









# **MODEL 288**










## **OPERATION AND MAINTENANCE MANUAL**

## FOR USE BY QUALIFIED PERSONNEL ONLY

### Safety Summary

	<b>WARNING</b> In case of power cord damage, do not attempt to repair or replace the power cord. Contact the manufacturer or the local distributor.
	<b>WARNING</b> Hot surface. Avoid contact.
	<b>CAUTION</b> The machine is to be operated by one person only.
	<b>CAUTION</b> To reduce the risk of electric shock and injury to persons, turn the machine off and disconnect the machine from the power supply before servicing and/or cleaning.
	<b>CAUTION</b> During normal operation, the base of the machine must be installed or placed above the wall socket on a level, stable surface.
	<b>CAUTION</b> Do not lean on the machine when the lower platen is removed. Care must be taken to prevent machine from tipping over. Keep upper platen as close as to the center position.

### International Symbols

	<b>Power Off</b>
	<b>Power On</b>
	<b>Hot Surface</b>
	<b>Risk of Electrical Shock</b>
	<b>Protective Earth Terminal</b>
	<b>Ground</b>
	<b>Wet Conditions</b>
	<b>Start Action</b>
	<b>Caution – Warning</b>

### **Congratulations!**

Your selection of the Insta Graphic Systems heat seal machine is a sound business decision. Insta equipment is the result of the highest quality engineering and time-tested design. Your new machine, combined with Insta's reputation for innovation in the heat-sealing field, ensures that you will be able to deliver the best-decorated substrates possible for years to come.

This manual provides the installation, operation, and maintenance procedures for your 288 series machine, as well as easy to follow instructions for on-the-spot maintenance.

Your model 288 machine will have a long, trouble-free life. Read this manual. Keep it with your machine; it's your key to proper operation and lasting service.

### **General Description**

The 288 is a manual swing-away machine capable of generating tremendous pressure that is evenly distributed across the area of the 20" x 25" platen. The 288 machine also features a quick-change mechanism in the lower platen allowing the lower platen to be switched or rotated in a matter of seconds. The heating platen features a cast-in tubular heating element that is densely coiled to deliver rapid heating and constant, long-lasting and uniform temperatures.

### **Limited Machine Warranty**

Insta Graphic Systems warrants this heat seal machine, when operated under normal conditions, to be free from manufacturing defects in material and workmanship for a period of one (1) year on parts and 90 days on labor from the invoice date.

This warranty will be effective only when Insta authorizes the original purchaser to return the product to the factory in Cerritos, California, freight prepaid, and only when the product upon examination has proven to be defective.

This warranty does not apply to any machine that has been subjected to misuse, negligence, or has been damaged accidentally or intentionally.

Insta shall not be liable for the injury, loss, or damage, directly or indirectly, arising from the use or the inability to use the product.

No claim of any kind shall be greater in amount than the sale price of the product or part to which claim is made.

See extended warranty information at the end of the manual.

Please fill out the following for future use:

**MODEL NO:**

**SERIAL NO:**

**MANUFACTURE DATE:**

**PURCHASE DATE:**

**PURCHASE VENDOR:**

## FOR USE BY QUALIFIED PERSONNEL ONLY



### 288 N MODEL, 230 VOLT

Use a **designated** 16 Amp AC circuit. Only industrial extension cords with proper wire size (2.5 mm<sup>2</sup>) shall be used.

### IMPORTANT



The appliance must be plugged into a proper receptacle of the proper size and rating. Equally important, the line voltage must be able to accommodate this appliance as well as *other appliances operating on this circuit.*

### Specifications

Voltage	<b>230 Volts AC</b>	50/60 Hertz
Model 288 230 V	3300 Watts	14.3 Amps
Machine Weight (Dry)	145 lbs	65.9 kg
Shipping Weight (Box & Pallet)	189 lbs	85.9 kg

### Degree of Protection

The IP (Ingress Protection) rating of this machine according to IEC 60529 is:

IP54 = IP

1<sup>st</sup> Digit = 5 (Dust Protected)

2<sup>nd</sup> Digit = 4 (Splashing Water)

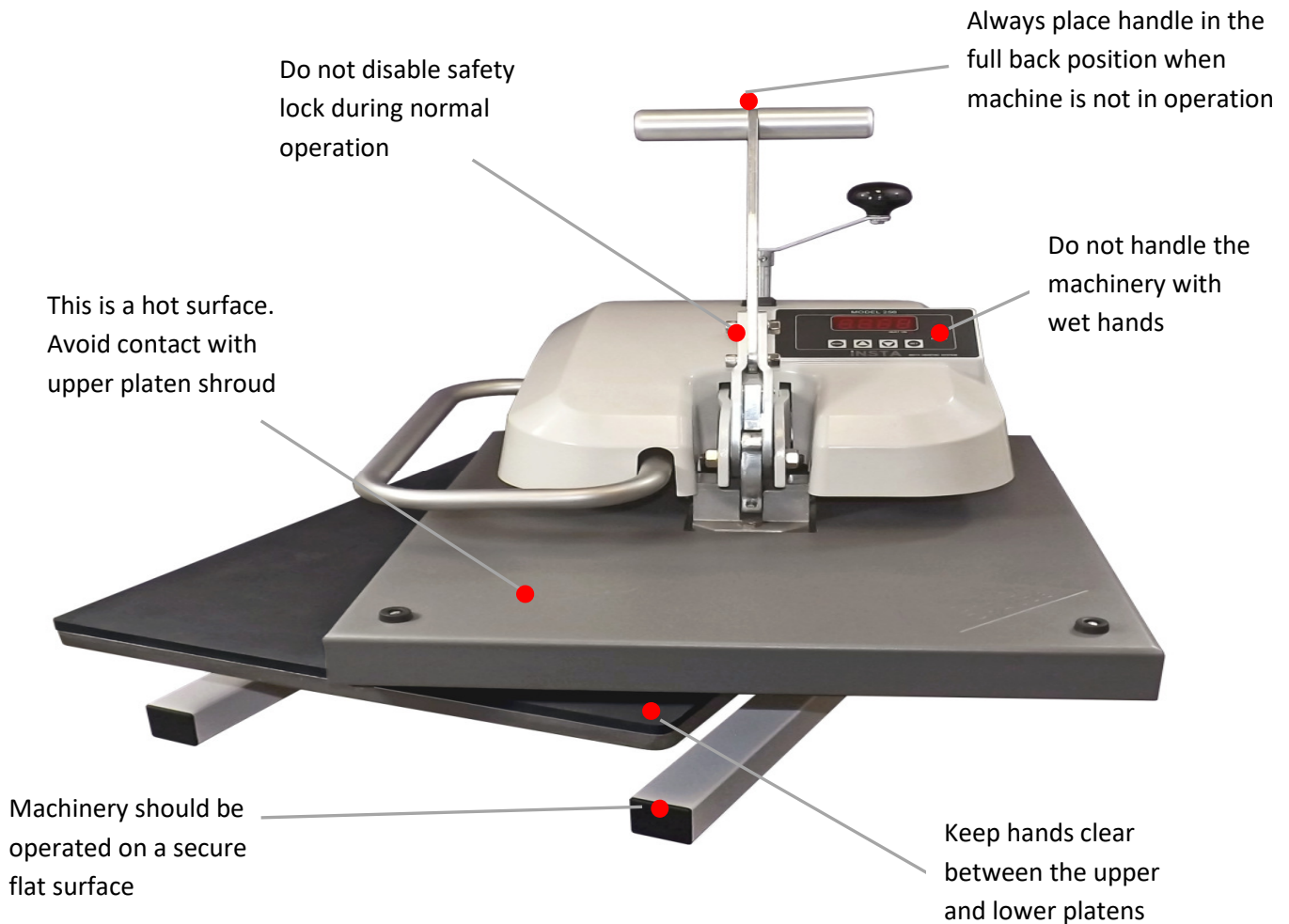
1 <sup>st</sup> Digit	Protection from solid objects	2 <sup>nd</sup> Digit	Protection from moisture
0	Not protected	0	Not protected
1	Objects greater than 50 mm	1	Dripping water
2	Objects greater than 12 mm	2	Dripping water when tilted up to 15°
3	Objects greater than 2.5 mm	3	Spraying water
4	Objects greater than 1 mm	4	Splashing water
5	Dust protected	5	Water jets
6	Dust tight	6	Heavy seas
--	---	7	0.15 m – 1 m immersion
--	---	8	+1 m submersion

#### NOTE:

*IEC 60529 does not specify sealing effectiveness against the following: mechanical damage of the equipment; the risk of explosion; certain types of liquid conditions, e.g. those that are produced by condensation; corrosive vapor; fungus; vermin.*

## FOR USE BY QUALIFIED PERSONNEL ONLY

### Safety and Danger Zone Diagram



#### Operating Environment

To maximize user safety, ensure that the following operating conditions are met:

1. The machine is placed on an even, non-flammable surface.
2. The surface can support a minimum of 300 lbs (136 kg).
3. The workspace does not restrict access to the main power switch or power cord.
4. The workspace is free of any forms of liquid.
5. The power cord is not overextended.
6. The machine is connected to a surge protector.

Taking these steps is crucial in maximizing user safety and ensuring a long, trouble-free life for your machine!

## Configuring Your Machine

Once you have correctly installed your machine, you will want to configure the settings of your machine to match your needs.

### 1. Turn the machine on

Plug your machine in, turn the main power switch on, and press the **POWER** button on the control panel.



The display will briefly show the controller program revision number.

### 2. Set the operating Temperature

- a. If the temperature is not shown, press **MODE** to cycle to the temperature display.



#### NOTE:

If the platen temperature is **BELOW** 225 °F **OR** 107 °C, the controller will display "Lo F" or "Lo C" depending on the units the controller is set to.

- b. Press **SET** to display the current set temperature.



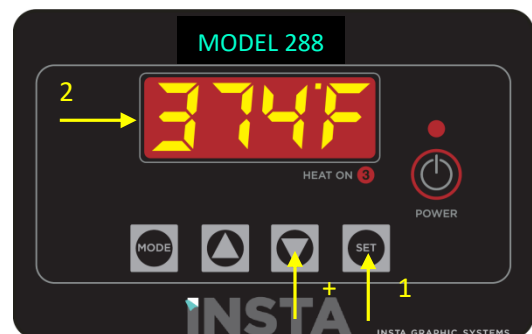
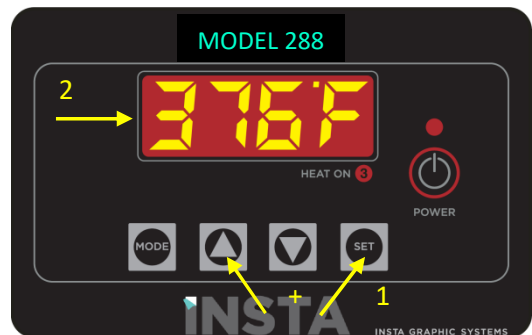
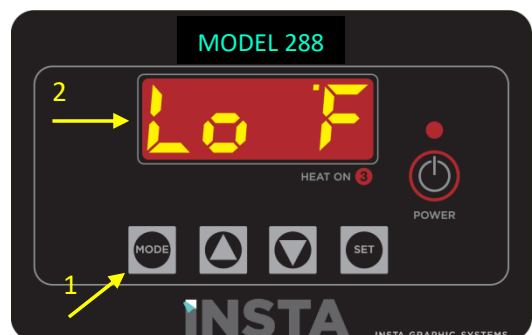
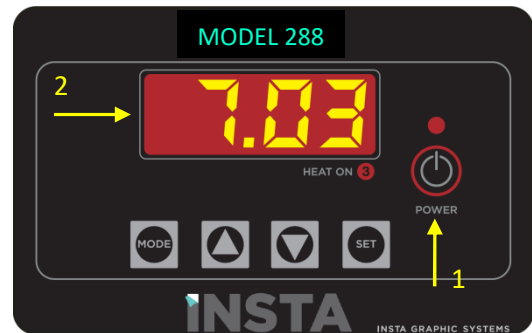
To raise the temperature, hold **SET** and **UP**.



To decrease the temperature, hold **SET** and **DOWN**.



### 3. Give the machine time to heat



#### NOTE:



Heating may take between 20 to 45 minutes depending on the set temperature. Do not leave the machine unattended during this time!

## FOR USE BY QUALIFIED PERSONNEL ONLY

### 4. Set the desired Pressure

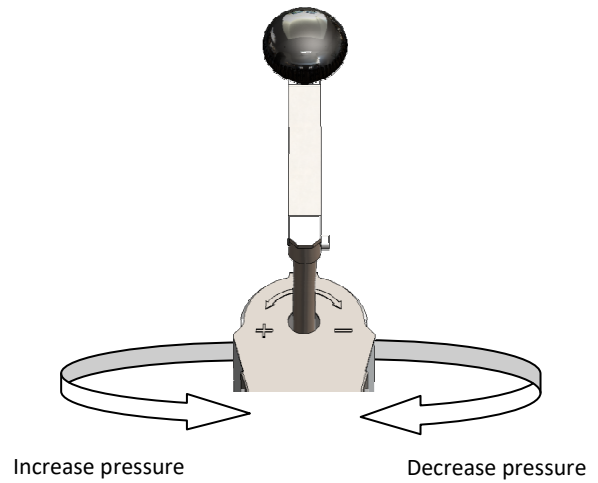
Adjust the pressure adjust crank located behind the top housing.

- a. Turn the crank **CLOCKWISE** to **DECREASE** the pressure.
- b. Turn the crank **COUNTER-CLOCKWISE** to **INCREASE** the pressure.

#### NOTE:



*Increasing the pressure increases the force required to close the platens. To avoid user injury or damage to the machine, do not attempt to force the platens closed at very high pressure levels.*



### 5. Set the Application time

- a. Press **MODE** to cycle to the time display.



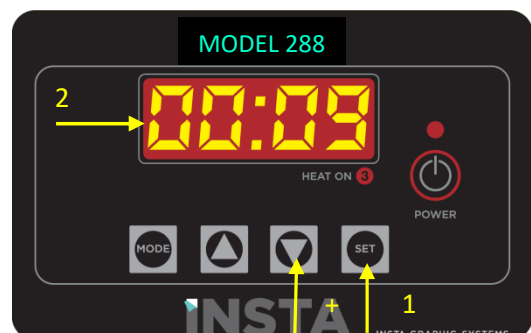
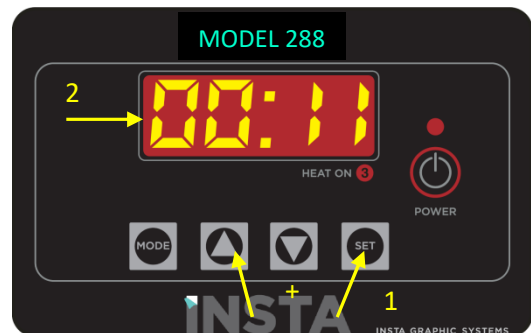
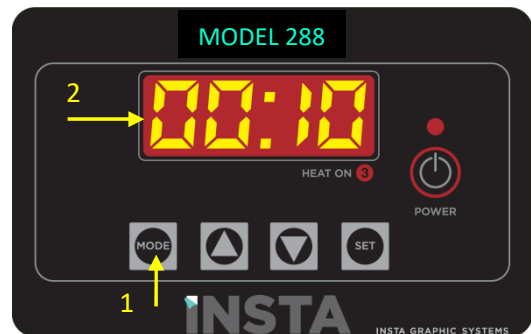
- b. Press **SET** to display the application time.



To increase the application time, hold **SET** and **UP**.



To decrease the application time, hold **SET** and **DOWN**.



## Basic Operation

1. Swing the upper platen to the right using the stainless steel handle.
2. Place the substrate on the lower platen.
3. Position the transfer or lettering on the substrate.
4. Swing the upper platen back using the stainless steel handle.
5. Close the platens by pulling the handle down with both hands until the machine self-locks.



### NOTE:

*Do not attempt to force the platens closed. Doing so may result in user injury or damage to the machine.*

6. The timer will start automatically when the platens are closed. A buzzer will sound when the timer reaches zero.
7. Release the handle lock and bring the handle up completely to the back to keep the platen raised. Swing away the upper assembly and remove the substrate.



### WARNING:

*Use only the stainless steel handle to swing the upper platen open and closed. Do not push or pull the upper platen to swing the top assembly.*



### WARNING:

*When replacing the lower platen, Raise up and keep the upper platen close to the center position, Do not lean on machine to prevent tipping over.*

## Controller Features

### Basic Controller Functions

This controller has two (2) main control features:

1. **Temperature** – the temperature may be set from 225 – 425 °F (107 – 218 °C).
2. **Timer** – the cycle timer may be set from 1 second to 99:00 minutes.

### Temperature Control

The temperature control has a range from 225 – 425 °F (107 – 218 °C). The temperature unit can be switched between °F and °C, and a temperature offset can be applied to adjust the temperature reading (see *advanced controller functions on pg.8*). For setting the set temperature, see *Configuring your Machine on pg. 5*.

### Timer

The controller features an application timer that will countdown and will start beeping when the timer has reached 0. The time display is in the minutes:seconds format, and ranges from 00:00 to 99:00. When the timer is running, the colons (:) will flash. For setting the application timer, see the basic operations section.

## Advanced Controller Functions

### Automatic Shut Off

The automatic shut off function is designed to reduce electrical usage when the Insta heat seal machine is idle. When active, any user input such as key presses or starting a heat press cycle will reset the timer for the automatic shut off.

The automatic shut off has a **non-adjustable timer of 2 hours**. By default, the automatic shut off is **on**.

### Setting the Automatic Shut Off

The automatic shut off can be set to **ON** or **OFF**.

1. Press **MODE** to cycle to the **TIMER**.



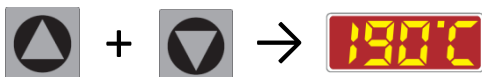
2. Press and hold **UP** and **DOWN** for 3 to 5 seconds to turn the automatic shut off **ON** or **OFF**.
  - a. **ONE** beep indicates that the automatic shut off is **OFF**.
  - b. **TWO** beeps indicate that the automatic shut off is **ON**.

### Changing the Temperature Scale

1. Press **MODE** to cycle to the **TEMPERATURE**.



2. Press and hold **UP** and **DOWN** for 3 to 5 seconds to switch the temperature scale.



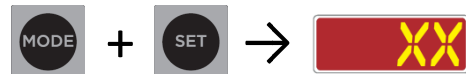
### Setting the Temperature Offset

1. Switch the temperature scale to Fahrenheit.
2. Let the platen temperature stabilize. Use a heat-reading tool such as a pyrometer or temperature strips to find the temperature at the center of the platen.

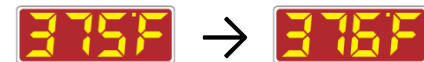
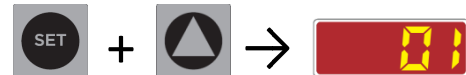
#### NOTE:

*For the best accuracy, it is suggested that the temperature offset adjustment be done in the Fahrenheit scale.*

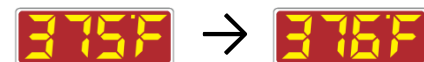
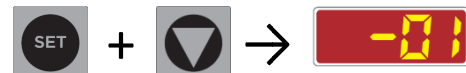
3. Enter the temperature offset adjust by pressing and holding **MODE** and **SET** for 3 to 5 seconds.



4. XX is the current temperature offset. Press **SET** and **UP** to increase the offset. Increasing the offset will increase the display temperature by the corresponding amount.



Press **SET** and **DOWN** to decrease the offset. Decreasing the offset will decrease the display temperature by the corresponding amount.



5. Change the offset so that the display temperature matches the temperature measured in step 1.
6. When the desired temperature offset has been reached, press and hold **MODE** and **SET** for 3 to 5 seconds to exit.



### Preventive Maintenance Suggestions

Insta heat seal machines are relatively maintenance free. For a long, trouble-free life, the following preventive maintenance should be followed:

1. Clean the Teflon-coated upper platen periodically with a piece of non-abrasive cloth. Stubborn stains may be removed with mineral spirits when the platen is cool. Take care not to rub the Teflon coating off.
2. To prevent the substrates from becoming soiled, periodically wipe the entire exterior of the machine, including the platens, with a clean rag. If necessary, use mineral spirits for cleaning a **cold** machine. Since mineral spirits are flammable, do not clean with mineral spirits while the machine is hot.
3. Periodically lubricate the joints and pins of the machine with a high-temperature, non-melting grease (MPPL023).
4. Avoid directly pressing items such as buttons, pins, snaps, or zippers that tend to cut the silicone rubber pad or scratch the Teflon-coated heat platen.

### General Maintenance

It is recommended that you have the following items available:

1. Phillips head screw driver
2. Needle nose pliers with insulated handle
3. Set of metric Allen wrenches
4. Special multi-purpose grease MPPL023
5. Grease Gun Kit MAPG010

With the above items you should be able to accomplish most repairs.



#### WARNING:

*Do not attempt to remove the upper platen alone.*

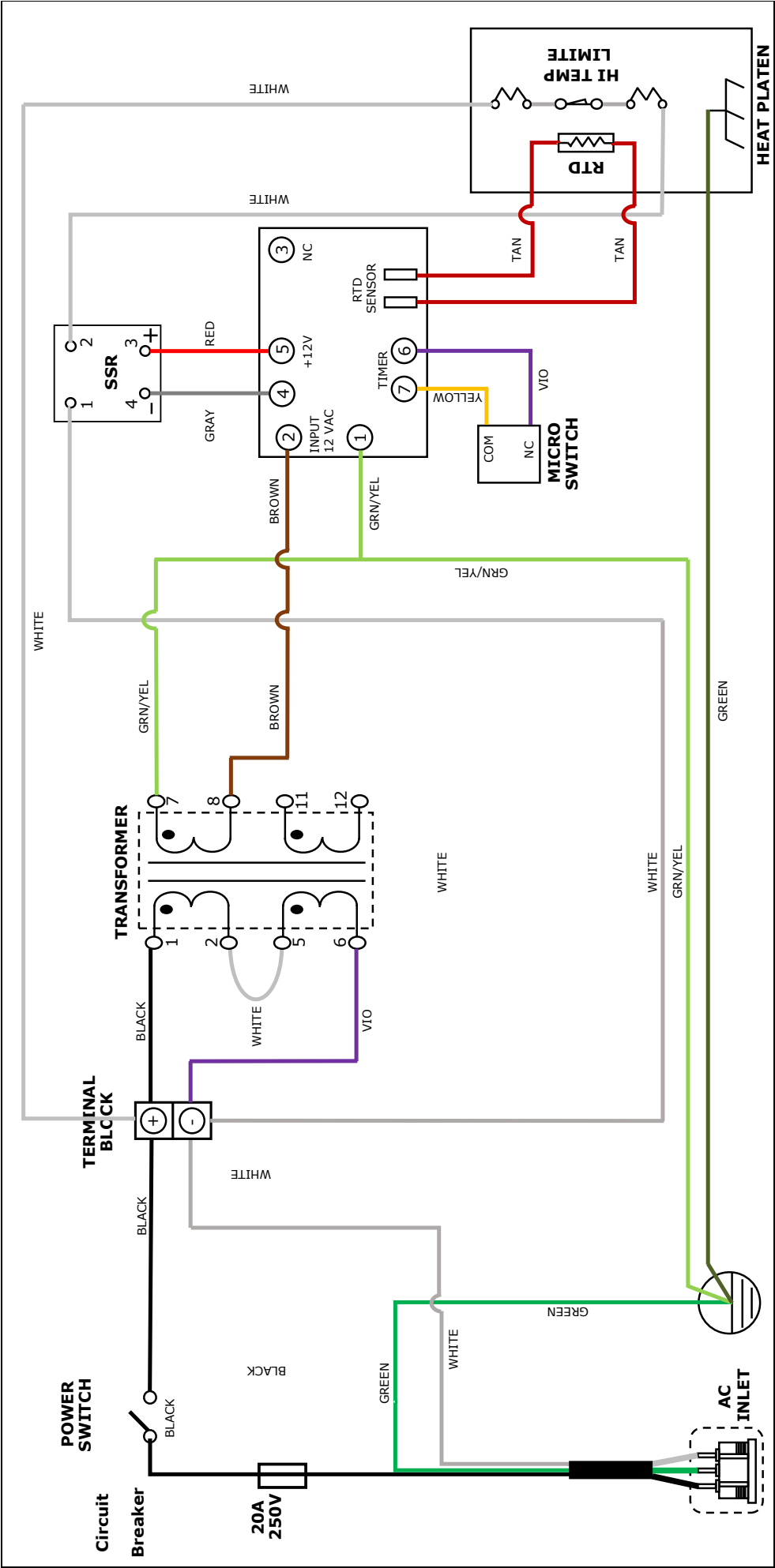
### Replacing the Silicone Pad

1. Make sure that the lower platen is cool. Remove the lower platen from the machine base.
2. Use a **mild solvent** such as **mineral spirits** to clean the surface of the lower platen.
3. Both the silicone pad and lower platen must be thoroughly dry and clean (wait at least 45 minutes after using the solvent) before starting the bonding operation.
4. Use a tube of MPPC006 adhesive to bond the silicone rubber pad to the lower platen. Spread a thin and even coat over the lower platen. Clear any excessive adhesive from the side edges of the lower platen.
5. Quickly apply the silicone pad. Make sure no air bubbles form.
6. Remove excess glue from the edges of the platen. Flip the platen over, pad-down, and allow it to cure for 24 hours at room temperature.

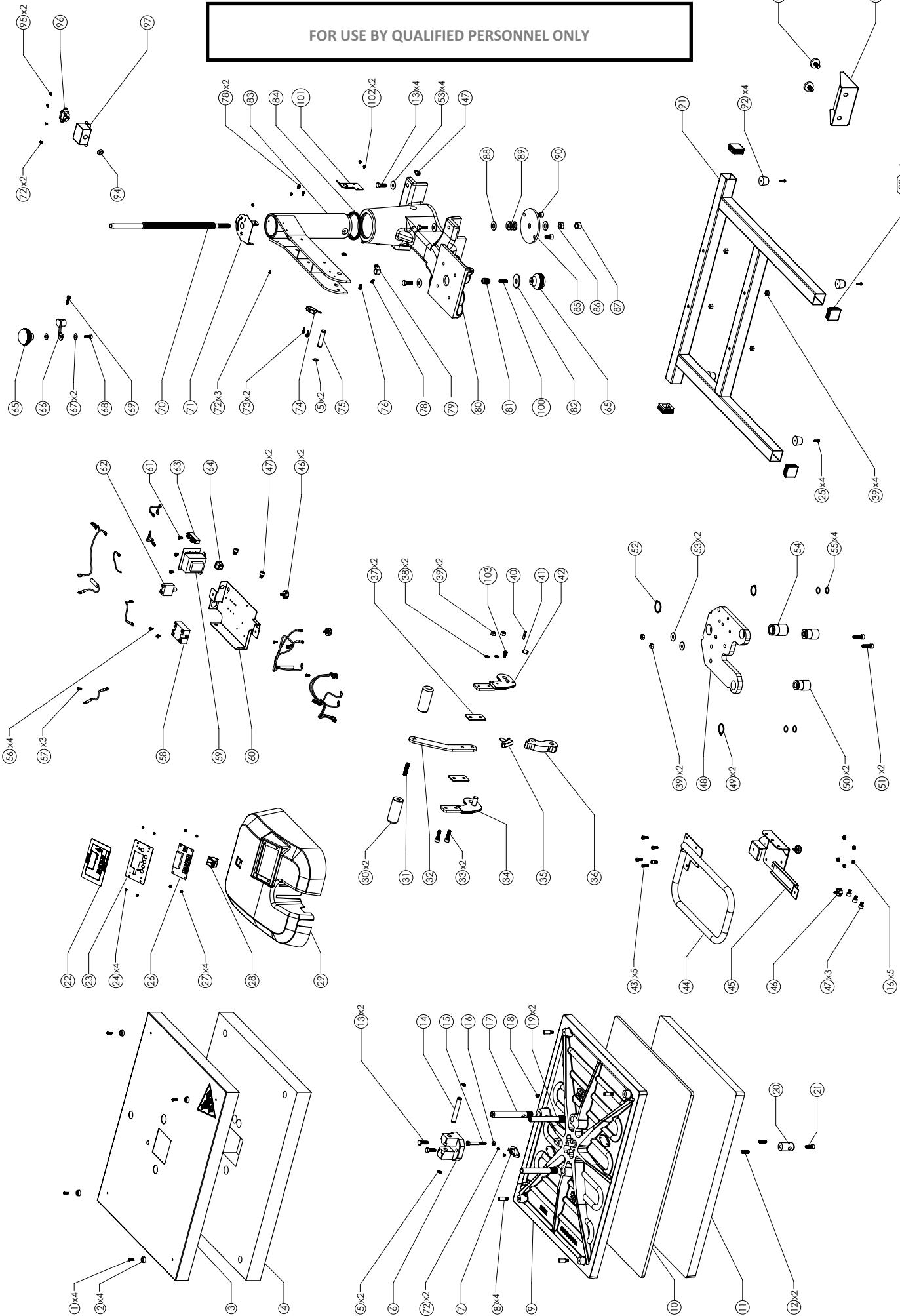
#### NOTE:

*Read and follow all instructions on the adhesive package.*

*A putty knife or similar tool is recommended for spreading the adhesive evenly on the lower platen.*



FOR USE BY QUALIFIED PERSONNEL ONLY



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ITEM No.	PART NO.	DESCRIPTION	QTY
1	MH001-M04-009	SCREW, PAN HEAD, M4 X 15	4
2	MH007-030	SILICONE RUBBER FOOT	4
3	MP288-007-011	HEAT SHROUD	1
4	MP288-007-012	FIBERGLASS INSULATION	1
5	MH007-019	C-RING, CLEVIS PIN	4
6	MP288-007-013	CLEVIS, UPPER PLATEN	1
7	MPPT046	HIGH TEMPERATURE LIMITER (230V)	1
8	MP256-003	PLASTIC STANDOFF	4
9	MP288-007-013	UPPER PLATEN, 20 X 25 (230V) WITH WIRING	1
10	MH007-054	SILICONE PAD 20 X 25	1
11	MP288-007-014	LOWER PLATEN, 20 X 25	1
12	MH256-009-001	SENSOR, RTD TEMP	2
13	MH001-M08-010	SCREW, HEX HEAD, M8 x 25	6
14	MP256-006	PIN, CLEVIS	1
15	MH288-001-001	SCREW, HEX, M6x60	1
16	MH288-002-001	NUT, HEX M6	6
17	MP256-004	GUIDE POST	1
18	MH001-M08-013	SCREW, SET, M8 x 10	1
19	MP288-007-001	LOADING BAR	2
20	MP256-009	SHAFT, LOWER PLATEN	1
21	MH001-M08-009	SCREW, SOCKET HEAD, M8 x 20	1
22	MP288-007-015	OVERLAY, CONTROLLER (288)	1
23	MP256-013	CONTROLLER BRACKET	1
24	MH288-003-001	WASHER, FLAT 3.2x10x0.8	4
25	MH288-002-002	NUT, HEX M3	4
26	MH006-003	CONTROLLER	1
27	MH288-001-002	SCREW, PAN M3x6	4
28	MP288-004-001	SWITCH, ROCKER 250V 20A	1
29	MP256-010	HOUSING	1
30	MP256-029	LEVER ARM HANDLE	2
31	MH001-M10-001	LEVER ARM HANDLE THREADED STUD	1
32	MP288-007-016	LEVER ARM	1
33	MH001-M08-005	SCREW, SOCKET HEAD, M8 x 28	2
34	MP288-001	BRACKET, ARM (L)	1
35	MP256-027	SAFETY LOCK	1
36	MP288-007-017	CAM	1
37	MP288-007-002	SPACER, ARM	2
38	MH288-003-002	WASHER, LOCK 8.3x13.6x1.6	2
39	MH002-M08-001	NUT, HEX, M8	8
40	MP288-004	PIN , SPRING	1

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ITEM No.	PART NO.	DESCRIPTION	QTY
41	MP288-005	CAP PLASTIC,BLK	1
42	MP288-002	LEVER ARM BRACKET, RIGHT	1
43	MH001-M06-013	SCREW, SOCKET HEAD, M6 x 14	5
44	MP288-007-018	SWING AWAY ARM ASSEMBLY	1
45	MP288-007-003	BRACKET ASS'Y 299x105x40	1
46	MH288-001-003	SCREW M4 22.5x22.5	4
47	MH001-M08-014	SCREW, SOCKET HEAD, M8 x 10	6
48	MP288-007-004	UPPER PLATE AL 255x200x15	1
49	MH007-059	C-RING, CLEVIS PIN (288)	2
50	MP288-007-005	TUBE, FRONT	2
51	MH001-M08-005	SCREW, SOCKET HEAD, M8 x 28	2
52	MH007-060	C-RING, CLEVIS PIN (288)	1
53	MH003-M08-004	WASHER, 8.5 x 18 x 2	6
54	MP288-007-019	TUBE, REAR	1
55	MH288-007-001	O-RING,15.8x2.4	4
56	MH288-001-004	SCREW, PAN M4x10	4
57	MH001-M04-010	SCREW STD P PAN HD (SP) & FLAT WASHER M4x10	3
58	MH005-003	RELAY, SOLID STATE 40A 24-280VAC	1
59	MP288-008-001	POWER TRANSFORMER	1
60	MP256-014	BRACKET ASSEMBLY, ELECTRONICS	1
61	MH288-001-005	SCREW, PAN M4x10	1
62	MH256-004-001	Circuit Breaker	1
63	MP288-004-002	TERMINAL BLOCK, 20A,250VAC	1
64	MH007-026	CABLE CLAMP, POWER CORD (230V ONLY)	1
65	MP256-017	PRESSURE TURN KNOB	2
66	MP288-007-006	CRANK, PRESSURE	1
67	MH003-M08-004	WASHER, 8.5 x 18 x 2	2
68	MH288-001-006	SCREW, HEX 5/16-18x1	1
69	MH001-M06-011	SCREW, SOCKET HEAD, M6 x 20	1
70	MP256-018	SHAFT, PRESSURE CRANK THREADED	1
71	MP256-022	PRESSURE HANDLE COVER	1
72	MH288-001-007	SCREW, M4x6	6
73	MH288-001-008	SCREW, PAN, M3x16	2
74	MP288-004-003	SWITCH MICRO 250VAC 11A	1
75	MP288-007-020	LEVER ARM PIN	1
76	MH256-007-001	PLUNGER	1
78	MH288-001-009	SCREW PAN, M5x10	3

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ITEM No.	PART NO.	DESCRIPTION	QTY
79	MH007-025	CABLE CLAMP	1
80	MT256-003	BASE	1
81	MB256-001-001	BOLT, QUICK CHANGE	1
82	MH288-001-010	SCREW, PAN,M4x8	1
83	MP288-007-007	ARM ASS'Y	1
84	MH007-033	RUBBER O-RING SEAL DH75-85-4.5/6	1
85	MP256-020	ADJUSTMENT WASHER	1
86	MH002-M12-001	NUT, HEX, M12 x P1.25 x 8t	1
87	MH002-M12-002	NUT, HEX LOCKING, M12 x P1.25	1
88	MH003-M13-001	WASHER, FLAT, 13.5 x 27 x 2	2
89	MP256-019	STEEL SPRING	1
90	MH001-M08-012	SCREW, SOCKET HEAD, M8 x 16	2
91	MP288-007-021	H-FRAME BASE	1
92	MP288-007-008	FOOT,BLK	4
93	MH007-028	COVER, TUBE END	4
94	MP288-007-009	GROMMET, SILICON RUBBER	1
95	MH288-001-011	SCREW, M3x6	2
96	MP288-004-004	AC INLET 15A 250V	1
97	MB256-007-003	POWER BOX (230V ONLY)	1
98	MH007-029	RUBBER ADJUSTMENT FOOTING	2
99	MP288-007-010	PLATE, SUPPORT	1
100	MH256-001-002	SCREW, SOCKET HEAD 5/16-18x1"L	1
101	MP288-007-022	PLATE, SPRING	1
102	MH001-M04-010	SCREW, TRUSS HEAD M4 X 6 (288)	2
103	MP288-007-023	SCREW, LOCKING BOLT D10X28.3	1

## **INSTA GRAPHIC SYSTEMS Heat Press Limited Warranty**

This limited warranty ("warranty") is given only to the original end-user/retail purchaser (referred to in this warranty as "Original Purchaser") of the accompanying product and accessories (collectively referred to in this warranty as "The Product").

### What is covered?

- "The Product" includes Machines, Parts and/or Accessories.
- Except as otherwise provided herein, Insta Graphic Systems ("Insta") warrants that The Product will be free from defects in materials and workmanship when used under normal conditions.

### What is the length of the Warranty Periods?

- Machines: Lifetime on the heating element, one year parts and 90 days labor from the original purchase date (end-user).
- Additional Parts and Accessory Items: 90 days from the original purchase date.

### This warranty does not cover:

- Physical damage to the Product;
- Damage caused by improper installation, improper or abnormal use, misuse, neglect or accident (including but not limited to transporting The Product without the proper preparation and/or packaging);

This limited warranty is VOID, if

- the Product has been altered or modified in any way (including but not limited to attempted warranty repair without authorization from Insta and/or alteration/removal of the serial number).
- the warranty period is expired,
- the serial number label is missing or unrecognizable,
- the defect was subject to abuse, improper use not conforming to product manual instructions
- the defect was subject to Force Majeure, such as acts of God, flood, lightning, earthquake, war, vandalism, theft, brownouts or sags (damage due to low voltage disturbances)

What to do if you think your Product is eligible for warranty service: Immediately report your issue to [service@instagraph.com](mailto:service@instagraph.com) or call Insta's Service Center at 800-421-6971. Supply the model, serial number and purchase date of the equipment.

### What Insta will ask you to do?

After contacting Insta you may be asked to deliver (by hand if you prefer) or send The Product properly packaged, freight prepaid, to Insta or Insta's service center together with your bill of

sale. A Return Authorization is required for all returned goods. Failure to obtain the RA will result in the refusal of the shipment.

**You are responsible for the cost of shipping, packing of The Product and insurance (if you desire). You are also responsible for loss or damage to The Product in shipping.**

If The Product does not operate as warranted above during the applicable warranty period, Insta shall, at its option and expense (except for shipping cost), repair the defective product or part, deliver to the customer an equivalent product or part to replace the defective item. All products that are replaced will become the property of Insta.

If The Product is not covered by this warranty, you will be charged for any service and/or replacement parts/products at Insta's then current published rates, as well as, for the freight.

What happens when Insta elects to replace your Machine?

When a replacement Machine is authorized by Insta, Insta will send a replacement Machine and issue a Return Authorization for the return of the Product. The Purchaser will be charged for the new machine at the time of the shipment. Once the machine is returned and the warranty confirmed, The Purchaser will receive a credit/refund. The replacement machine you receive (will be covered by the balance of the limited warranty period remaining on the original product, plus an additional thirty (30) days. You will keep the replacement machine that is sent to you and your original machine shall become the property of Insta.

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, WHETHER EXPRESSED BY AFFIRMATION, PROMISE, DESCRIPTION, DRAWING, MODEL OR SAMPLE. ANY AND ALL WARRANTIES OTHER THAN THIS ONE, WHETHER EXPRESSED OR IMPLIED INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. INSTA SHALL HAVE NO LIABILITY FOR DEFECTS OF ANY NATURE WHATSOEVER EXCEPT AS PROVIDED FOR HEREIN.

This Limited Warranty (and Insta's obligation to you) may not be changed in any way unless you and Insta sign the same piece of paper in which we (1) refer to The Product and your bill of sale date, (2) describe the change to this warranty and (3) agree to make that change.

Important:

We recommend that you keep all original packing materials, in the event that you need to ship the Product.

FOR USE BY QUALIFIED PERSONNEL ONLY

**NOTES:**

FOR USE BY QUALIFIED PERSONNEL ONLY

**NOTES:**



13925 E. 166<sup>th</sup> St. • Cerritos, CA USA 90702 • (800) 421-6971 • Fax (562) 404-3010

Parts Orders • (800) 426-3609 • (562) 404-3000 Ext. 215

Technical Support • (800) 426-3609 • (562) 404-3000 Ext. 208

In-House Repair • (800) 426-3609