

Operation and Maintenance Manual

# 100 Series

Heat Seal Machines



**PUT IT ON!**

*Insta Graphic Systems • 13925 E. 166th. St. • Cerritos, CA USA 90702 • [562] 404-3000 • FAX [562] 464-6616*

## THIS MACHINE IS DESIGNED TO BE OPERATED BY ONE OPERATOR ONLY

### Congratulations!

Your selection of the Insta Graphic heat seal machine is a sound business decision. Insta Graphic's equipment is the result of the highest quality engineering and time tested design. Your new machine combined with Insta's reputation of innovation in the heat sealing field, insures the continuing capability of delivering the best decorated garments possible.

This manual describes installation, operation, and maintenance procedures for your new Model 116 machine, as well as easy to use instructions for on the spot maintenance.

Your Model 116 machine will have a long trouble free life. Read this manual and keep it with your machine, it is your key to proper operation and lasting service.

### Installation



#### DOMESTIC

Use a **separate** 15 amp AC circuit. Only industrial extension cords with proper wire size should be used: size 16/3 wire for distances up to 25 feet, and size 14/3 for distances up to 50 feet.



#### INTERNATIONAL

Use a **designated** 16 amp AC circuit. Only industrial extension cords with proper wire size (2.5 sq. mm) shall be used.

### Specifications

120 Volts AC 50/60 Hertz 1450 Watts  
240 Volts AC 50/60 Hertz 1450 Watts

Shipping Weight 81 Pounds (36.8 KG)

### Limited Machine Warranty

Insta Graphic Systems (IGS) warrants this heat seal machine, when operated under normal conditions, to be free from manufacturing defects in material and workmanship for a period of six months on parts (lifetime on the heating element) and 90 days on labor from the date of shipment.

This warranty will be effective only when IGS 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 which has been subjected to misuse, negligence or accident.

IGS shall not be liable for the injury, loss or damage, direct or consequential, arising out of 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.

*This is the sole warranty given by the company, is in lieu of any other warranties, expressed or implied, in law or in fact, including the warranties of merchantability and fitness for a particular use, and is accepted as such by the purchaser in taking delivery of this product.*

### Operation

1. It is recommended that you review the "How to Apply Instructions" (in our Product Catalog) before beginning heat sealing operations.
2. Push **ON/OFF** switch to **ON** position. Set desired temperature and lift handle so that the upper platen arm is away from lower platen.



#### CAUTION

The temperature adjustment knob gets very hot during operation. Adjust only when machine is cold.

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3. Allow the machine to warm up for approximately 30 minutes. When the selected temperature is reached, the neon lamp on the power switch will cycle on and off.



### NOTE

*The thermometer indicates the internal temperature of the heat platen and will indicate a temperature approximately 15 degrees F (8.3 degrees C) higher than the actual heat platen surface. The temperature control is calibrated at the factory and indicates the **TRUE** surface temperature of the heat platen.*

4. Set the desired pressure by adjusting the pressure adjust knob on the top of the machine. To reduce pressure, turn knob counter-clockwise.
5. Place the garment on lower platen. Smooth out all wrinkles.
6. Position transfer or lettering on garment.
7. Close machine by pulling handle down into locked position.
8. Set timer for desired time cycle.
9. Bell will ring at end of time cycle. Pull handle up **slowly** and move upper platen handle to its full open position. This technique will avoid transfer paper (cover) from being pulled off prematurely due to suction from the separating platens.

### Preventive Maintenance Suggestions

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

1. Do not heat seal items such as buttons, pins, snaps, or zippers which tend to cut the

silicone rubber pad or scratch the Teflon heat platen.

2. Periodically clean the Teflon-coated heat platen with a non-abrasive piece of cloth. Stubborn stains may be cleaned, **when platen is cool**, with mineral spirits.
3. When the heat platen is hot and not in use, keep in open position (away from the silicone rubber pad).
4. To prevent soiling of garment, periodic wiping of the entire exterior machine, including platens, with a clean rag is recommended. If necessary, use mineral spirits for cleaning a **cold** machine. Since mineral spirits are flammable, use precautions and keep away from sparks, flame, or hot heat platen.
5. Occasionally apply a few drops of heavy machine oil to the moving parts of the cam assemblies and pressure adjustment screw.

### NOTE

*Wipe off any excess oil or grease.*



### Safety Summary

#### WARNING



In case of power cord damage, do not attempt to repair or replace the power cord. Contact the manufacturer or the local distributor.

#### WARNING



Avoid touching hot surfaces while operating the machine.

#### CAUTION



During normal operation, the base of the machine needs to be installed or placed above the wall socket.

#### CAUTION



When operating the machine, keep both hands on the vinyl handle.

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### International Symbols



Power Off



Power On



Hot Surface



Risk of Electrical Shock



Protective Earth Terminal



Ground



Caution - Warning

### Model 116 General Maintenance

It is recommended that you have the following items available:

- A. Regular screw driver
- B. Phillips head screw driver
- C. Small adjustable wrench
- D. Needle nose pliers with insulated handle
- E. Set of Allen wrenches
- F. 3-In One Machine Oil

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



#### WARNING

*Power cord replacement should be from the manufacturer only (because it requires a specially prepared cord).*

### Replacement of Silicone Rubber Pads

1. Make sure heat platen is cool.
2. Use tube of silicone adhesive (MPPC006) to bond silicone rubber pad to metal platen.  
**NOTE:** Read instructions on the tube package.
3. Be sure that the surface of the silicone platen is clean. Use a **mild** solvent such as **mineral spirits**.
4. The pad and metal must be thoroughly dry and clean, before starting the bonding operation.
5. Apply adhesive sealant to the metal platen. Spread a thin even coat and apply pad immediately. Apply pressure and position pad making sure that there is no air entrapment.

**NOTE:** A serrated blade such as used for laying down rubber floor tiles would be helpful.

6. Allow to cure overnight under low pressure at normal room temperature.

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### Temperature Control Replacement



**NOTE**

*Disconnect Power Supply*

1. Remove knob and shroud cover plate.
2. Disconnect the wires going to the control.



**NOTE**

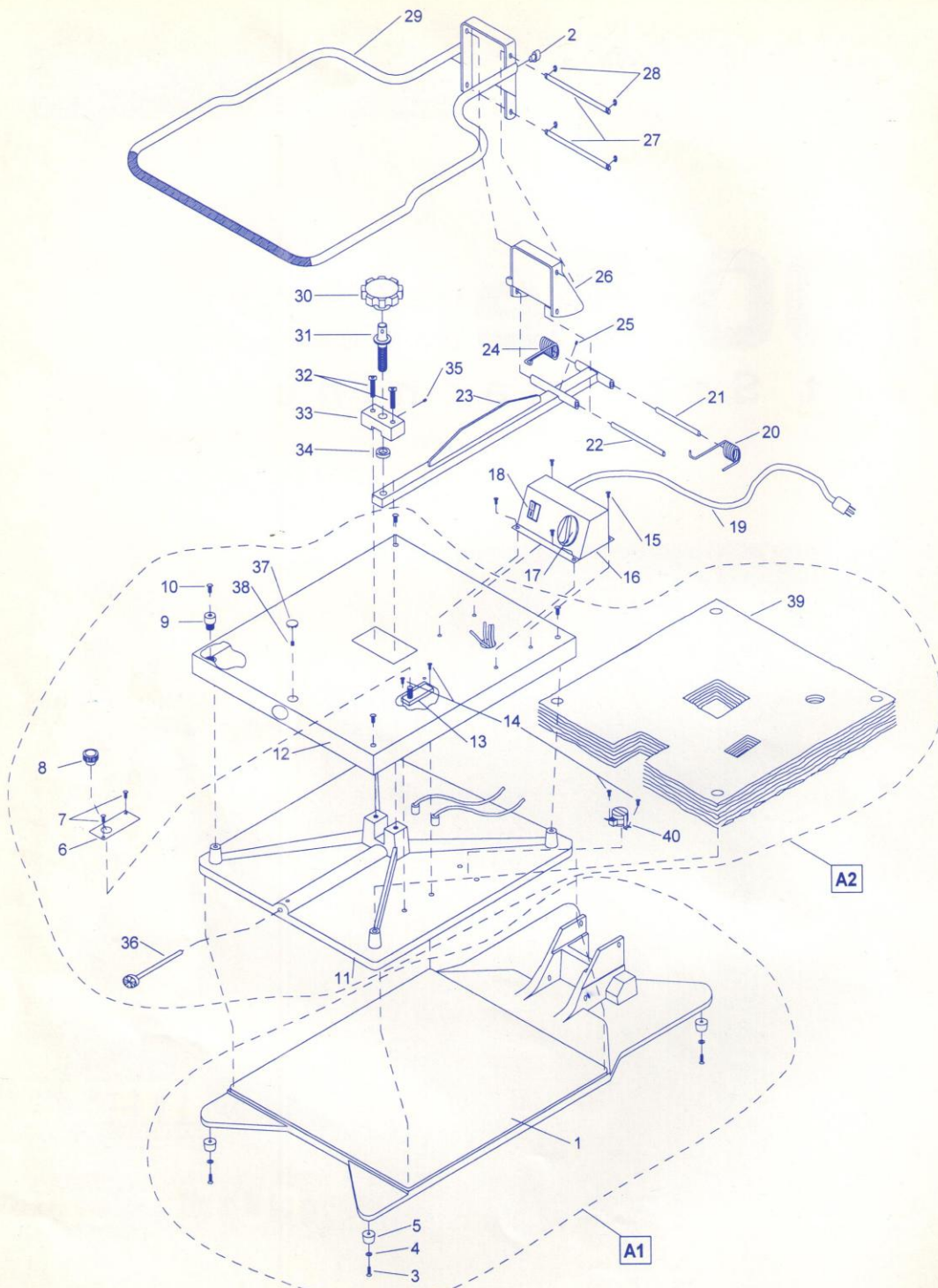
*The terminal with only one wire going to it is the **HOT** side of the line. The other terminal has two wires--one from the heating element and one from the lamp.*

3. Remove the two temperature control mounting screws.
4. Reconnect the three (3) wires to temperature control as stated in Step 2.
5. Insert the two screws which secure the control to the front of the heat platen.
6. Replace the knob and proceed with the temperature control calibration.

5. Monitor press temperature. The heater indicator lamp should turn off at approximately 410-415 degrees F.

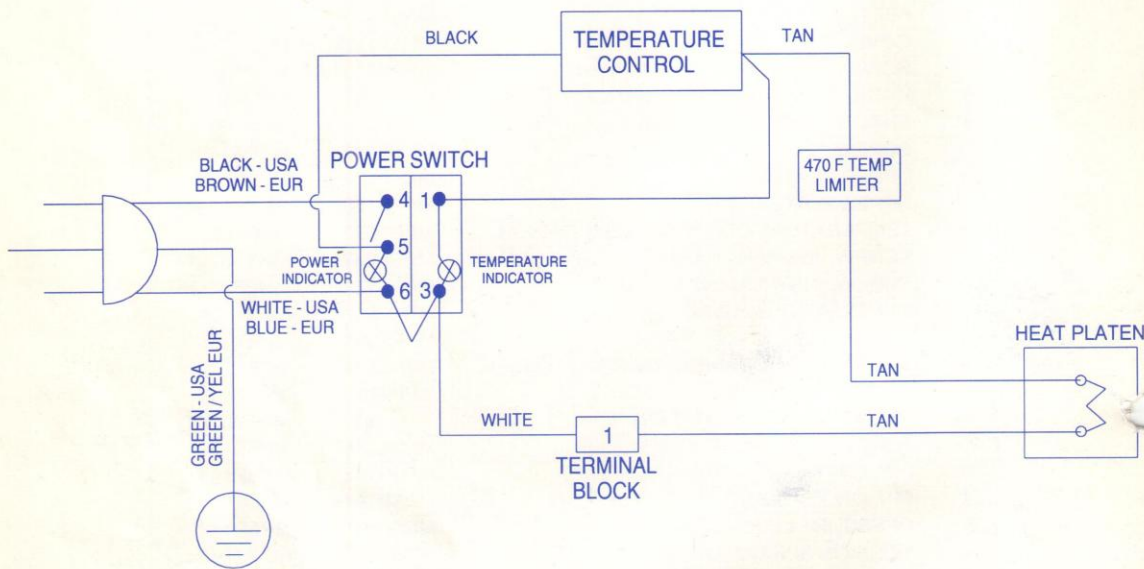
### Temperature Control Calibration

1. Heat machine to approximately 410-415 degrees F as indicated on the thermometer, **not the temperature control**. It may be necessary to adjust the knob on the temperature control several times until the heater indicator lamp turns off at 410-415 degrees F.
2. Without moving the position of the knob, carefully loosen the knob set screw and remove the knob.
3. Without rotating the temperature control shaft position the knob pointer to 400 degrees F.
4. Tighten temperature control knob set screw.



**EXPLODED VIEW MODEL 116**

NO	PART NAME	MODEL	MODEL
		116 120V AC	116 240V AC
1	PAD, SILICONE RUBBER	MPPP030	MPPP030
2	SHOCK ABSORBER	MPSB116	MPSB116
3	SCREW, RUBBER FOOT	MHSP83212	MHSP83212
4	WASHER, RUBBER FOOT	MHWSAE8	MHWSAE8
5	FEET, RUBBER (4 PER SET)	MPSF150	MPSF150
6	COVER TEMPERATURE CONTROL	MH116125	MH116125
7	SCREW, TEMP. CONTROL COVER	MHP632516T	MHP632516T
8	KNOB, TEMPERATURE CONTROL	MPSK441	MPSK441
9	SHROUD INSULATORS (4/SET)	MPSI089	MPSI089
10	SCREW, SHROUD	MPSS143	MPSS143
11	UPPER PLATEN	MPSP072	MPSP073
12	UPPER PLATEN SHROUD	MPSS116	MPSS116
13	TEMPERATURE CONTROL ASSY W/KNOB	MPPT032	MPPT032
14	SCREW, TEMPERATURE CONTROL	MHSP63214	MHSP63214
15	SCREW, INSTRUMENT HOUSING	MHP632145T	MHP632145T
16	INSTRUMENT HOUSING	MH116211	MH116211
17	TIMER, BELL	MPPT058	MPPT058
18	SWITCH, POWER / INDICATOR 240V GREEN	MPPS230	MPPS230
19	POWER CORD (USA)	MPPW161	MPPW162
19A	POWER CORD (EUROPEAN)	N/A	MPPW202*
20	TORSION SPRING (SHORT)	MPSS154	MPSS154
21	PIN, CROSS (ARM BACK) SUPPORT	MPSP163	MPSP163
22	PIN, CROSS (ARM FRONT) SUPPORT	MPSP164	MPSP164
23	PRESSURE LEVER ASSEMBLY	MPSP123	MPSP123
24	TORSION SPRING (LONG)	MPSS155	MPSS155
25	SET SCREW, PRESSURE LEVER ASSY.	MHST142014	MHST142014
26	CHANNEL ASSEMBLY	MH11650A	MH11650A
27	PIN, PRESSURE (CLIP) SUPPORT	MPSP165	MPSP165
28	E-CLIP RETAINING	MPSC240	MPSC240
29	PRESSURE HANDLE ASSEMBLY	MPSH116	MPSH116
30	PRESSURE (FLUTED) KNOB	MPPK018	MPPK018
31	PRESSURE ADJUSTMENT SCREW	MPSS117	MPSS117
32	SCREW, CLEVIS BAR	MHH1420112	MHH1420112
33	CLEVIS BAR SUPPORT	MPSP121	MPSP121
34	PRESSURE ADJUST LOCKNUT	MPSP247	MPSP247
35	SET SCREW, PRESSURE ADJ. LOCK NUT	MHST103218	MHST103218
36	THERMOMETER	MPPT056	MPPT056
37	PLUG, BUTTON	MHPB12	MHPB12
38	SET SCREW, THERMOMETER	MHST142038	MHST142038
39	FIBERGLASS INSULATION	MPSP251	MPSP251
40	HI TEMPERATURE LIMITER	MPPT046	MPPT046
A1	BASE ASSEMBLY	MPSB117	MPSB117
A2	UPPER PLATEN ASSEMBLY (COMPLETE)	MPSP020	MPSP021



**WIRING DIAGRAM MODEL 116**

# INSTA GRAPHIC SYSTEMS

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