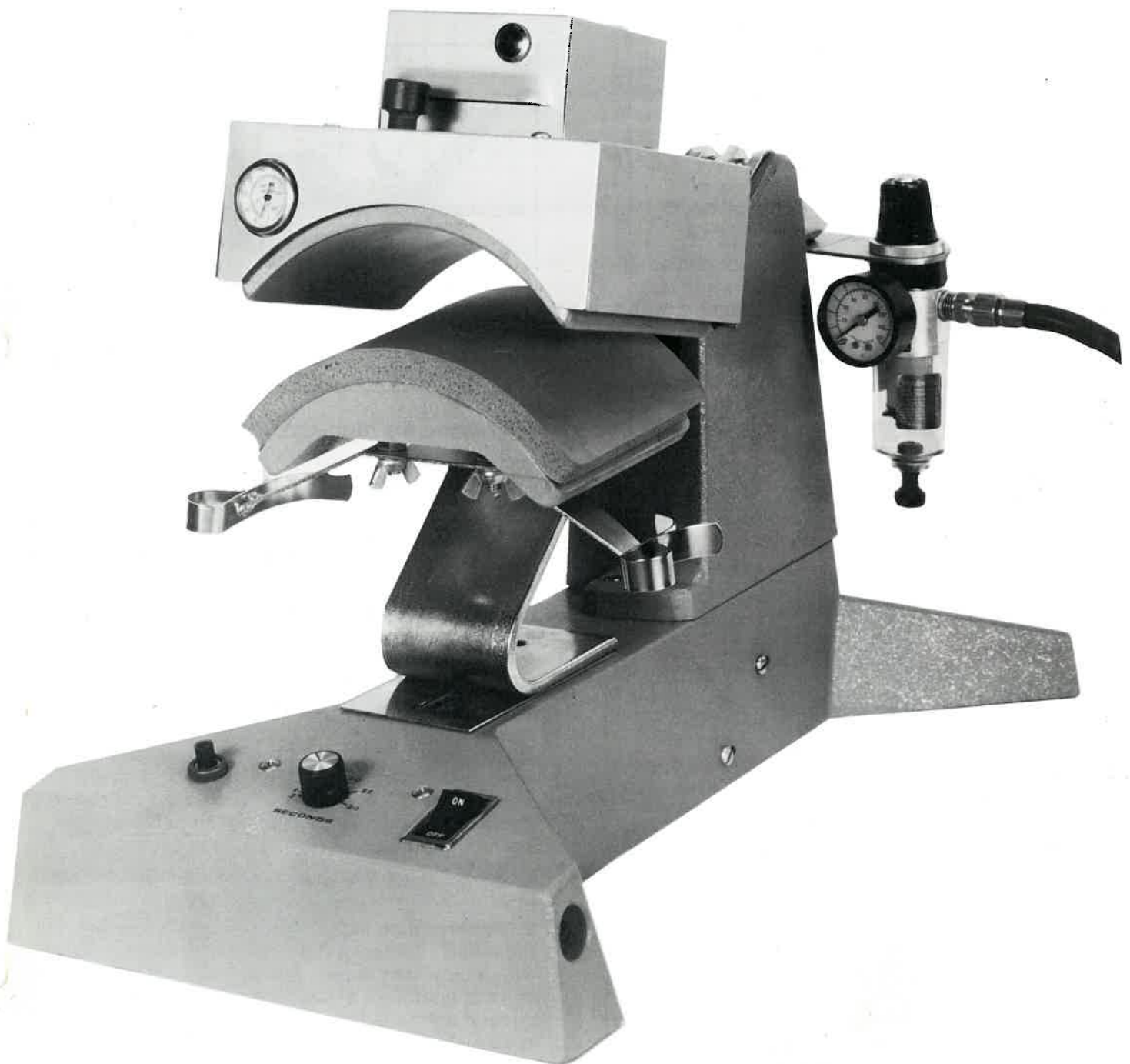


**Operation and maintenance manual  
for model 422 Cap Machine**

**INSTA**



## Congratulations!!

Your selection of the Insta Graphic heat seal machine is a sound business decision. Insta Graphic 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, insures you the continuing capability of delivering the best decorated garments possible. This manual describes the installation and operation procedures for your new Model 422 machine, as well as an easy-to-use chart for on-the-spot maintenance. Proper heat sealing instructions and helpful hints are included in a separate brochure.

With simple maintenance, your Model 422 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.

## Installation

1. Connect power supply cord to 120 Volt circuit.
2. Connect air supply to fitting on pressure control assembly. Air supply must be minimum 80 PSI (*Note:* Machine will open when air supply is connected).

## Operation

1. Push ON/OFF switch on ON position. Set temperature dial to 375°-400° F (190°-204° C).
2. Allow the machine to warm up for approximately 30 minutes. When the selected temperature is reached the neon lamp in the upper housing will cycle on and off.

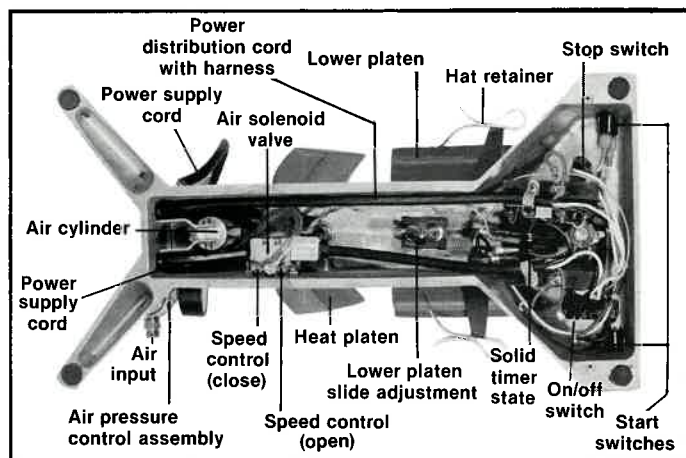
**NOTE:** The thermometer indicates the internal temperature of the heat platen and will indicate a temperature approximately 15° F (8° C) higher than that of the heat platen surface. The temperature control indicates the TRUE surface temperature of the heat platen.

3. Set the desired air pressure (80 to 100 PSI) by turning the knob on the regulator located at the rear of the machine. (Clockwise to increase and counter clockwise to decrease.) Read pressure setting on gauge.
  4. Place cap or garment on lower platen, smoothing out all wrinkles.
- NOTE:** this machine is equipped with a cap holding device. Slip the sweat band of the cap into the jaws of the device for retention on the platen while applying the transfer.
5. Position transfer or lettering on cap or article.
  6. Set desired time on timer.
  7. Close the machine by pressing simultaneously the two buttons located on the front sides of the instrument housing. For best sealing results, refer to the "How to Apply Insta Heat Seal Transfers and Die Cut Letters" manual.
  8. At the end of the time cycle the machine will open automatically. Notice that the head raises quite slowly. This is to avoid having the transfer paper (cover) pulled off prematurely from suction created by the separating platens.

9. Remove the cap or article.

10. The lower platen on the 422 has a sliding assembly to accommodate the variety of printing areas on caps, sleeves, etc. Simply sliding the lower platen backward or forward will allow a choice of variable printing areas 3" to 4.5" x 6.75" (7.6 cm to 11.4 cm x 17.2 cm). A wing nut at the bottom of the machine locks the assembly in the desired location.

11. If the head movement is too rapid or too slow, refer to figure below for location and function of the speed control screws. With a thin blade screwdriver, turn the appropriate screw clockwise to decrease the speed or counterclockwise to increase the speed. As these controls are quite sensitive, turn them 1/8 turn or less and check results.



## Preventive Maintenance Suggestions

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

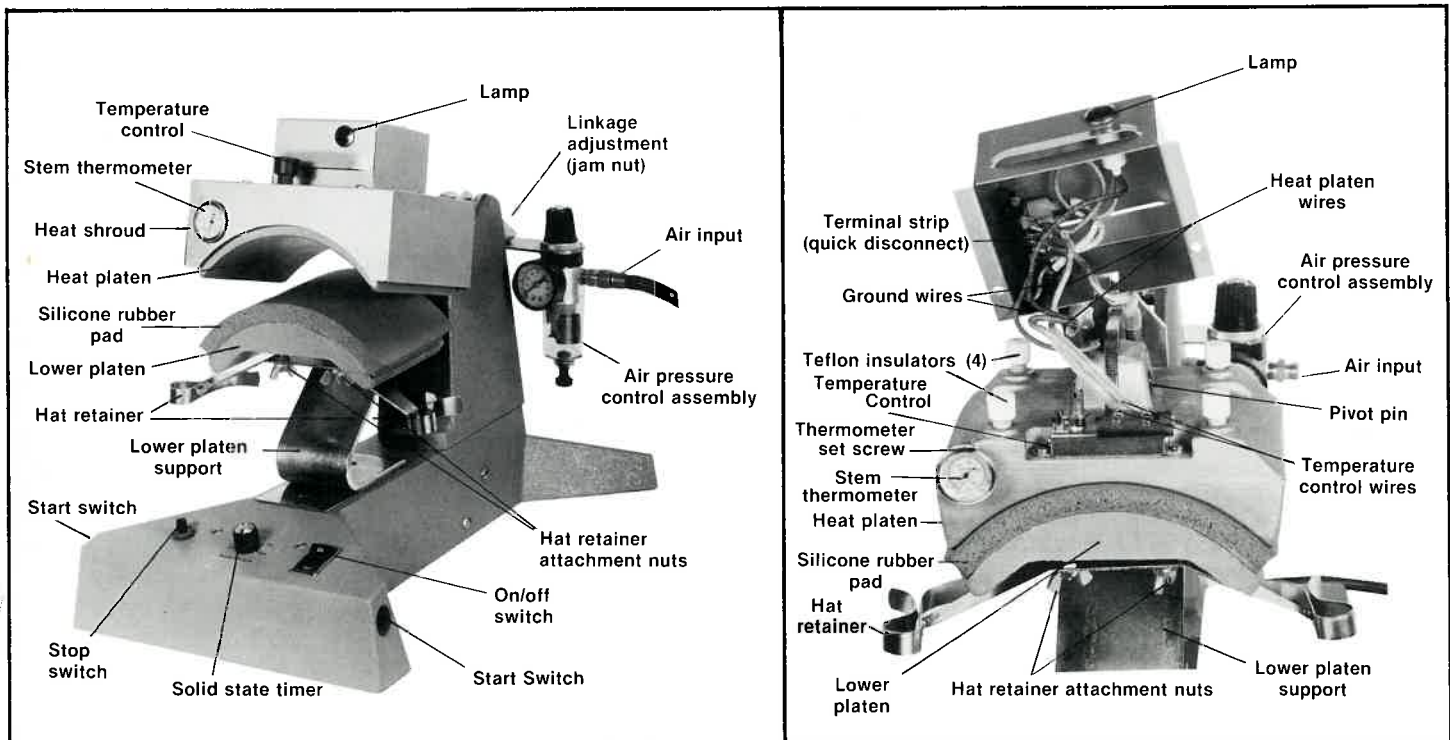
1. Do not insert items into the machine which would tend to cut the silicone rubber pad, or scratch the teflon, i.e., buttons, pins, snaps or zippers.
2. Periodically clean the teflon-coated heat platen with a non-abrasive piece of cloth. Stubborn stains may be cleaned, when platen is cool, with mineral spirits (paint thinner or kerosene).
3. Lubrication should be done after every eight (8) hours of machine operation (every day for a machine used in production, versus once a week for a machine used occasionally). Apply a few drops of heavy machine oil (50 weight) to each of the pivot points of the linkage system. Allow the oil to penetrate the bearing areas and then wipe off the excess.
4. When the heat platen is hot and not in use, keep in open position (away from the silicone rubber pad).
5. To prevent soiling of garment, periodic wiping of the entire exterior of the machine, including platens, with a clean rag is recommended. If necessary, use mineral spirits for cleaning a cold machine. Since mineral spirits is flammable, use precautions and keep away from sparks, flame or hot heat platen.

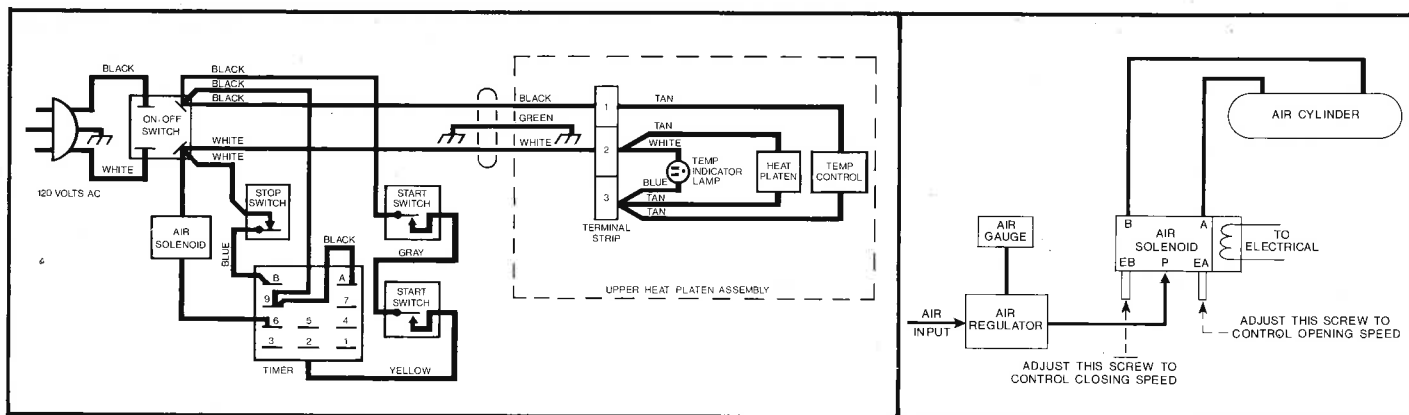
## General Maintenance

The following maintenance chart has been prepared to assist you in locating and correcting problems if the Model 422 should not operate properly.

To locate the problem area it may be necessary to refer to more than one symptom listed in the chart. The table directs your attention to the fault. It does not rule out other possibilities.

SYMPTOMS	TEST PROCEDURE	TEST RESULTS	PROBABLE CAUSE & FIX
Air cylinder does not operate. Temperature control does not operate.	Turn OFF/ON switch to ON position.	Switch lamp & temperature indicator lamp do not light.	1. Is power supply cord plugged in? Is power supply on? 2. May be defective switch, broken or disconnected wire on power cord or a defective plug.
		Switch lamp lights. Temperature indicator lamp does not light.	1. Broken or disconnected wire in wiring harness or distribution cord. 2. Defective switch.
Air cylinder does not operate. Temperature control operates & platen heats satisfactorily.	Place jumper wire on terminals 6 & 9 on timer.	Air cylinder does not activate.	1. No air to system. Check supply & regulator. 2. Broken or disconnected wire in wiring harness. 3. Solenoid is defective. Replace.
		Air cylinder does activate. PROCEED	
	Connect neon test lamp to timer terminals 9 & B	Neon lamp does not light.	1. Broken or disconnected wire in wiring harness. 2. Defective stop switch.
		Neon lamp does light. PROCEED	
Connect neon test lamp to timer terminals 2 & B and depress both start buttons simultaneously.		Neon lamp does not light.	1. Broken or disconnected wire in wiring harness. 2. One or both start switches defective.
		Neon lamp does light.	1. Timer is defective. Replace.
Unable to adjust air pressure.			1. Is air supply properly connected and operational? 2. Is line pressure to machine 80# or more? 3. Regulator defective. Replace.
All systems function normally, but pressure is too light.	Close machine with strip of parchment or kraft paper between platens	Paper slips out easily.	Linkage adjustment is too low. To adjust: 1. Loosen jam nut on adjustment screw at extreme rear of machine. (This screw also supports regulator mounting bracket.) 2. Back screw out about two turns and tighten jam nut. Pressure should now be normal.





### Insta's Model 422 Parts List for Manual

Part	Stock No.
Air Hose (6 ft.)	MPPA005
Air Solenoid	MPPA405
Air Regulator Ass'y	MPPA422
Air Piston (1 in.)	MPPA430
Cement Silicone Rubber	MPPC006
Fitting-Air	MPPF085
Lamp Ass'y	MPPL019
Pad Silicone	MPPP021
Switch Start Ass'y	MPPS045
Switch Stop Ass'y	MPPS046
Switch, on/off	MPPS050
Temperature Control	MPPT030
Thermometer Stem (F/C)	MPPT056
Timer, Electronic	MPPT422
Wire, Power Cord	MPPW174
Wire Harness	MPPW422
Insulator Teflon Platen Shroud	MPSI089
Knob 412 Temp Control	MPSK440
Linkage Ass'y	MPSL422
Pivot Pin Platen	MPSP086
Plate, Bottom Cover	MPSP422
Plate, Wear	MPSP450
Plate, Adapter	MPSP451
Upper Platen Ass'y	MPSP461
Retainer Hat Ass'y	MPSR020
Shroud Heat	MPSS405
Screw Platen Slide	MPSS410
Screw Wing	MPSS411

### Limited Warranty

INSTA GRAPHIC SYSTEMS warrants that for one (1) year from date of purchase, it will repair or replace any part of a machine operated under normal use and maintenance which is found to have been defective in material or workmanship. In order for this warranty to be effective, no return of machine or parts may be made without prior written factory authorization.

Manufacturer shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product.

### INSTA GRAPHIC SYSTEM

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