

INSTATM

INSTA GRAPHIC SYSTEMS



MODEL 158

OPERATION AND MAINTENANCE MANUAL

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

Hot Surface. Avoid contact.



CAUTION

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



CAUTION

The machine is to be operated by one person only.



CAUTION

To reduce the risk of electric shock and injury to persons, disconnect from power supply before servicing and /or cleaning.

International Symbols



Power Off



Power On



Hot Surface



Risk of Electrical Shock



Protective Earth Terminal



Ground



Caution - Warning

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 of innovation in the heat-sealing field, insures the continuing capability of delivering the best-decorated substrates possible.

This manual describes installation, operation, and maintenance procedures for your new model 158 machine, as well as easy to use instructions for on-the-spot maintenance.

Your model 158 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.

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 year on parts (lifetime on the heating element) 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 accident.

Insta 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, it 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.

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.



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.*

Degree of Protection

IP (Ingress Protection) rating according to IEC 60529.

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 vapours; fungus; vermin

IP54 = IP
1st Digit 5
2nd Digit 4

1 st Digit	Protection from solid objects	2 nd Digit	Protection from moisture
0	Non protected	0	Non protected
1	Objects greater than 50mm	1	Dripping water
2	Objects greater than 12mm	2	Dripping water when tilted up to 15 deg.
3	Objects greater than 2.5mm	3	Spraying water
4	Objects greater than 1mm	4	Splashing water
5	Dust protected	5	Water jets
6	Dust tight	6	Heavy seas
--	---	7	.15m – 1m immersion
--	---	8	1m + submersion

Specifications

MODEL 158

Voltage Model 158 **120 Volts AC** 50/60 Hertz
 1750 Watts 14.6 Amps

Voltage Model 158 **230 Volts AC** 50/60 Hertz
 2200 Watts 9.6 Amps

Model 158
 Machine Weight 97 Pounds (44.0 KG)

Operation

1. Turn the power on by pressing the **POWER** button on the controller.
2. Set desired temperature and time.
3. Lift handle so that the upper platen is away from lower platen.
4. Allow the machine to warm up until the selected temperature is reached.
5. Set the desired pressure by adjusting the pressure adjust wheel located on the handle assembly. To reduce pressure, turn wheel to the right (clockwise).
6. Place the substrate on lower platen.
7. Position transfer or lettering on substrate.
8. Close machine by pulling handle down into the closed, operational position.
9. The timer will start automatically and a buzzer will beep at the end of the time cycle.



NOTE

Buzzer will sound with three (3) seconds remaining on the time cycle to advise the operator the machine is opening.

NOTE

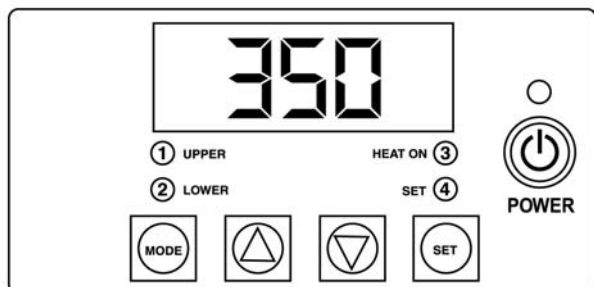
The sealing cycle can be stopped at any time by pressing the mode button on the controller. The machine will automatically end the sealing cycle and the platens will disengage and open.

Environmental Conditions

Only operate Insta heat seal machines under suitable environmental conditions.

1. Placed on a even, non flammable surface.
2. Can support a minimum of 300 lbs. if placed above a platform.
3. Do not restrict access to the main power switch.
4. Maintain a clearance around any forms of liquid.
5. Do not over extend the power cord.
6. The operational voltage should not be 10% max/min of the rated value.
7. Avoid voltage spikes.

Operation Timer/Temperature Control



Solid State Controller

This controller has three (3) control features:

1. Temperature - Temperature may be set from 225 - 450°F (107-232°C).
2. Time - Time may be set from 1 second to 99.59 minutes.
3. Counter – Cycle counter counts the number of applications from 1 to 9999 (see additional Notes – Counter).

Controller Operation

1. If the temperature is not being displayed, press the **MODE** button until temperature is displayed.
2. Push and hold **SET** button and simultaneously push UP (↑) or DOWN (↓) arrow buttons to the desired temperature setting.
3. Press the **MODE** button until time is displayed.
4. Push and hold **SET** button and simultaneously push UP (↑) or DOWN (↓) arrow buttons to the desired timer setting.

Temperature



NOTE

Fahrenheit/Centigrade (Celsius) Conversion

The temperature controller can be programmed to display °F or °C.

To change:

*Press the **MODE** button until the temperature is displayed, then push and hold the **SET** button for 10 seconds.*

Timer

- The controller has a count down timer that automatically activates a buzzer at the completion of the application.
- Timer display is minutes:seconds. Range is **00:00** to **99:59**, Colons (:) flash while timer is running.

Counter

The controller has a built in cycle counter.

- Press **MODE** button until the counter is displayed.
- Counter display range is 0000 to 9999.
- To reset the cycle counter, display the counter reading, then push and hold UP (↑) and DOWN (↓) arrow buttons for 3 seconds until the counter resets to zero (**0000**) on the display.

Preventive Maintenance Suggestions

The Insta 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 that 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 substrate, 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 light machine oil (such as 3-IN-ONE) to the moving parts and pressure adjustment screw.

NOTE

Wipe off any excess oil.



Replacement of Silicone Rubber Pads

1. Make sure heat platen is cool.
2. Use tube of MPPC006 silicone adhesive sealant to bond the silicone rubber pad to metal platen.

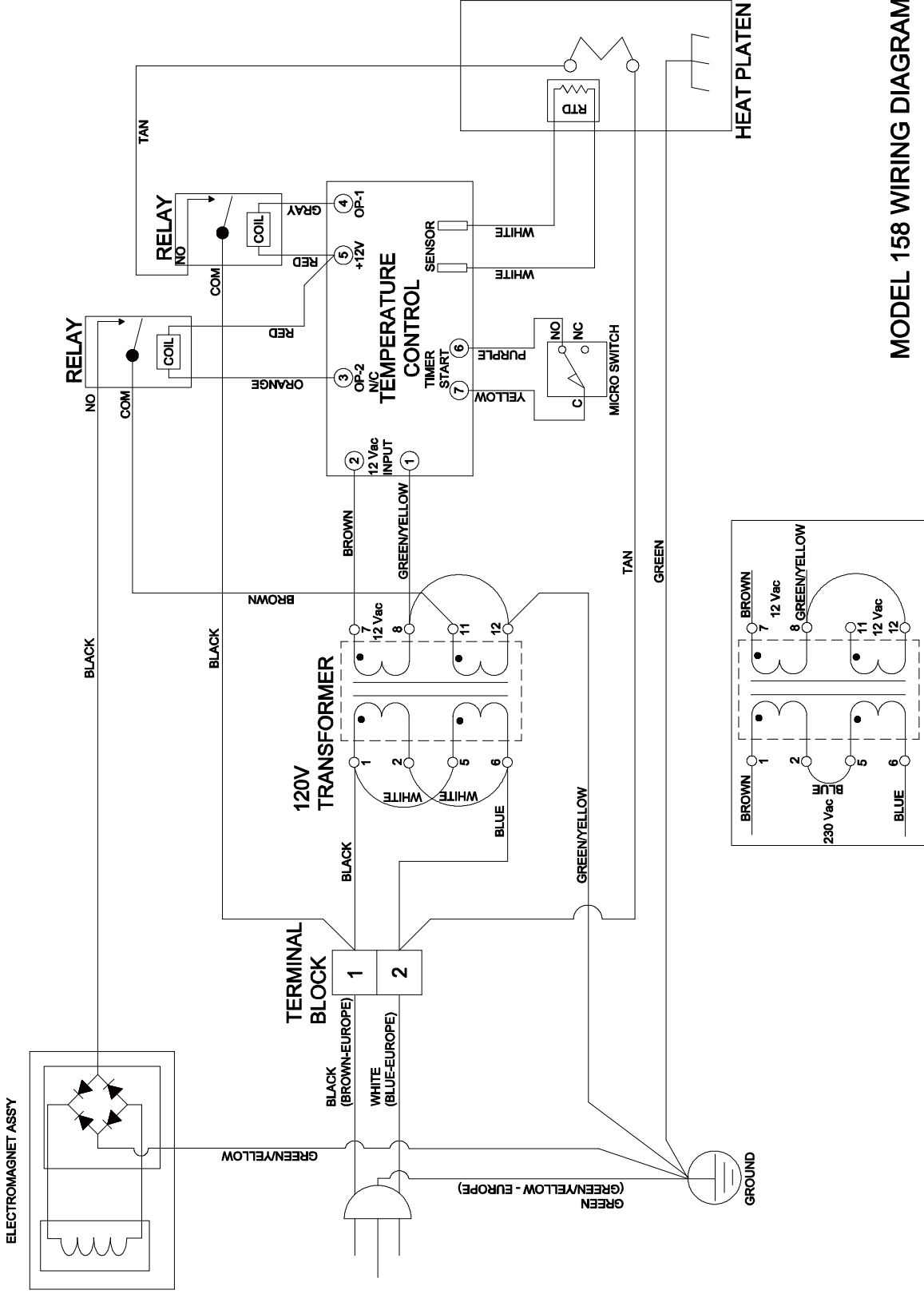
NOTE: *Read instructions on the tube package.*
3. Be sure that the surface of the silicone platen is clean. Use a **mild** solvent such as **mineral spirits**.
4. The pad and metal must be thoroughly dry and clean, before starting the bonding operation.
5. Apply adhesive sealant to the metal platen. 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.

Safety and Danger Zone Diagram



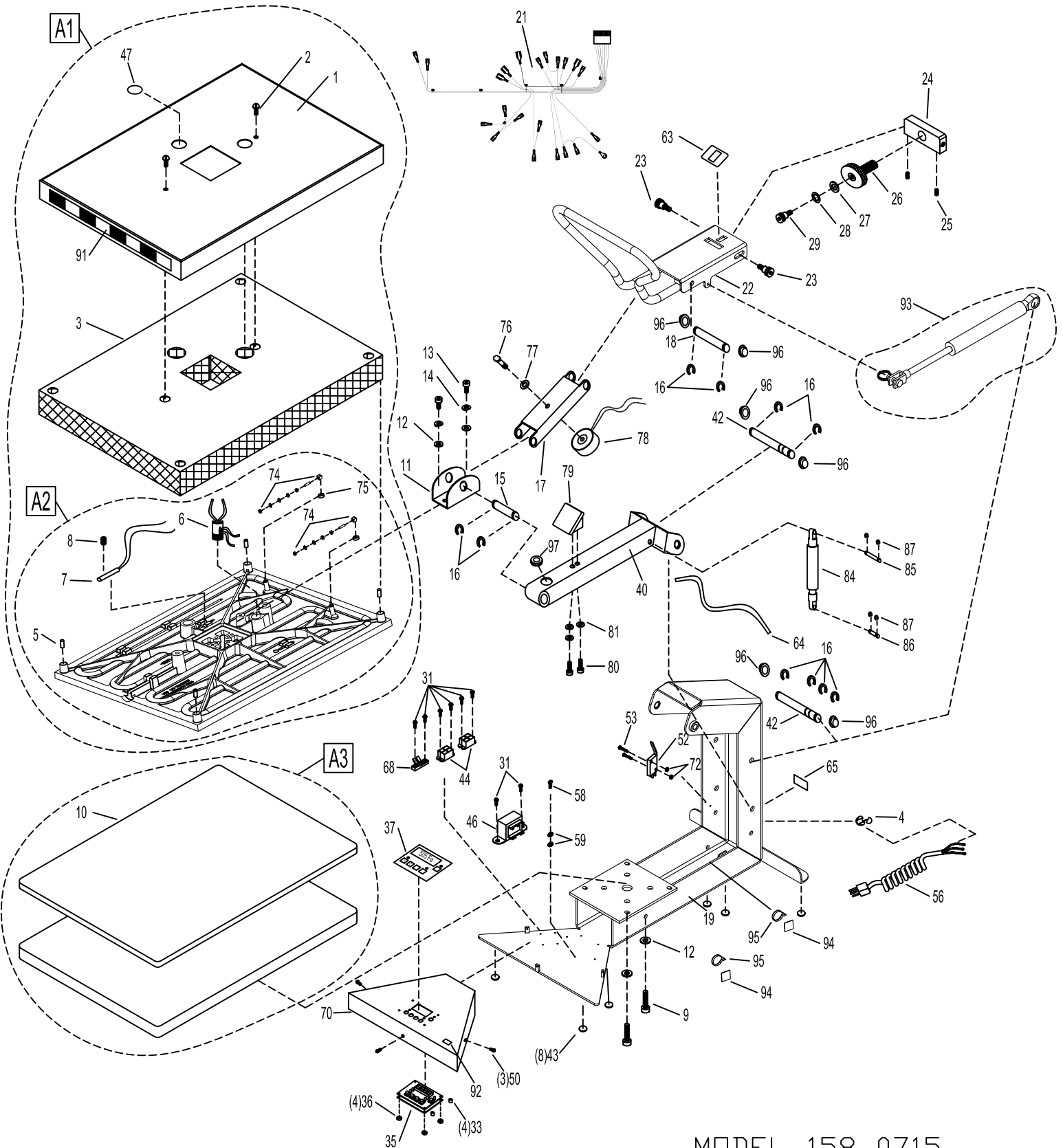
MODEL 158



MODEL 158 WIRING DIAGRAM 0807

230V TRANSFORMER

MODEL 158



MODEL 158 0715

		MODEL	
		158	
NO	PART NAME	120V AC	230V AC
1	SHROUD, UPPER PLATEN	MPS90155	MPS90155
2	SCREW, BUTTON HD 5/16-18 x .50 LG	MHSB5161812	MHSB5161812
3	INSULATION, FIBERGLASS 15X20	MPI90158	MPI90158
4	STRAIN, RELIEF CABLE	MPS90014	MPS90014
5	INSULATORS, SHROUD (SET 4)	MPI90156	MPI90156
6	POST, GUIDE	MPP90000	MPP90000
7	SENSOR, TEMP. REPLACEMENT KIT	MPPS210	MPPS210
8	SCREW, SET 3/8-16 x .50 LG.	MHSST381612	MHSST381612
9	SCREW, SOCKET HD 5/16-18UNC x .750 LG.	MHSSH5161834	MHSSH5161834
10	PAD, SILICONE 15 X 20 BLK	MPPP031	MPPP031
11	BRACKET, CLEVIS	MPB90001	MPB90001
12	WASHER, SAE 5/16 I.D. PRESSURE ADJ.	MHWSAE516	MHWSAE516
13	BOLT, HEX 5/16-18 X 1 LG STAIN	MHBH516181S	MHBH516181S
14	WASHER, LOCK 5/16" I.D.	MHWL516	MHWL516
15	PIN, BOTTOM PRESSURE	MPP90003	MPP90003
16	CLIPS, "E"	MPSC240	MPSC240
17	LINK, LOWER	MPL90167	MPL90167
18	PIN, HANDLE PRESSURE	MPP90001	MPP90001
19	FRAME, BASE ASSY	MPB90164	MPB90164
21	WIRE HARNESS ASSY	MPW90165	MPW90165
22	HANDLE ASS'Y	MPH90208	MPH90208
23	SCREW, SHOULDER BOLT .500-13 x.750 LG.	MHBS1234	MHBS1234
24	BLOCK, PIVOT PRESSURE	MPB90002	MPB90002
25	SCREW, SET 1/4"-20X3/8" CP	MHSST142038CP	MHSST142038CP
26	KNOB, WHEEL ADJUSTING ASS'Y	MBAW90000	MBAW90000
27	WASHER, SHIM 1/2" I.D. x .031 THK	MHWS0136	MHWS0136
28	WASHER, WAVE 1/2" I.D. x .015 THK	MH5806282	MH5806282
29	BOLT, SHOULDER 1/2" X 1/2"	MHBS1212	MHBS1212
31	SCREW, PAN HD 8-32 X .375" LG	MHSP83238	MHSP83238
33	SPACER, NYLON 0.166 ID X1/4 LG	MH110969111	MH110969111
35	CONTROLLER, DIGITAL W/SWITCH	MPC90181-632	MPC90181-632
36	NUT, HEX 6-32	MHNS632	MHNS632
37	LABEL, CONTROLLER OVERLAY	MPL90345	MPL90345
40	PIVOT HANDLE ASS'Y	MPH90168	MPH90168
41	BUMPER, PIVOT HANDLE	MPB90004	MPB90004
42	PIN, ARM PIVOT	MPP90002	MPP90002
43	FEET, RUBBER (6/SET)	MPF90004	MPF90004
44	RELAY	MPPR200	MPPR200
46	TRANSFORMER (USA MODEL)	MPT90319	MPT90319
46A	TRANSFORMER (EUROPEAN/BITAIN)	N/A	MPT90319
47	PLUG, BUTTON SHROUD	MHPB78	MHPB78
50	SCREW, PAN HD 8-32UNC x .25 LG	MHSP83214	MHSP83214
52	SWITCH, MICRO	MPS90018	MPS90018
53	SCREW, PAN HD 4-40UNC x .50 LG.	MHSR44012	MHSR44012
56	POWER CORD (USA MODEL)	MPPW141	MPPW142
56A	POWER CORD (EUROPEAN MODEL)	N/A	MPPW202
56B	POWER CORD (GREAT BRITAIN)	N/A	MPPW203
58	SCREW, PAN HD 8-32UNC x .375 LG	MHSP83238	MHSP83238

NO		MODEL	
		PART NAME	
		120V AC	230V AC
59	WASHER, FLAT #8 (.164 I.D.)	MHWSAE8	MHWSAE8
63	OVERLAY, PRESSURE ADJUSTMENT	MPL90004	MPL90004
64	SLEEVING, SILICONE COATED	MHT117EA1BK	MHT117EA1BK
65	LABEL, DISCONNECT POWER	MPPL001	MPPL001
68	BLOCK, TERMINAL	MH11096914	MH11096914
70	HOUSING, INSTRUMENT	MPH90131	MPH90131
72	NUT, HEX 4-40	MHNNH440	MHNNH440
74	TERMINAL END ASSY	MPC90157	MPC90157
75	CERAMIC INSULATOR	MPI90159	MPI90159
76	SCREW, HEX HEAD 3/8-16 x 1-1/4	MHBH3816114	MHBH3816114
77	WASHER	MHWSAE38	MHWSAE38
78	ELECTROMAGNET	MPE90169	MPE90169
79	MAGNET PLATE BRACKET ASSEMBLY	MPB90170	MPB90170
80	SCREW, SOCKET HD 5/16-18UNC x .750 LG.	MHSSH5161834	MHSSH5161834
81	SPRING WASHER	58043483	58043483
84	GAS SPRING ASSY	MPS90171	MPS90171
85	UPPER CLEVIS PIN	MPP90172	MPP90172
86	LOWER CLEVIS PIN	MPP90173	MPP90173
87	CLIPS "E"	MPSC240	MPSC240
91	TAPE, CAUTION	MPT90210	MPT90210
93	GAS SPRING, DAMPENER ASSEMBY	MP158-001	MP158-001
96	NUT CAP DEEP DRAWN 1/2" STUD	MH007-049	MH007-049
97	GROMMET, RUBBER 3/8" ID. 7/8" OD.	MH007-050	MH007-050
A1	PLATEN, HEAT ASS'Y	MPP1381A	MPP1382A
A2	PLATEN, HEAT (WIRING ONLY)	MPP1381W	MPP1382W
A3	PLATEN, LOWER ASS'Y	MPP90160	MPP90160

FOR USE BY QUALIFIED PERSONNEL ONLY

Notes:

FOR USE BY QUALIFIED PERSONNEL ONLY

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