

INSTA™

INSTA GRAPHIC SYSTEMS



MODEL 418

OPERATION AND MAINTENANCE MANUAL

International Symbols



Power Off



Power On



Hot Surface



Risk of Electrical Shock



Protective Earth Terminal



Ground



Wet Conditions



Caution



Warning

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.



WARNING

If this equipment is used in a manner not specified by the manufacturer, protection may be impaired.



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.



CAUTION

Do not handle the plug with wet hands, or machinery under wet conditions.

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 418 series machine, as well as easy to use instructions for on-the-spot maintenance.

Your 418 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.

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 merchant-ability and fitness for a particular use, and is accepted as such by the purchaser in taking delivery of this product.

Installation



DOMESTIC – 418 SERIES

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 – 418 SERIES

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.*

Specifications

MODEL 418

120 V AC, 50/60 Hz, 1000 Watts, 8.3 Amps
230 V AC, 50/60 Hz, 1000 Watts, 4.4 Amps

Weight Model 418 29 Pounds (13.2 KG)

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

Operation

1. Turn the power on by pressing the **POWER** button on the controller.
2. Set desired temperature and time. Open the upper platen arm to its fully open position, away from the lower platen. (See Solid State Controller Section)
3. Allow the machine to warm up until the selected temperature is reached.
4. Set the desired pressure by adjusting the pressure knob on top of the machine counterclockwise to increase pressure.
5. Place the substrate on lower platen, smoothing out all wrinkles. Push and hold the cap retainer in the down position. For a cap, pull the sweatband out, place the crown on the lower platen.
6. Position transfer or lettering on substrate.
7. Close the machine by pulling handle down into locked position.
8. The timer will start automatically and a buzzer will beep at the end of the time cycle.
9. At the end of the time cycle, open the machine by lifting handle to the full open position.
10. Unlock cap retainer and remove substrate.



NOTE

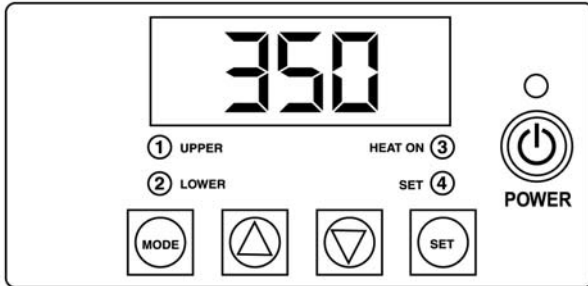
The lower platen may be adjusted to accommodate various caps, sleeves, pant legs. Slide the lower platen z bracket assembly by loosening the lock down knob located in the base of the of the z bracket. Move the complete lower platen assembly forward or backward to the desired location. Once in position, lock down the complete assembly by tightening down the lock down knob.

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 150 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 two (2) control features:

1. Temperature - Temperature may be set from 221-446°F (105-230°C).
2. Time - Time may be set from 1 second to 99.59 minutes.

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

Fahrenheit/Centigrade (Celsius) Conversion

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

1. Press the **MODE** button until the temperature is displayed.
2. Push and hold the **UP and DOWN** buttons for 5 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.

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. The Model 418 machines require periodic lubrication with a high-temperature, non-melting grease (MPPL023).
 - A. Lubricate the post, handle and cam assembly depending upon usage. (Once every month if used continuously.)

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 MPPL023

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 MPPC006 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.*

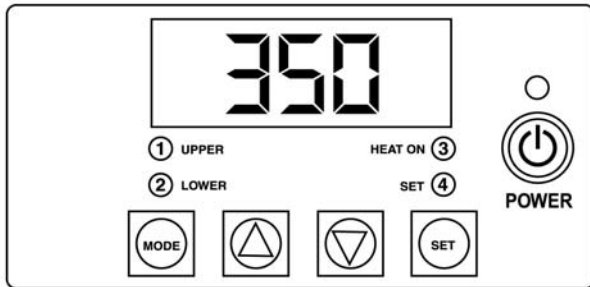
6. Allow to cure overnight under low pressure at normal room temperature.

FOR USE BY QUALIFIED PERSONNEL ONLY

Automatic Shut Off

Model 418

(418 - Controller P/N MPC90214; Rev. 4.73)



The Automatic Shut Off is designed to save electrical consumption when the user is not engaged in the usage of the Insta heat seal machines.

By default, the timer for Automatic Shut Off is set to **2 hours** during activation and cannot be changed. Any disturbance such as a key press or heat press cycle will reset the timer.

The timer for Automatic Shut Off will begin after every key press or heat press cycle.

Automatic Shut Off

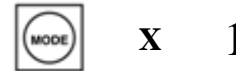
1. Turn on the machine by pressing **POWER**.



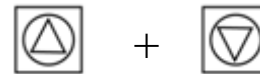
POWER

- a) ONE beep indicates the Automatic Shut Off is **OFF**.
- b) TWO beeps indicates the Automatic Shut Off is **ON**.

2. Press on the **MODE** once in order to display the **TIME SETTING**.



3. With the **TIME SETTING** displayed, press and hold the **UP + DOWN ARROWS** for **3 to 5 seconds**.



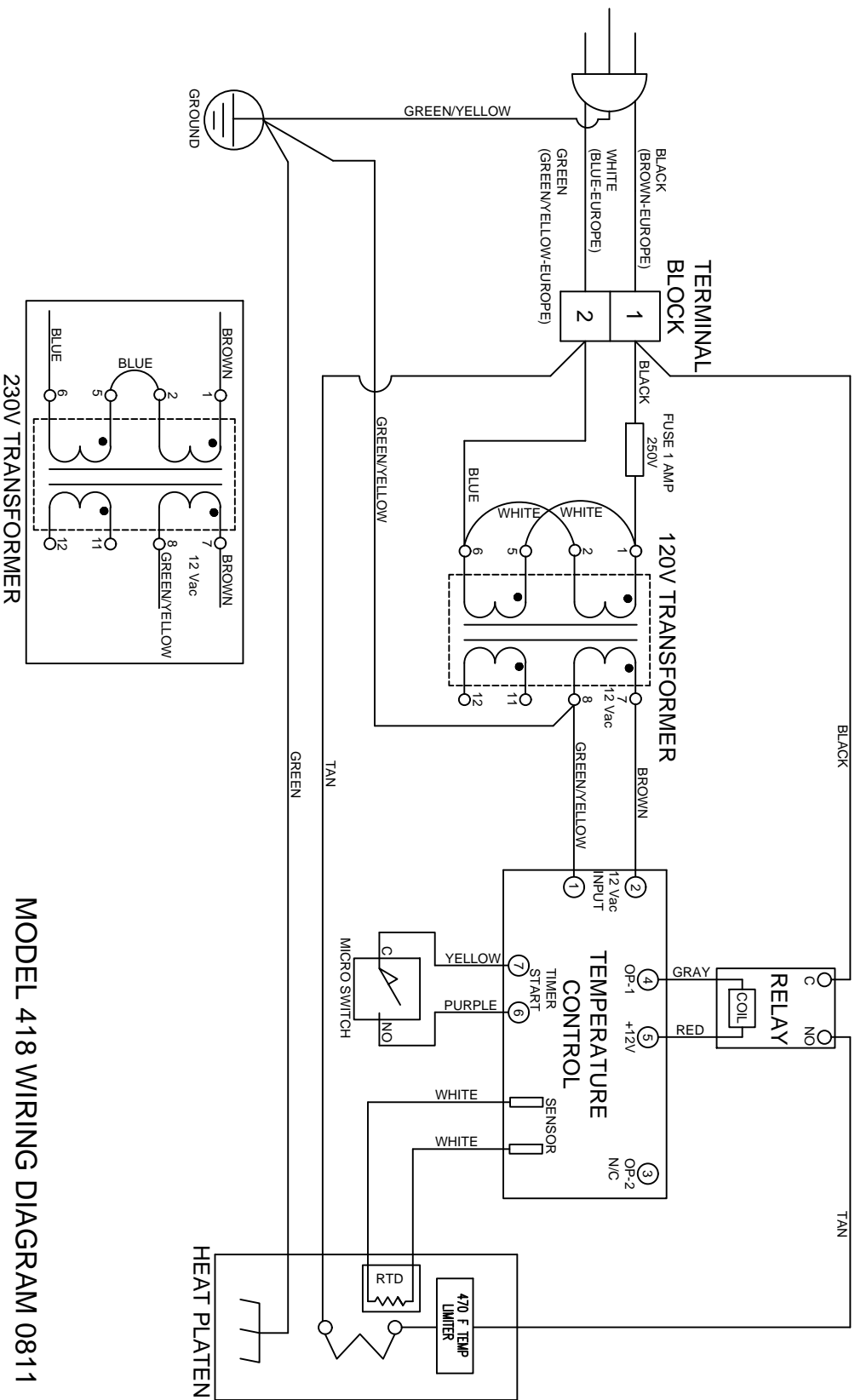
- a) ONE beep indicates the Automatic Shut Off is **OFF**.
 - b) TWO beeps indicates the Automatic Shut Off is **ON**.
4. Repeat step 3 in order to turn ON or OFF the Automatic Shut Off.

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Safety and Danger Zone Diagram

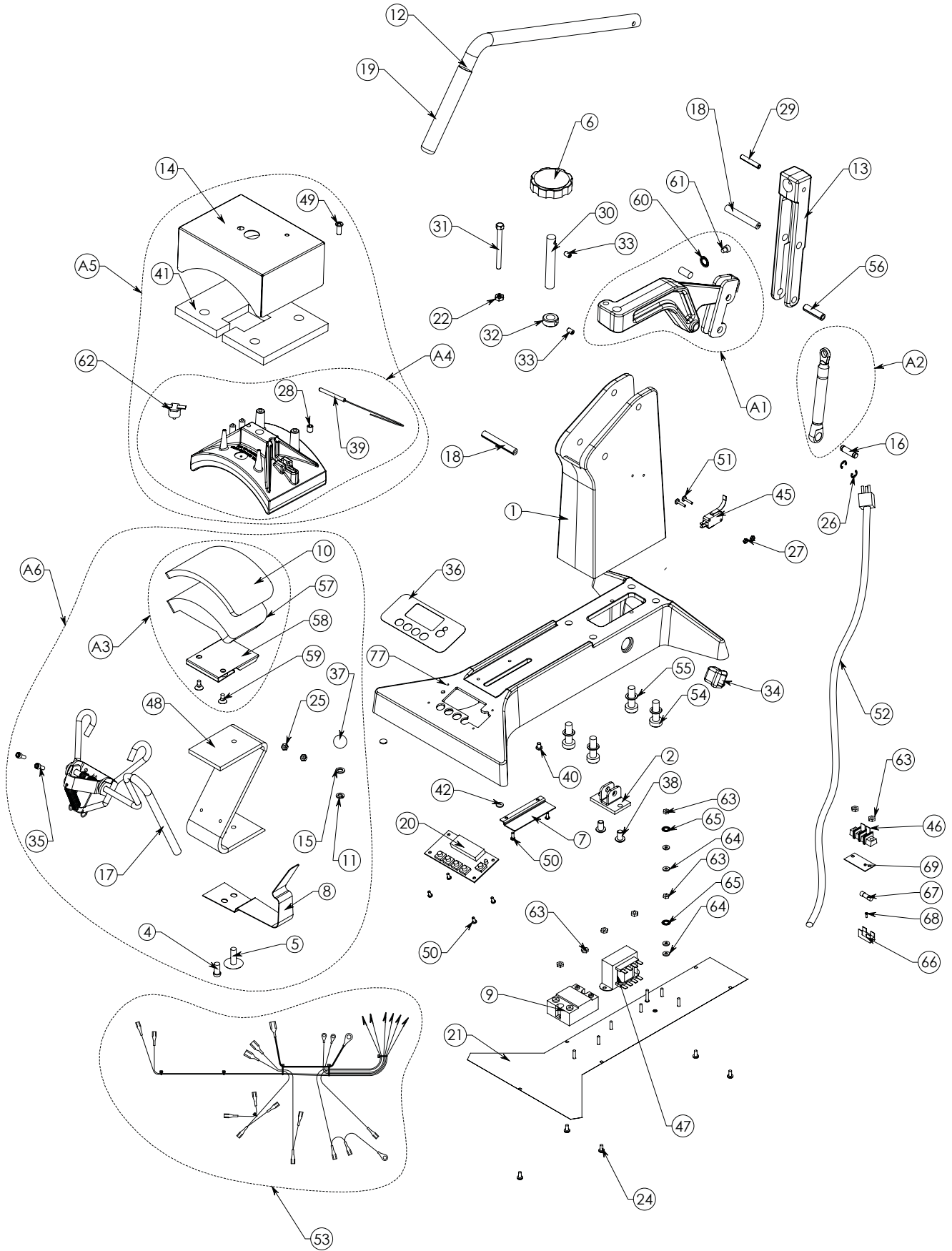


MODEL 418



MODEL 418 WIRING DIAGRAM 0811

MODEL 418



		MODEL	MODEL	MODEL
		418	418	418 EUR
NO	PART NAME	120V AC	230V AC	230V AC
1	418 BASE	MPB90184	MPB90184	MPB90184
2	BASE UPRIGHT	MPB90183	MPB90183	MPB90183
3	CLEVIS ASSY, GAS SPRING	MPC90190	MPC90190	MPC90190
4	SCREW, BUTTON HEAD 1/4-20 x 5/8	MHSB142058	MHSB142058	MHSB142058
5	CARRIAGE BOLT 1/4-20 x 1.0	MHBC14201	MHBC14201	MHBC14201
6	KNOB, PRESSURE ADJUST	MPPK018	MPPK018	MPPK018
7	RETAINER, CARRIAGE BOLT	MPR90200	MPR90200	MPR90200
8	LOCKING PLATE CAP DEVICE	MPSC413	MPSC413	MPSC413
9	RELAY, SOLID STATE	MPR90217	MPR90217	MPR90217
10	SILICONE RUBBER PAD	MPP90194	MPP90194	MPP90194
11	INTER LOCK WASHER ¼	MHWL14	MHWL14	MHWL14
12	HANDLE	MPH90197	MPH90197	MPH90197
13	BREAK OVER ARM MACHINING	MPA90213	MPA90213	MPA90213
14	SHROUD, UPPER PLATEN	MPS90198	MPS90198	MPS90198
15	WASHER ¼	MHWSAE14	MHWSAE14	MHWSAE14
16	PIN, LOWER CLEVIS	MPP90201	MPP90201	MPP90201
17	CAP HOLD DOWN DEVICE ASSEMBLY	MPSR021	MPSR021	MPSR021
18	PIN, ROLL 3/8" x 2-1/2"	MHPR38212	MHPR38212	MHPR38212
19	GRIP, RUBBER	MPSH168	MPSH168	MPSH168
20	DIGITAL CONTROL	MPC90214	MPC90214	MPC90214
21	BOTTOM COVER ASSEMBLY	MPC90202	MPC90202	MPC90202
22	HEX NUT 1/4-20	MHNNH1420	MHNNH1420	MHNNH1420
24	PAN HEAD SLOTTED SCREW 8-32 X 3/8	MHSP83238	MHSP83238	MHSP83238
25	HEX NUT 10-32	MHNNH1032	MHNNH1032	MHNNH1032
26	3/8 CLIP	MPSC242	MPSC242	MPSC242
27	HEX NUT 4-40	MHNNH440	MHNNH440	MHNNH440
28	SET SCREW 5/16-18 X 3/8	MHSST5161838	MHSST5161838	MHSST5161838
29	PIN, ROLL ¼ X 1-1/2	MHPR14112	MHPR14112	MHPR14112
30	ADJUSTMENT SCREW	MPS90203	MPS90203	MPS90203
31	HEX BOLT, 1/4-20 x 2-3/4	MHBH1420234	MHBH1420234	MHBH1420234
32	COLLAR ADJUSTMENT	MPSP247	MPSP247	MPSP247
33	SET SCREW 10-32 X 3/16	MHSST1032316	MHSST1032316	MHSST1032316
34	STRAIN RELIEF	MPS90014	MPS90014	MPS90014
35	SCREW, SOCKET HEAD 10-32 X ½	MHNNH103212	MHNNH103212	MHNNH103212
36	OVERLAY, DIGITAL CONTROL	MPL90349	MPL90349	MPL90349
37	KNOB, BLACK	11088817	11088817	11088817
38	SCREW, BUTTON HEAD 1/4-20 X ½	MHSB142012	MHSB142012	MHSB142012
39	SENSOR, 2000 OHM	MPPS210	MPPS210	MPPS210
40	SCREW, PHILLIPS 6-32X1/4	MHSP63214	MHSP63214	MHSP632143
41	INSULATION	MPSP90335	MPSP90335	MPSP90335
42	FOOT, RUBBER	MPF90004	MPF90004	MPF90004
45	MICRO SWITCH	MPPS043	MPPS043	MPPS043
46	TERMINAL BLOCK ASSEMBLY	MH11096914	MH11096914	MH11096914
47	TRANSFORMER	MPT90001	MPT90001	MPT90001

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48	ZEE, LOWER PLATEN SUPPORT	MPSS471	MPSS471	MPSS471
49	SCREW, PHILLIPS 12-24 X 5/8	MHSP122458	MHSP122458	MHSP122458
50	SCREW, PHILLIPS 6-32 X 5/16	MHSP632516	MHSP632516	MHSP632516
51	SCREW, PHILLIPS 4-40 X 7/8	MHSR44078	MHSR44078	MHSR44078
52	POWER CORD	MPPW141	MPPW142	MPPW202
53	WIRE HARNESS	MPW90325	MPW90325	MPW90325
54	SCREW, SOCKET HEAD 3/8-16 X 1-1/4	MHSSH3816114	MHSSH3816114	MHSSH3816114
55	WASHER, LOCK 3/8	MHWL38	MHWL38	MHWL38
56	PIN, ROLL 3/8 X 1-3/8	MPP90206	MPP90206	MPP90206
57	LOWER PLATEN	MASP469	MASP469	MASP469
58	LOWER PLATEN RETAINING CLAMP	MPSP432	MPSP432	MPSP432
59	SCREW, SOCKET FLAT HEAD 1/4-20 x 5/8	MH142058	MH142058	MH142058
60	WASHER, LOCK INTERNAL TOOTH #10	MHWLIT10	MHWLIT10	MHWLIT10
61	BUMPER	100455166	100455166	100455166
62	HI-TEMPERATURE LIMITER	MPPT045	MPPT045	MPPT045
63	HEX NUT 6-32	MHNNH632	MHNNH632	MHNNH632
64	WASHER #6	MHWSAE6	MHWSAE6	MHWSAE6
65	WASHER #6 INTERNAL TOOTH LOCK	MHWLIT6	MHWLIT6	MHWLIT6
66	FUSE HOLDER	MPPF708	MPPF708	MPPF708
67	FUSE (1 AMP, 250V)	MPPF701R	MPPF701R	MPPF701R
68	SCREW, PHILLIPS 2-56 X 1/4	MHSP25614	MHSP25614	MHSP25614
69	MARKER STRIP	MS6992	MS6992	MS6992
A1	LINK ARM ASSEMBLY	MPL90211	MPL90211	MPL90211
A2	GAS SPRING ASSEMBLY	MPS90192	MPS90192	MPS90192
A3	LOWER PLATEN ASS'Y W/RUBBER	MASP469	MPSP469	MPSP469
A4	UPPER PLATEN, WIRING ONLY	MPP4181W	MPP4182W	MPP4182W
A5	UPPER PLATEN COMPLETE ASSEMBLY	MPP4181A	MPP4182A	MPP4182A
A6	LOWER PLATEN COMPLETE ASSEMBLY	MPP90274	MPP90274	MPP90274

MODEL 418 1112

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