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3" STROKE  
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## **Operation and Maintenance Manual for**

# **Model**

# **900/906**

## **Heat Seal Machines**

# 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 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 900 series machine, as well as easy to use instructions for on the spot maintenance. Proper heat sealing instructions and helpful hints are included in a separate brochure.

Your 900 series 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



### DOMESTIC

Use a 15 amp AC circuit. Only industrial weight extension cords with proper wire size should be used: size 18/3 wire for distances up to 25 feet, and size 16/3 for distances up to 50 feet.



### INTERNATIONAL

Only industrial extension cords with proper wire size (2.5 mm sq.) 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*. The electrical requirements:

- 115 Vac, 50/60 Hz, 400 W
- 230 Vac, 50/60 Hz, 400 W

## Specifications

Weight Model 900/906      62 Pounds (28.1 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 one year 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, 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. Turn the ON/OFF switch in the rear of the machine to the ON position.

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- Set desired temperature.
- Allow the machine to warm up for approximately 30 minutes. When the selected temperature is reached, the neon lamp on the lower right side of the temperature selector knob 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.*

- Set the timer for the desired timing cycle.
- Set the desired pressure by adjusting the pressure regulator (located at the rear of the machine).

## For Model 906 Needleboard Only:



## NOTE

*Testing is highly recommended for each type of application. Temperature and pressure will vary depending on the substrate and material being applied. As a starting point, set temperature to 450 degrees F (232 degrees C) with little to no pressure..*

- Place the garment on one of the lower platens. For a cap, pull sweatband out, place crown on lower platen, and lock the cap retainer by pulling handle forward until it locks. Smooth out all wrinkles.
- Position transfer or lettering on garment or cap.
- Swing the upper platen into position directly over the lower platen.

## NOTE



*For operator safety the machine is designed not to operate unless the upper platen is directly over the lower platen.*

- Depress both start buttons, one on each side of the machine, simultaneously. At this point the machine operation is fully automatic, the upper platen moves downward seals the transfer to the garment and then releases automatically at the end of the selected timing cycle.

## CAUTION



*Do not place hands between the platens after activating.*

- Swing away the upper platen to the opposite side and remove garment.

## NOTE



*Another garment may be prepared on the unused platen during the sealing operation on the used platen.*

- The red STOP button may be pushed at any time to deactivate the machine.
- Unlock cap retainer and remove garment.
- The lower platen on the model 406 has a sliding assembly to accommodate the variety of printing on caps, sleeves, etc. Simply sliding the lower platen backward or forward will allow a choice of variable printing areas 3 in to 4.5 in by 6.75 in.

## 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:

- 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.

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- 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.
- When the heat platen is hot and not in use, keep in open position (away from the silicone rubber pad).
- 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.
- Occasionally apply a few drops of heavy machine oil to the moving parts.

**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.



**International Symbols**



**Power Off**



**Power On**



**Hot Surface**



**Risk of Electrical Shock**



**Protective Earth Terminal**



**Ground**



**Caution - Warning**

# FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY

## 900 series 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. Grease gun
- G. Special high temperature grease

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 RTV-106 (or RTV-108) adhesive to bond silicone rubber pad to metal platen.

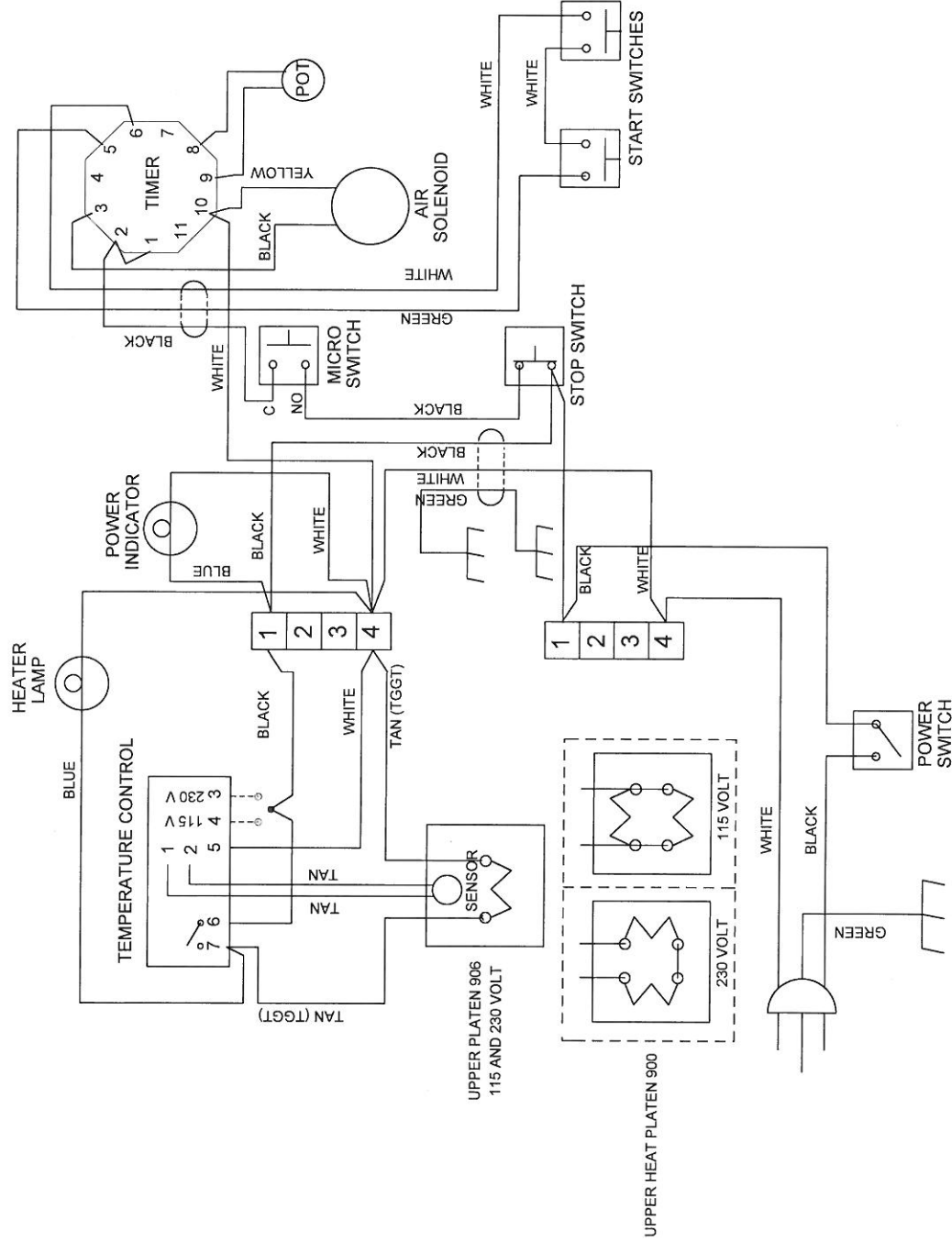
**NOTE:** *Read instructions on the tube package.*

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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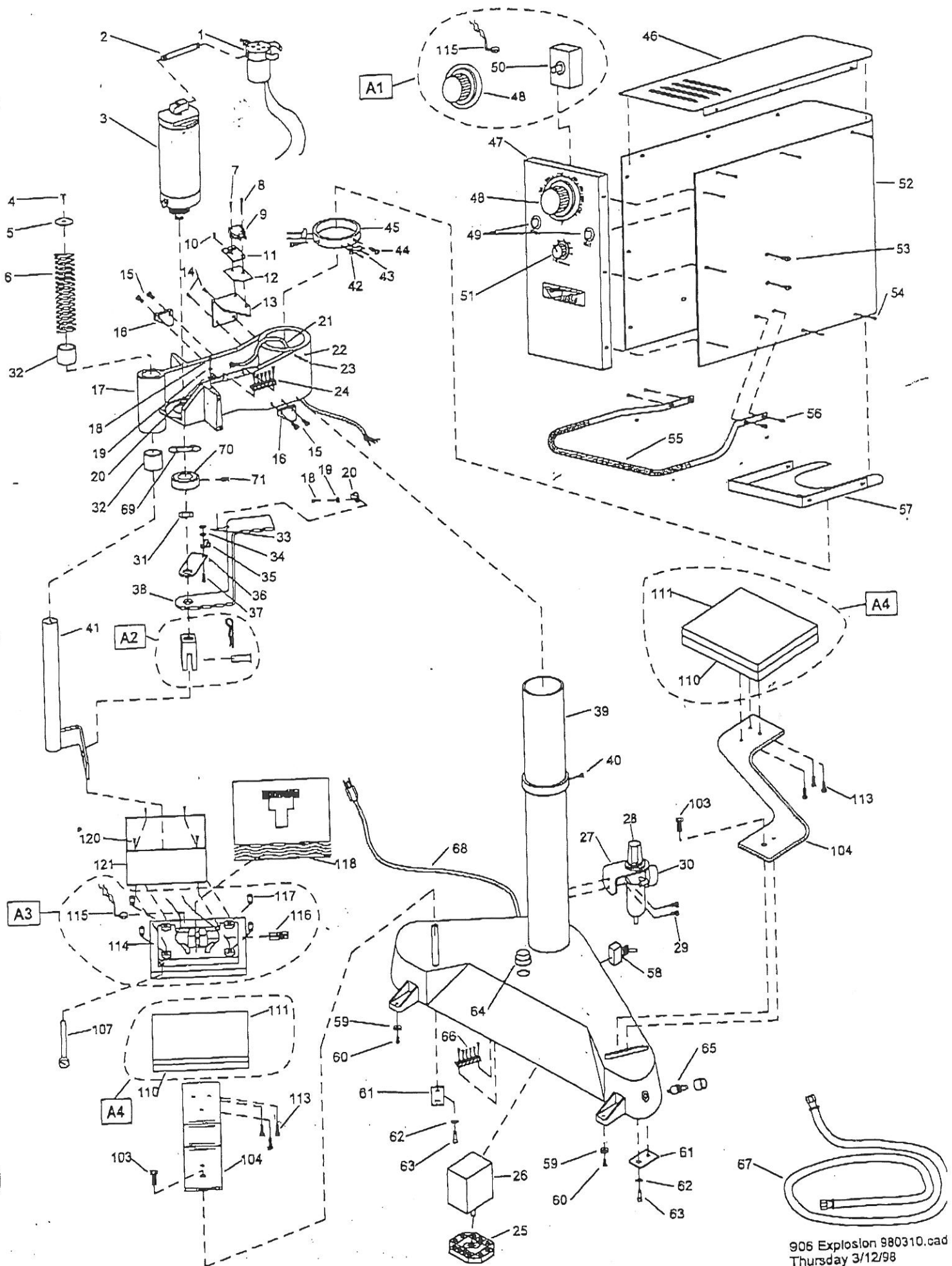
**WIRING DIAGRAM FOR 900 SERIES**

NO	PART NAME	MODEL		MODEL	MODEL	MODEL
		900	Raw Part	900	906	906
		120V AC		240 AC	120V AC	240 AC
		MPSH900		MPSH900	MPSH900	MPSH900
55	HANDLE	MHSP83212		MHSP83212	MHSP83212	MHSP83212
56	SCREW 8-32 X 1/2	MPSM90002		MPSM90002	MPSM90002	MPSM90002
57	PLATE, BOTTOM (SHEET METAL)	MPPS040		MPPS040	MPPS040	MPPS040
58	SWITCH, TOGGLE	MPSF451		MPSF451	MPSF451	MPSF451
59	FEET, RUBBER W/MOLDED WASHER	MHSP83238		MHSP83238	MHSP83238	MHSP83238
60	SCREW 8-32 X 3/8	MPSM90016		MPSM90016	MPSM90016	MPSM90016
61	BRACKET, ATTACHMENT (LOWER PLATEN ZEE)	MHWL516		MHWL516	MHWL516	MHWL516
62	WASHER, LOCK	MPSS410		MPSS410	MPSS410	MPSS410
63	SCREW, SHOULDER	MPPS047		MPPS047	MPPS047	MPPS047
64	SWITCH, STOP	MPPS045		MPPS045	MPPS045	MPPS045
65	SWITCH, START	MPST6014		MPST6014	MPST6014	MPST6014
66	TERMINAL BLOCK	MPPA005		MPPA005	MPPA005	MPPA005
67	AIR HOSE	MPPW161		MPPW161	MPPW161	MPPW161
68	CORD, POWER	MHNHJ114		MHNHJ114	MHNHJ114	MHNHJ114
69	NUT, HEX JAM	MPSB900		MPSB900	MPSB900	MPSB900
70	SPACER, PISTON ROD	MHST142038		MHST142038	MHST142038	MHST142038
71	SCREW, SET 1/4-20 X 3/8	MPSM90017L		MPSM90017L	N/A	N/A
101	PLATE, SKID (LEFT)	MPSC412		MPSC412	N/A	N/A
102	CLIP, CAP HOLD DOWN HANDLE	MHBH5161		MHBH5161	MHBH5161	MHBH5161
103	BOLT, HEX	MPSS471		MPSS471	MPSS471	MPSS471
104	SUPPORT, LOWER PLATEN ZEE	MHSH103212		MHSH103212	N/A	N/A
105	SCREW, SOCKET HEAD 10-32 X 1/2	MHNH1032		MHNH1032	N/A	N/A
106	NUT, HEX	N/A		N/A	MPPT056	MPPT056
107	THERMOMETER	MHSF142058		MHSF142058	N/A	N/A
108	SCREW, FLAT HD 1/4-20 X 5/8	MPSP432		MPSP432	N/A	N/A
109	PLATE, LOWER PLATEN RETAINING	MPSP466		MPSP466	MPSP467	MPSP467
110	PLATEN, LOWER W/ SILICONE PAD	MPPP022		MPPP022	MPPP406	MPPP406
111	SILICONE PAD	MPSM90017		MPSM90017	N/A	N/A
112	PLATE, SKID (RIGHT)	N/A		N/A	MHSH142058	MHSH142058
113	SCREW 1/4-20 X 5/8	MPSP460		MPSP461	MPSP465	MPSP464
114	PLATEN, UPPER W/WIRING	MPSS900		MPSS900	MPSR900	MPSR900
115	SENSOR, TEMPERATURE CONTROL	MHPR38112		MHPR38112	MHSF142058	MHSF142058
116	PIN, UPPER PLATEN	MPSI089		MPSI089	MPSI089	MPSI089
117	INSULATOR, SHROUD	MPSP249		MPSP249	MPSP249	MPSP249
118	INSULATION FIBERGLASS	MPSR025		MPSR025	N/A	N/A
119	RETAINER, TRANSFER (RIGHT)	MPSS143		MPSS143	MPSS143	MPSS143
120	SCREW, SHROUD (4 SET)	MPSS90005		MPSS90005	MPSS906	MPSS906
121	ENCLOSURE, SHROUD	MPSR025L		MPSR025L	N/A	N/A
122	RETAINER, TRANSFER (LEFT)	MHSP83238		MHSP83238	N/A	N/A
123	SCREW 8-32 X 3/8	MPST413		MPST413	N/A	N/A
124	TEFLON BAND					
A1	TEMPERATURE CONTROL KIT	MPPT039		MPPT039	MPPT039	MPPT039
A2	CLEVIS ASSEMBLY	MPSC919		MPSC919	MPSC919	MPSC919
A3	UPPER PLATEN ASSEMBLY	MPSP461		MPSP461	MPSP405	MPSP405
A4	LOWER PLATEN ASSEMBLY	MPSP470		MPSP470	MPSP476	MPSP476
A5	RETAINER, CAP HOLDDOWN (LEFT)	MPSR900L		MPSR900L	N/A	N/A
A6	RETAINER, CAP HOLDDOWN (RIGHT)	MPSR900		MPSR900	N/A	N/A
A7	RETAINER, TRANSFER	MASR025		MASR025	N/A	N/A

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		MODEL		MODEL	MODEL	MODEL
		900		900	906	906
		120V AC	Raw Part	240 AC	120V AC	240 AC
	PART NAME					
	AIR SOLENOID VALVE ASSEMBLY	MPPA901	MPPA901R	MPPA902	MPPA901	MPPA902
	NIPPLE, CYLINDER	MHN38412		MHN38412	MHN38412	MHN38412
2	AIR CYLINDER ASSEMBLY	MPPA413	MPPA413R	MPPA413	MPPA413	MPPA413
3	SCREW, COMPRESSION SPRING 1/4-20 X 3/4	MHSF142034		MHSF142034	MHSF142034	MHSF142034
4	WASHER, SPRING	MHWC716		MHWC716	MHWC716	MHWC716
5	SPRING, COMPRESSION	MPSS884		MPSS884	MPSS884	MPSS884
6	SCREW, MICRO SWITCH 4-40 X 1/2	MHSR44012		MHSR44012	MHSR44012	MHSR44012
7	SCREW, MICRO SWITCH 4-40 X 3/4	MHSR44034		MHSR44034	MHSR44034	MHSR44034
8	SWITCH, MICRO	MPPS044		MPPS044	MPPS044	MPPS044
9	SCREW, MICRO SWITCH 8-32 X 3/8	MHSP83238		MHSP83238	MHSP83238	MHSP83238
10	PLATE, MICRO SWITCH MOUNTING	MH700213		MH700213	MH700213	MH700213
11	INSULATOR, MICRO SWITCH	MH700214		MH700214	MH700214	MH700214
12	BRACKET, MICRO SWITCH	MPSM90018		MPSM90018	MPSM90018	MPSM90018
13	SCREW, MICRO SWITCH BRACKET 10-24 X 3/8	MHSP102438		MHSP102438	MHSP102438	MHSP102438
14	SCREW, STOP BRACKET 1/4-20 X 1/2	MHSH142012		MHSH142012	MHSH142012	MHSH142012
15	BRACKET, STOP	MPSM90010		MPSM90010	MPSM90010	MPSM90010
16	ARM ASSEMBLY	MPSA90021	MP90021	MPSA90021	MPSA90021	MPSA90021
17	SCREW 8-32 X 3/8	MHSP83238		MHSP83238	MHSP83238	MHSP83238
18	WASHER	MHWSAE8		MHWSAE8	MHWSAE8	MHWSAE8
19	CLAMP, CABLE	MHCC516		MHCC516	MHCC516	MHCC516
20	CORD, POWER DISTRIBUTION	MPPW900		MPPW900	MPPW900	MPPW900
21	WASHER	MHWSAE8		MHWSAE8	MHWSAE8	MHWSAE8
22	SCREW 8-32 X 3/8	MHSP83238		MHSP83238	MHSP83238	MHSP83238
23	TERMINAL BLOCK	MPST6014		MPST6014	MPST6014	MPST6014
24	TERMINAL, OCTAL SOCKET	MPPT090		MPPT090	MPPT090	MPPT090
25	TIMER, ELECTRONIC	MPPT902		MPPT903	MPPT902	MPPT903
26	MOUNT, AIR REG. FILTER	MPSM90009		MPSM90009	MPSM90009	MPSM90009
27	AIR FILTER REGULATOR	MPPA900		MPPA900	MPPA900	MPPA900
28	SCREW, AIR FILTER 1/4-20 X 1/2	MHSH142012		MHSH142012	MHSH142012	MHSH142012
29	AIR PRESSURE GAUGE	MPPA001	MPPA001R	MPPA001	MPPA001	MPPA001
30	NUT, JAM CLEVIS	MHJN21		MHJN21	MHJN21	MHJN21
31	BUSHING, GUIDE POST	MPSB070		MPSB070	MPSB070	MPSB070
32	NUT, HEX	MHNNH832		MHNNH832	MHNNH832	MHNNH832
33	WASHER	MHWSAE8		MHWSAE8	MHWSAE8	MHWSAE8
34	CLAMP, CABLE	MHCC516		MHCC516	MHCC516	MHCC516
35	BRACKET, WIRE STABILIZER	MPSM90019		MPSM90019	MPSM90019	MPSM90019
36	SCREW 8-32 X 1/2	MHSP83212		MHSP83212	MHSP83212	MHSP83212
37	BRACKET, ELECTRICAL SUPPORT	MPSM90024		MPSM90024	MPSM90024	MPSM90024
38	BASE ASSEMBLY	MPSB90011	MP90011	MPSB90011	MPSB90011	MPSB90011
39	SCREW, SOCKET 5/16-18 X 3/4	MHH5161834		MHH5161834	MHH5161834	MHH5161834
40	GUIDE POST ASSEMBLY	MPSG90008		MPSG90008	MPSG90008	MPSG90008
41	CAM, MICRO SWITCH	MPSC90020		MPSC90020	MPSC90020	MPSC90020
42	SCREW, PAN HD 6-32 X 1/4	MHSP63214		MHSP63214	MHSP63214	MHSP63214
43	SCREW, SOCKET HD 5/16-18 X 3/4	MHH5161834		MHH5161834	MHH5161834	MHH5161834
44	COLLAR, POST	MPSC90023		MPSC90023	MPSC90023	MPSC90023
45	PANEL, TOP COVER (SHEET METAL)	MPSM90004		MPSM90004	MPSM90004	MPSM90004
46	PANEL, FRONT (SHEET METAL)	MPSM90003		MPSM90003	MPSM90003	MPSM90003
47	KNOB, CONTROL TEMPERATURE	MPSK900		MPSK900	MPSK900	MPSK900
48	LIGHT, PILOT	MPPL019		MPPL018	MPPL019	MPPL018
49	TEMPERATURE CONTROL	MPPT038		MPPT038	MPPT038	MPPT038
50	POTENTIOMETER	MPPP900		MPPP900	MPPP900	MPPP900
51	PANEL, WRAP AROUND (SHEET METAL)	MPSM90001		MPSM90001	MPSM90001	MPSM90001
52	SCREW 10-24 X 3/8	MHSP102438		MHSP102438	MHSP102438	MHSP102438
53	SCREW 6-32 X 1/4	MHP63214ST		MHP63214ST	MHP63214ST	MHP63214ST



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