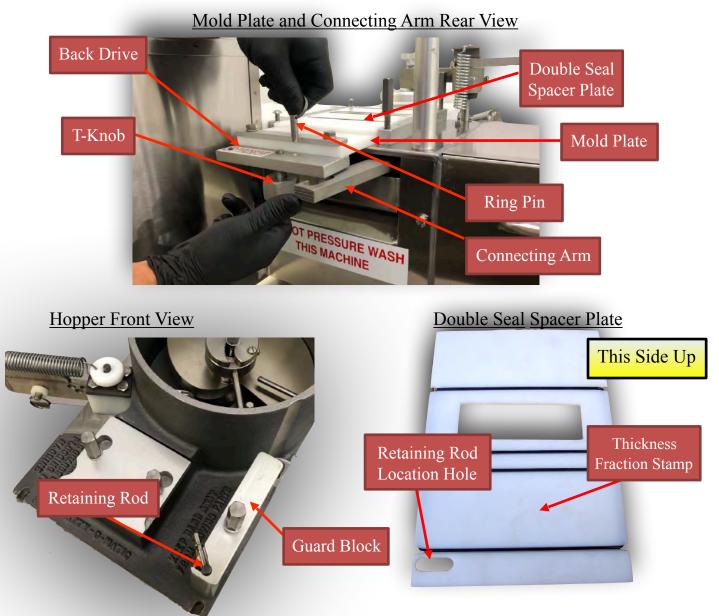
Changing Your Machine's Mold Plate

Always disconnect the machine from its power source

before attempting to change or clean any of the machines component parts.

If the Mold plate is all the way into the machine, remove the T-Knob from the Back Drive by lifting the ring pin and unthreading the knob. Pull the Mold Plate out from the back of the machine. If the Mold Plate is slightly out of the machine and you prefer to remove it without removing the T-Knob, simply pull the ring pin out and unhook the Connecting Arm from the T-Knob. Then slide the Mold Plate from the back of the machine.

When changing the Mold Plate always use the corresponding Double Seal Spacer Plate and Knock Out Cup. The thickness fraction stamped on the Double Seal Spacer Plate should match the fraction stamped on the front right corner of the Mold Plate. For example: if your Mold Plate is stamped "4F ¹/₂" then the Double Seal Spacer Plate should be stamped "1/2". The Double Seal Spacer Plate is held in place by the Retaining Rod. The Retaining Rod is secured by a spring into the Guard Block. Lift the Retaining Rod up and to the side so it does not protrude into the Double Seal Spacer Plate. There is no need to remove the Retaining Rod from the Guard Block. After putting the new Mold Plate and corresponding Double Seal Spacer Plate. Make Sure that the Double Seal Spacer Plate is in the locked position and the O'Rings are facing up. Failure to do so may cause the Double Seal Spacer Plate is required when using a 3/4" Mold Plate, leave the Retaining Rod in the storage position.



Proper Disassembly for Cleaning your Model PS21 Always Unplug Machine from its Electrical Source Before Cleaning

- Remove Feed Tray by lifting it off the Hopper, and Mold Plate Guard by loosening the Guard Bolts, and unlatching the push rod.

- Remove Pressure Plate by detaching Pressure Plate Spring and sliding Pressure Plate from inside of the Hopper. Pull Retractable Meat Stop out of the hopper until it stops. Remove feeder by loosening bolt using the tool provided. Twist feeder washer away from bolt and lift feeder from the inside

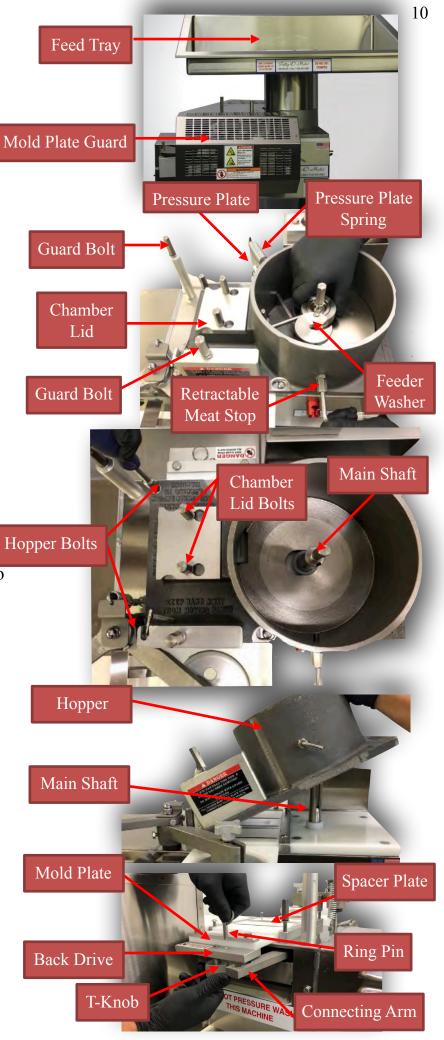
- Remove the four Hopper Bolts using the provided speed driver. The two bolts on the Chamber Lid may be removed for additional cleaning.

-Loosen the two Hopper Bolts using the disassembly tool provided. The two bolts on the chamber lid may be loosened to be able to remove the Chamber lid for additional cleaning if necessary.

- Remove Hopper by sliding it toward the on/off switch and lifting it off the Main Shaft.

- After the Hopper is removed from the machine, remove Spacer Plate from the top of the Mold Plate. *Note--Occasionally the Spacer Plate sticks to the bottom of the Hopper. 3/4" Molds do not use a spacer plate. Retaining Rod should be left in storage position when using a 3/4" mold.

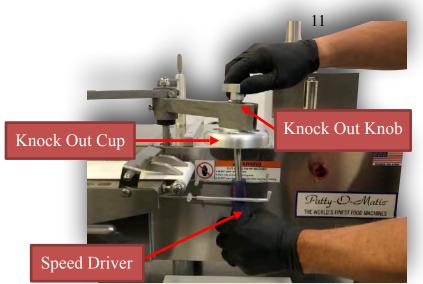
- Remove the Mold Plate by pulling the ring pin and disengaging the Connecting Arm from the T-Knob. This will allow the Mold Plate to be removed from between the Guide Rails and removed from the machine. The T-Knob may also be un-screwed from the Back Drive as an alternate means of disassembly.



- Remove the Knock Out Cup by loosening the Knock Out Knob while holding the other end of the bolt with the Speed Driver provided with the machine.

- All of the parts that were removed from the machine can now be washed and sanitized thoroughly. USDA recommends the sanitizing solution should be 50 parts per million but no more than 200 parts per million. The machine itself should be cleaned and sanitized by hand. After all the parts are cleaned, sanitized and dry they should be coated in mineral oil as an extra protectant.

DO NOT HOSE DOWN OR PRESSURE WASH THIS MACHINE!



*To Re-Assemble the Machine reverse the above procedure. Hopper bolts should only be hand tightened with the speed driver provided.

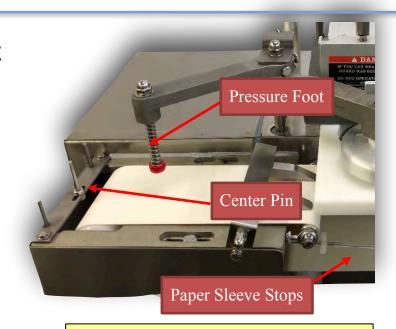
*The Knock Out Cup Should be installed on the Machine before the Feed Tray and Mold Plate Guard, but after all other parts are in place. The Mold Plate should be all the way forward and the Knock Out Arm should be in the down position for the cup to align with the Mold Plate properly.

Installing Patty Paper on Interleaver

-Place a stack of paper no thicker than 1 inch under the pressure foot. Slide the hole in the paper over the center pin.

*Placing more than 1 inch of paper may cause improper paper feeding.

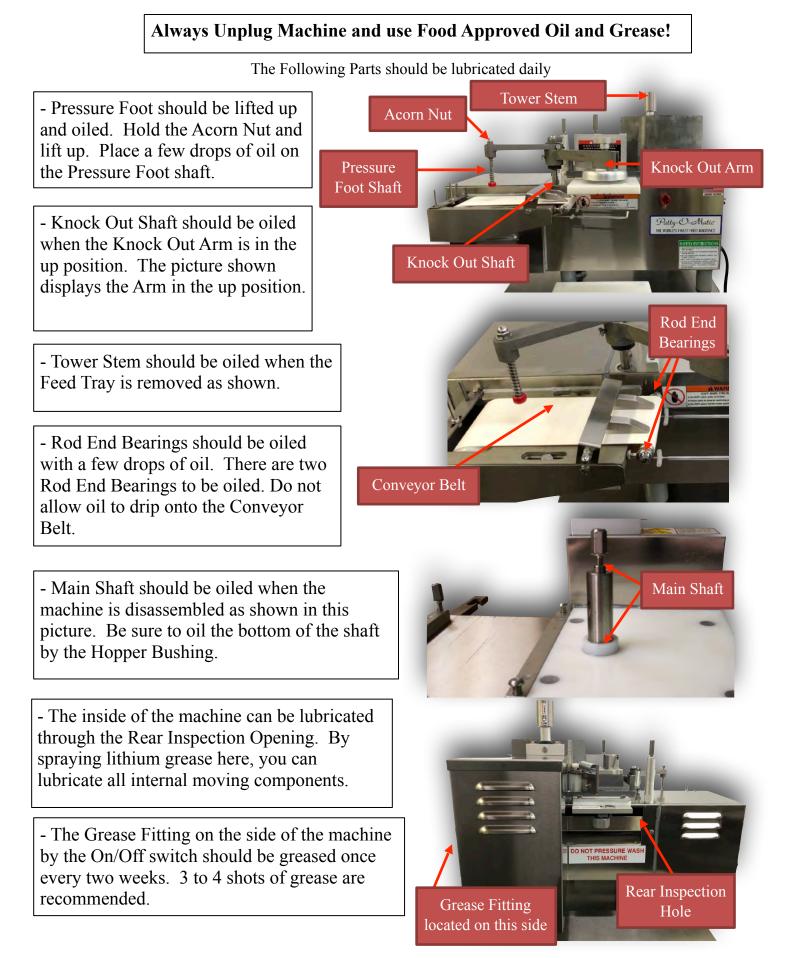
Paper Sleeves Stops should be adjusted for different size patty paper

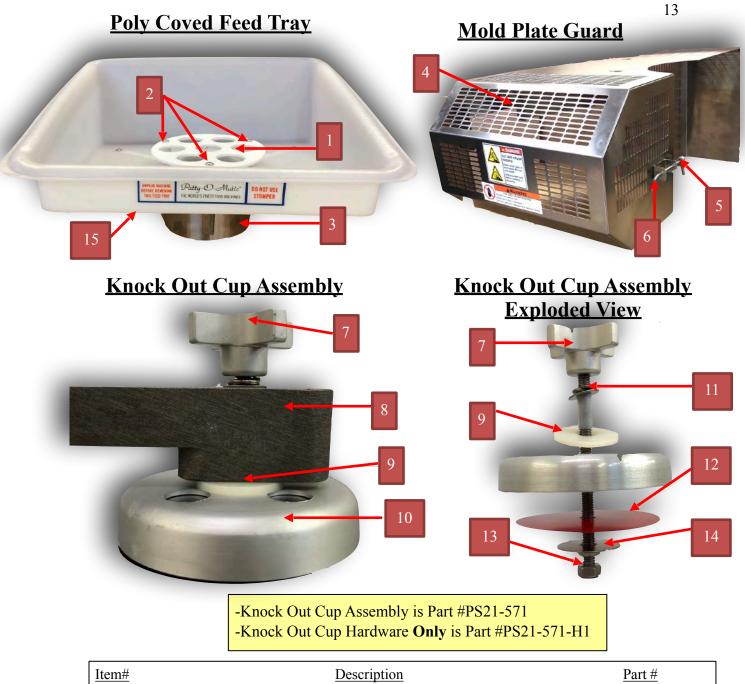


Shown without guard for better visual

Patty-O-Matic Inc. offers the highest quality patty paper, machine lubricant, and
machine grease. Please contact the factory for information on these products.732-938-5244www.pattyomatic.cominfo@pattyomatic.com

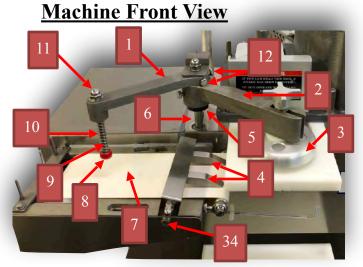
Points of Daily Lubrication For Your Model PS21:





Item#	Description	Part #
1	Quick Feed Tray Guard Assembly	543-QP
2	Feed Tray Guard Hardware	541-B
3	Stainless Steel Flange Support	554
4	Mold Plate Guard Assembly	PS21-550SC
5	Push Rod Collar	553-1B
6	Push Rod	553-5
5&6	Push Rod and Collar Assembly	553
7	Knock Out Knob	PS21-571-7
8	Knock Out Arm (partial view)	502B
9	Knock Out Cup Plastic Washer	571-6
10	Round Knock Out Cup(Specify Size)	571-1
11	Knock Out Cup Flat Washer and Lock Washer	571-8
12	Knock Out Air Valve (shown in red for visual affect)	571-4
13	Knock Out Cup Bolt	571-9
14	Knock Out Cup Fender Washer	571-10
15	Feed Tray Tower Plunger and Bolt(Located on the bottom	
	of the feed tray)	620-17



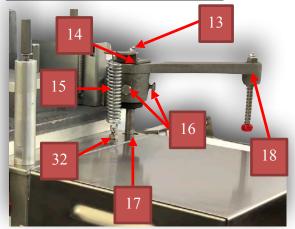


Machine Right Side View

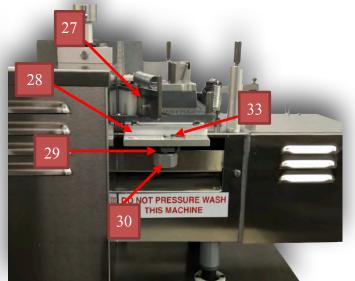


Item #	Description	Part #
1	Paper Interleaver Arm and Bolts	PS21-505
2	Knock Out Arm and Bolts	502B
3	Knock Out Cup	571-1
4	Paper Weight	532
5	Knock Out Bumper	PS21-504
6	Knock Out Shaft	PS21-449
7	Conveyor Belt	534
8	Pressure Bolt Tip	506D
9	Pressure Bolt	PS21-506
10	Pressure Foot Spring	508
11	Pressure Foot Hardware	PS21-506B
12	Paper Interleaver Arm Bolt(2)	PS21-505-1
13	Knock Out Shaft Acorn Nut	503
14	Knock Out Spring Tab	PS21-498C
15	Knock Out Spring	PS21-490
16	Knock Out Arm Bolt(2)	502-1
17	Knock Out Shaft Bushing (white b	ushing pressed
	into Machine Frame)	462
18	Paper Interleaver Arm Bushing (wh	nite bushing) 505-1B

Machine Left Side View



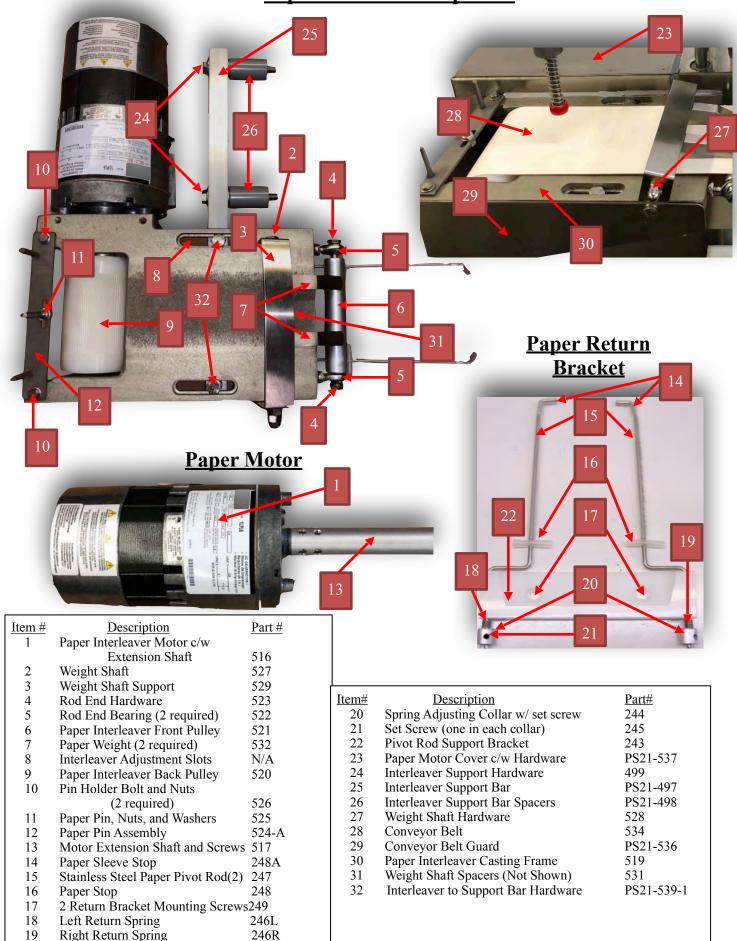
Machine Rear View



Item#	Description	Part#
19	Feed Tray Tower Sleeve	620-16
20	Feed Tray Tower Block	620-6
21	Tool Holder	601
22	On/Off Switch	500
23	Power Cord	115-01
24	On/Off Switch Guard	501
25	Round Key Latch Assembly	PS21-553-R
26	Plunger Switch(Located inside machine)	608-1B
27	Ring Pin Pressure Plate	546-3
28	Mold Plate Back Drive	564
29	Connecting Arm	455
30	T-Knob	567
31	Grease Fitting	701
32	Knock Out Spring Threaded Holder	490E
33	Ring Pin	546C
34	Weight Shaft Support Hardware	530

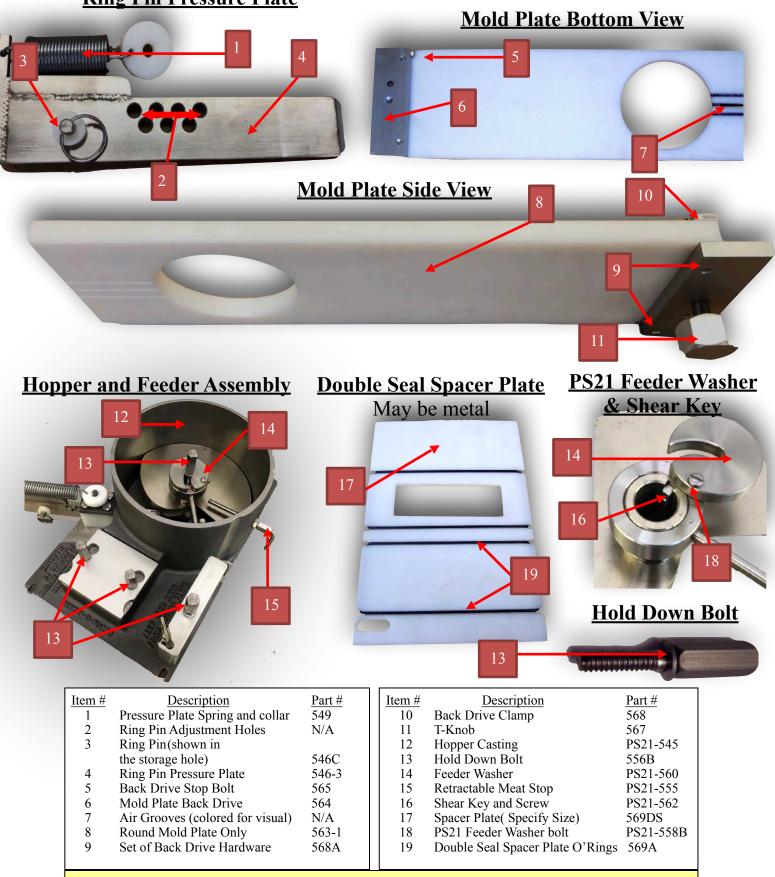
Many parts are also sold as assemblies. Please contact the factory for further information: Toll Free in the U.S.A. 877-938-5244 Outside the U.S.A. 732-938-2757

Paper Interleaver Top View



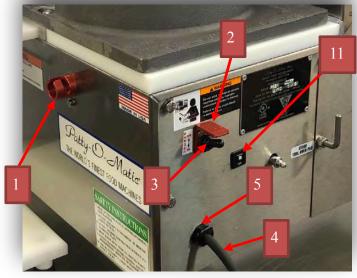
16

<u>Ring Pin Pressure Plate</u>



Part # PS21 -563 - Mold Plate Assembly -Includes Round Mold Plate, Back Drive Assembly and Knock Out Cup Assembly *Other Shapes Available*

Machine Switches Front View

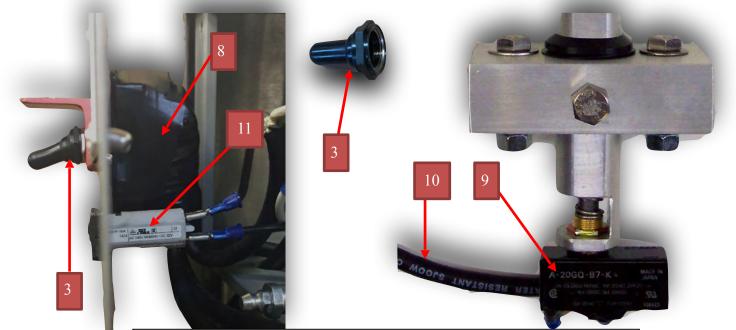


On/Off Switch Interior View

Guard Switch Interior View

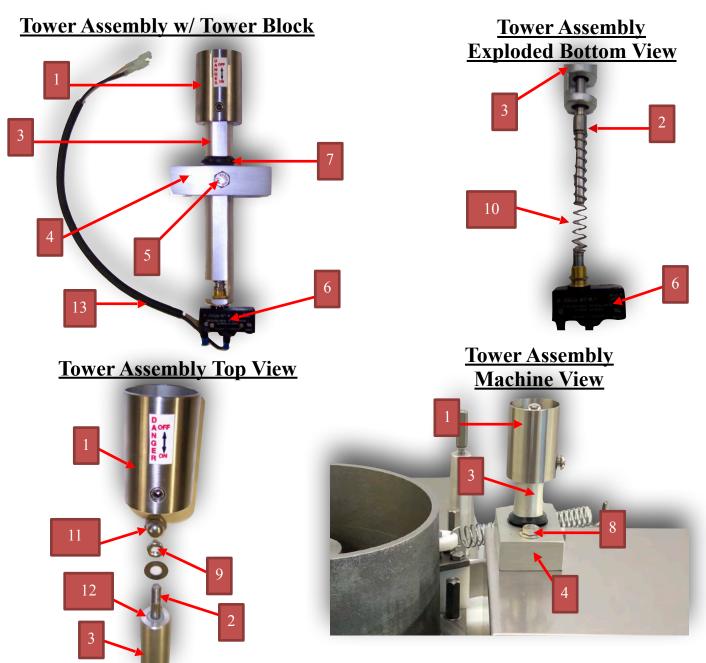


Tower Switch Interior View

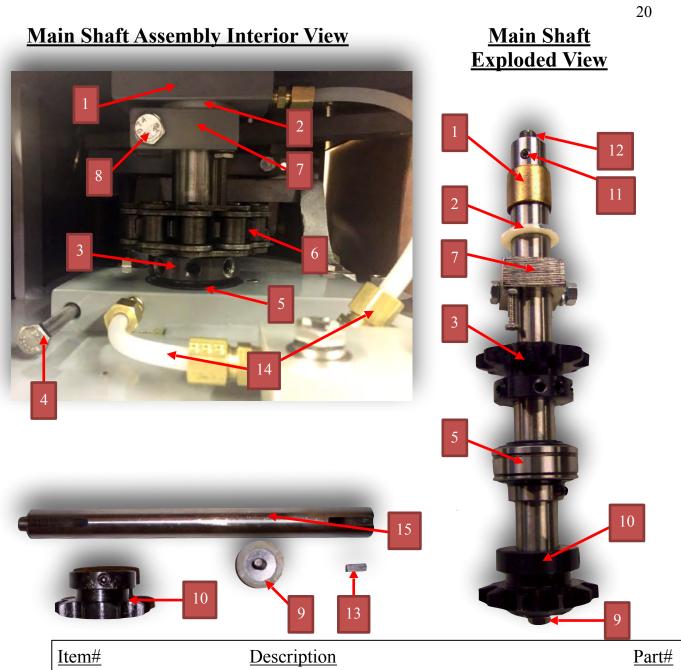


Item#	Description	Part
1	Round Key Latch	609-A1
2	On/Off Switch Guard	501
3	On/Off Switch Boot	500B
4	Power Cord	115-01
5	Wire Grommet	487
6	Guard Switch	608-1B
7	Guard Switch Wire	608-1D
8	On/Off Switch (insulated in electrical tape)	500
9	Tower Switch	620-10B
10	Tower Switch Wire	620-10A
11	15 AMP Circuit Breaker	115-15

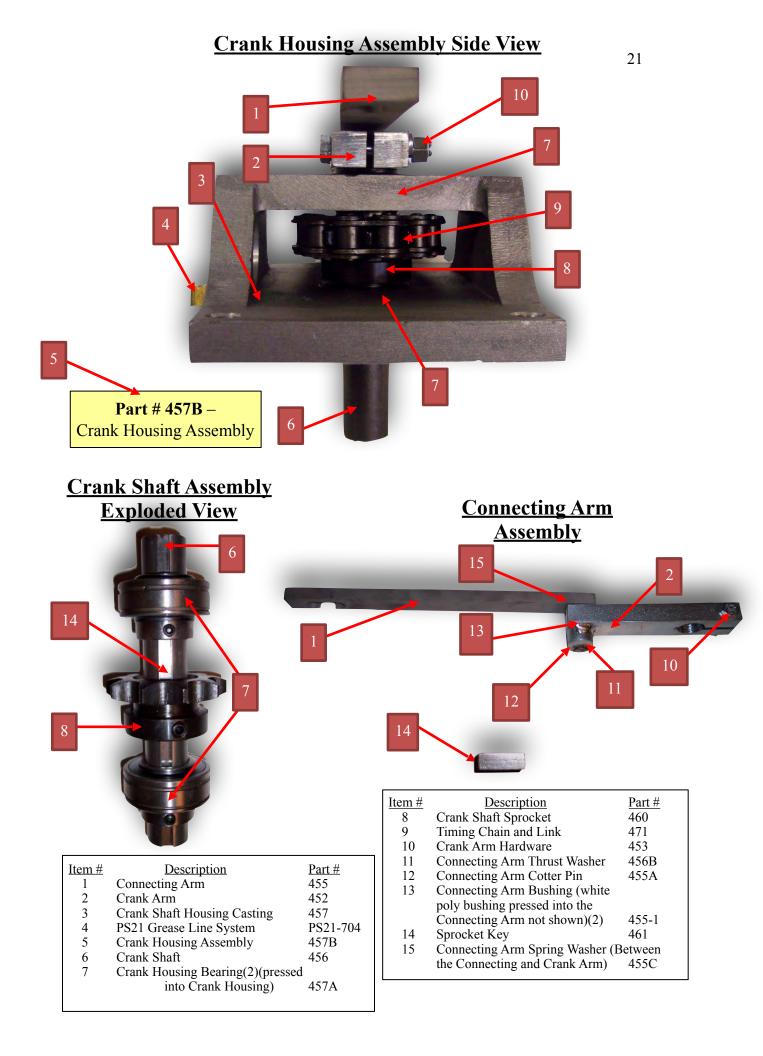
Part # 608-5A – Includes Guard Switch and Wire Part # 620-10 – Includes Tower Switch and Wire

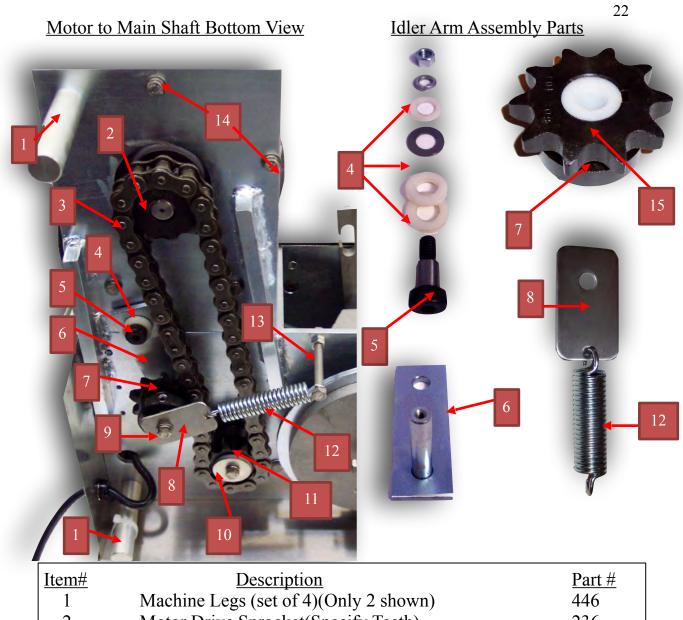


Item#	Description	<u>Part #</u>
1	Tower Sleeve	620-16
2	Tower Stem	620-3
3	Tower Tube	620-5
4	Tower Block	620-6
5	Tower Locator Lock Bolt	620-7
6	Tower Switch	620-10B
7	Rubber Seal	464S
8	Tower Block Hardware	620-8
9	Tower Jam Nut	620-06
10	Tower Spring	620-9
11	Tower Acorn Nut	620-15
12	Tower Bushing	620-4
13	Tower Switch Wire	620-10A



Item#	Description	Part#
1	Main Shaft Bushing (pressed into Machine Frame)	470
2	Main Shaft Thrust Washer	469-1
3	Timing Sprocket	465T
4	Chain Tension Adjuster Bolt	463
5	Main Shaft Bearing (pressed into Machine Frame)	464A
6	Timing Chain and Link	471
7	Main Shaft Clamp	467
8	Main Shaft Clamp Hardware	468
9	Main Shaft Fender Washer and Hardware	240-1
10	Main Shaft Driven Sprocket(Specify Amount of Teeth)	240
11	Main Shaft Threaded Insert Set Screw	464-2
12	Main Shaft Threaded Insert c/w Set Screw and Locking Nut	464-1
13	Main Shaft Sprocket Key	241
14	Grease Line System(Not completely shown)	PS21-704
15	Main Shaft C/W Insert and Set Screw	464





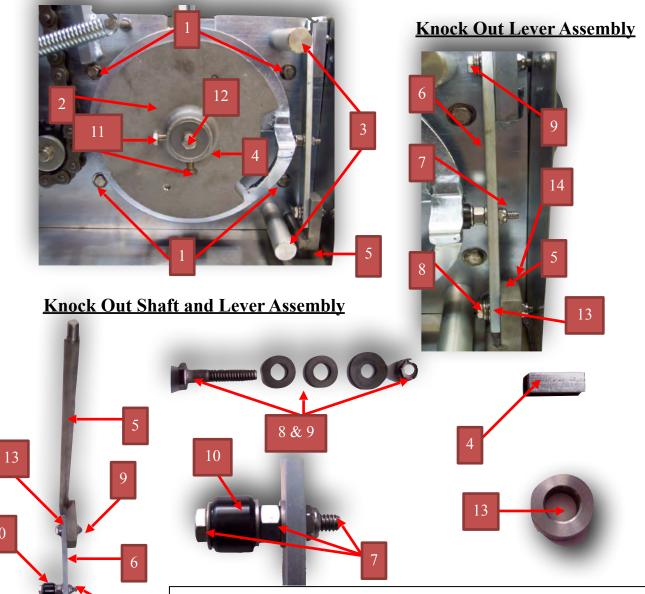
	Description	<u>1 alt #</u>
1	Machine Legs (set of 4)(Only 2 shown)	446
2	Motor Drive Sprocket(Specify Teeth)	236
3	Motor to Main Shaft Chain and Link	239
4	Idler Arm Shoulder Bolt Hardware	229B
5	Idler Arm Shoulder Bolt	229A
6	Idler Arm	230-A
7	Idler Arm Sprocket and Bushing Assembly	232
8	Idler Arm Spring Tab	231A
9	Idler Arm Spring Tab Hardware	231B
10	Main Shaft Fender Washer and Hardware	240-1
11	Main Shaft Driven Sprocket(Specify Teeth)	240
12	Idler Arm Spring	231
13	Idler Arm Spring Bolt and Hardware	235
14	Gear Head Motor Mounting Hardware(set of 5)	284B
15	Idler Arm Sprocket Bushing(Set of 2)	234
Dant # 220 Idlan Ann Assambly Includes enving tab ann and all handware		

Part # 229 – Idler Arm Assembly - Includes spring, tab, arm, and all hardware

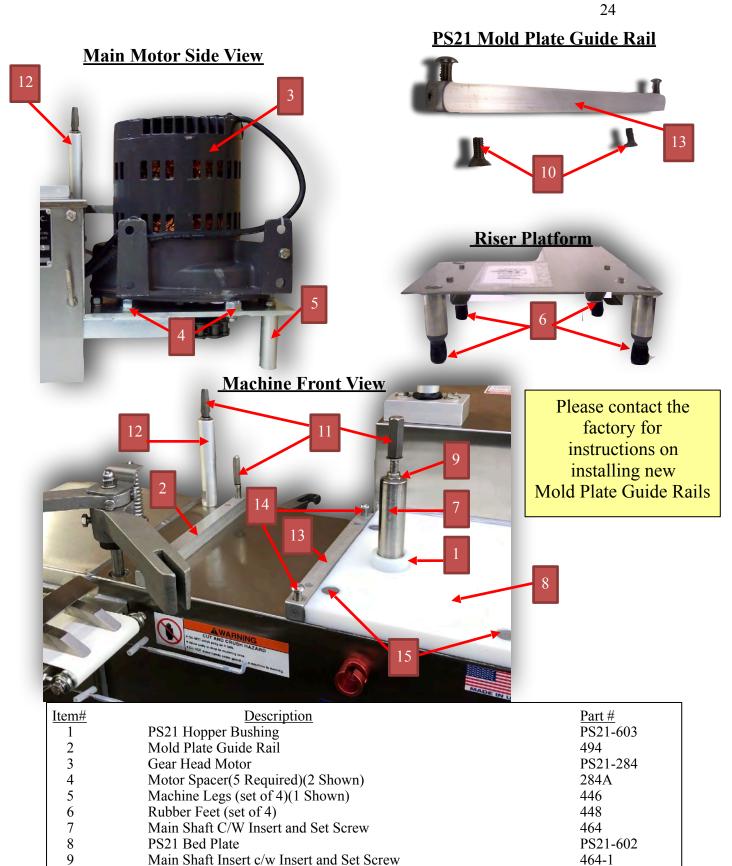
Knock Out Cam Bottom View

Part # 450X Knock Out Lever Assembly

-Includes Lever, Bushing, Cam Bearing, and all Hardware



<u>Item#</u>	Description	Part #
1	Crank Housing Hardware	459
2	Steel Knock Out Cam Assembly	472-S
3	Machine Legs (set of 4)(2 Shown)	446
4	Steel KO Cam Drive Key(Not Shown)	477-1
5	Knock Out Shaft	PS21-449
6	Knock Out Lever	450
7	Cam Follower Bearing Hardware	475
8	Knock Out Lever Hardware	451
9	Knock Out Lever Bushing Hardware	450B
10	Cam Follower Bearing	474
11	Steel Knock Out Cam Bolts(2)	472-S1
12	Steel KO Cam Keeper Bolt and Hardware	472-S2
13	Knock Out Lever Bushing(sits inside Knock	ζ.
	Out Lever)	450A
14.	Knock Out Shaft Bushing	

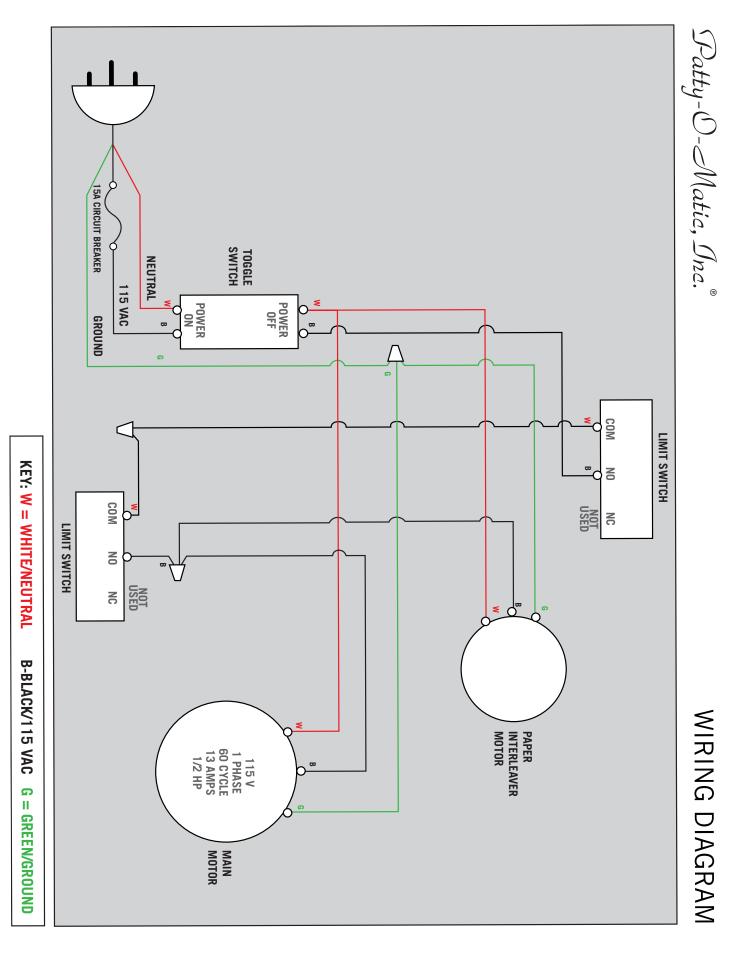


10	Mold Plate Guide Rail Bolts (set of 2 bolts)	
11	Hold Down Bolt	
12	Mold Plate Guard Rear Post Assembly	
13	PS21 Guide Rail	
14	PS21 Guide Rail Button Bolts(Set of 2)	
1.7	$\mathbf{P}(\mathbf{O} + \mathbf{D} + \mathbf{D} + \mathbf{D} + \mathbf{O} + $	

495 556B PS21-551-D PS21-494 PS21-494B PS21-602-1

PS21-494C

- 15 PS21 Bed Plate Bolts(Set of 4)
- 16PS21 Guide Rail Set Screws (Set of 2)



Warranty Information

This appliance is guaranteed to original purchaser to be free from defects in materials and workmanship.

Warranty shall be limited to repairing or exchanging any part that shows evidence of defect within One Year of the original date of purchase.

In the event of the return due to defect in material or workmanship, within the warranty period, please return in original packing case or equivalent.

Our expert factory authorized repair service is provided, and recommended for all repairs, within and beyond the warranty period.

Warranty shall not apply if appliance has been plugged into any current other than that specified; or has been tampered with or altered in any way.

Warranty does not cover parts that wear out from use or parts that are damaged or broken in use; or service claims arising due to failure to follow operating instructions.

This warranty is in lieu of all other warranties, expressed or implied. No representative or other person is authorized or permitted to make any guarantee or to assume for us any liability not strictly in accordance with the foregoing.

If you should have any further questions or require assistance with anything please do no hesitate to call the factory. We recommend that you are near the machine when you call. Please provide us with the age, serial number, model number, and mold plate size when you call.

Patty-O-Matic Vorld's Finest Food Machines

www.PattyOMatic.com

Toll Free 877-938-5244

Patty-O-Matic Inc. Model PS21

Serial Number
Date Purchased
Purchased From What Dealer
Dealer Address and Phone Number
Maintenance Performed on Machine
Owner's Notes

<u>Notes</u>