

Operation and Maintenance Manual for

Model

515/520

Heat Seal Machines

Insta Graphic Systems ♦ 13925 E 166th St ♦ Cerritos, Ca 90702 ♦ USA ♦ (562) 404-3000

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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 you the continuing capability of delivering the best lettered garments possible.

This manual describes installation and operation procedures for your new model 515 machine, as well as an easy to use table for on the spot maintenance. Proper heat sealing instructions and helpful hints are included in a separate brochure.

Your model 515 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.

Warranty

Insta Graphic Systems guarantees its machines to be free of defects in material and workmanship, under normal use and service for one (1) year from date of purchase. In order for the warranty to be effective, do not return any machines or parts without prior factory authorization.

Installation

1. Use a separate 115 volt, 20 AMP, AC circuit. Only industrial weight extension cords with proper wire size should be used. Size 14/2 wire for distances up to 25 feet, and size 12/3 wire for distances up to 50 feet.
2. Utilize the bolt holes on each side of the machine and secure the unit to the work table.

Operation

1. Turn on the machine by setting temperature dial to approximately 375 degrees.
2. Swing the upper platen arm to its fully open position; away from lower platen.
3. Allow the machine to warm up for approximately 30 minutes. When the selected temperature is reached, the neon lamp above the temperature selector knob will cycle on and off. Note that the thermometer usually reads 20 to 35 degrees higher than the actual platen surface temperature.
4. Set the desired pressure by adjusting the spoked ring under the bottom platen. To increase pressure, turn ring counter clockwise. To reduce pressure, turn ring clockwise.
5. Place the garment on the lower platen, smoothing out all wrinkles.
6. Position transfer or lettering on garment.
7. Swing the upper arm into position directly over the lower platen.

8. Close machine by pulling handle down into locked position.
9. Set timer for proper time cycle. (For best heat sealing results refer to the "How to apply Insta heat transfers and die cut letters" manual.)
10. 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) being pulled off prematurely due to suction from the separating platens.
11. Swing away upper arm to the extreme right hand position and remove garment.

General maintenance

The following maintenance chart has been prepared to assist you in locating and correcting problems when the equipment is not operating 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.

Preventive maintenance suggestions

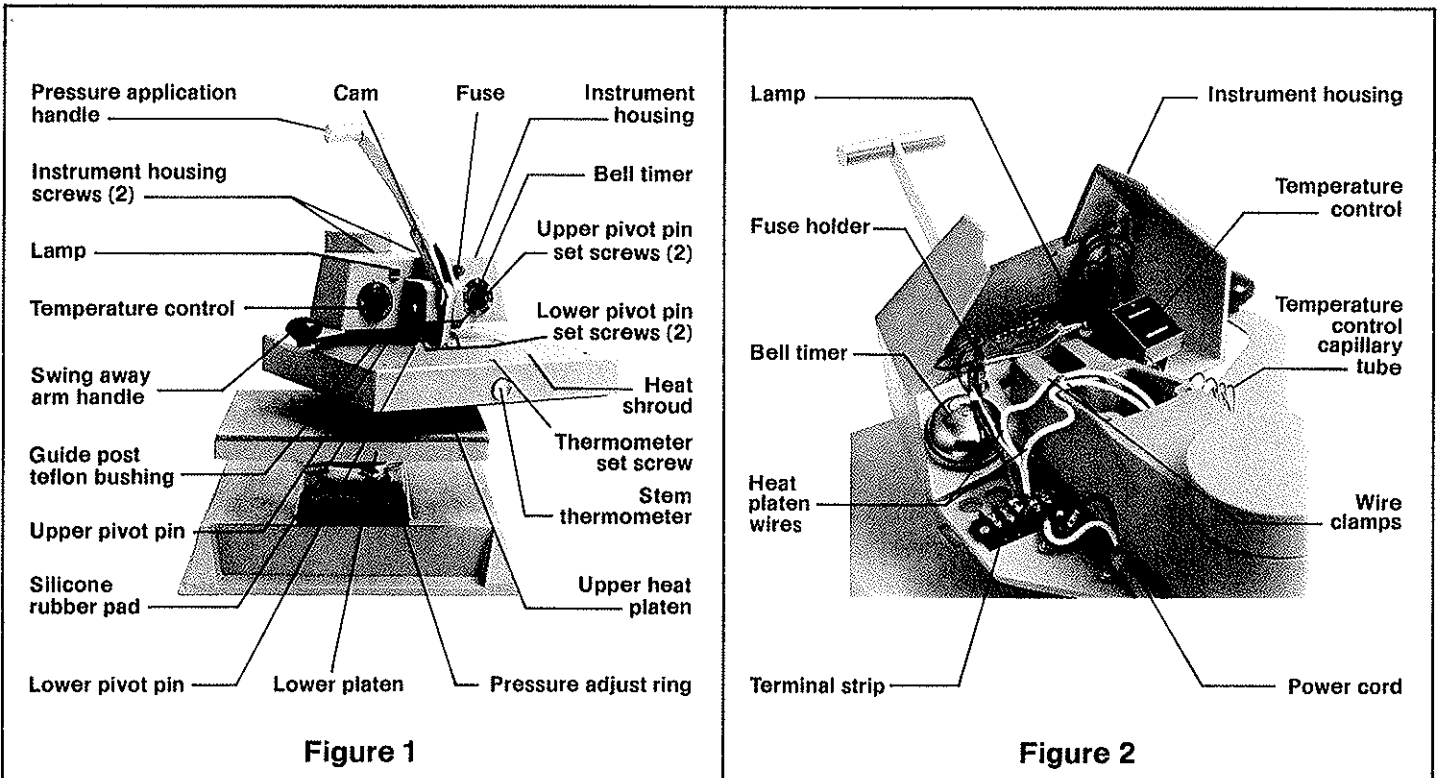
The Insta Graphic heat seal machine is relatively maintenance free. For long trouble free life the following preventive maintenance should be followed.

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, zippers or snaps.
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 the arm 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 mineral spirits is recommended.
5. The model 515 requires periodic lubrication with a high temperature grease. Mobil Temp #1 or equivalent.
 - A. Lubricate post, handle and cam assembly depending on usage.
 - B. The grease fitting at the top of the machine should be lubricated approximately once every three months.

Model 515 maintenance chart

SYMPTOMS	TEST PROCEDURE	TEST RESULTS	PROBABLE CAUSE AND FIX
Temperature of the platen gets too hot or cannot be controlled.			Defective temperature control. Replace with a new unit.
Platen DOES NOT heat when temperature control is turned on. Temperature indicator lamp DOES NOT light.	Place test jumper wire across terminals of temperature control.	Temperature indicator lamp lights.	1. Is machine turned on? 2. Check fuse. 3. Temperature control is defective. Replace with a new unit.
		Temperature indicator lamp DOES NOT light.	4. Wire harness or power cord is either disconnected or broken.
Platen DOES NOT heat when the temperature control is turned on. Temperature indicator lamp DOES light.			1. One of the connections from the heat platen is either disconnected or broken. 2. Defective heat platen assembly. Repair or replace with a new unit.

Model 515 nomenclature



Temperature control replacement

1. Remove knob.
2. Remove the two screws which secure the control to the front panel.
3. Disconnect the wires going to the control. Note that there is only one wire going to one terminal (this is the hot side of the line). The other terminal has two wires—one from the heating elements and one from the lamp.
4. Carefully remove the capillary tube clamp and temperature sensing bulb from the rear of the upper heat platen. *Do not squeeze or sharply bend the thin capillary tube which connects the temperature control of the sensing bulb.*
5. Make sure that the temperature sensing bulb on the new control is straight. Carefully straighten if necessary.
6. Carefully insert the new sensing bulb into the upper heat platen. If necessary, the sensing bulb (not the capillary tube) may be grasped *gently* with a pair of pliers to aid in installation. *Do not grasp capillary tube with pliers.*
7. Reconnect the three wires to temperature control as stated in Step 3.
8. Insert the two screws which secure the control to the front panel.
9. Put on the knob with the pointer indexed to the off position.

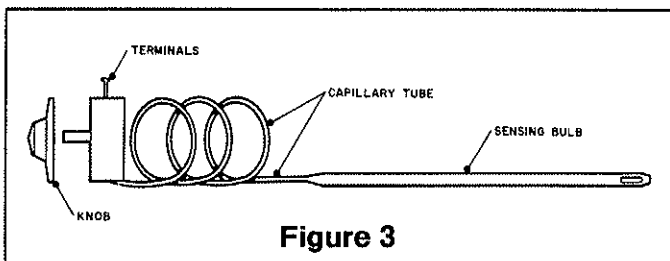


Figure 3

Wiring diagram model 515

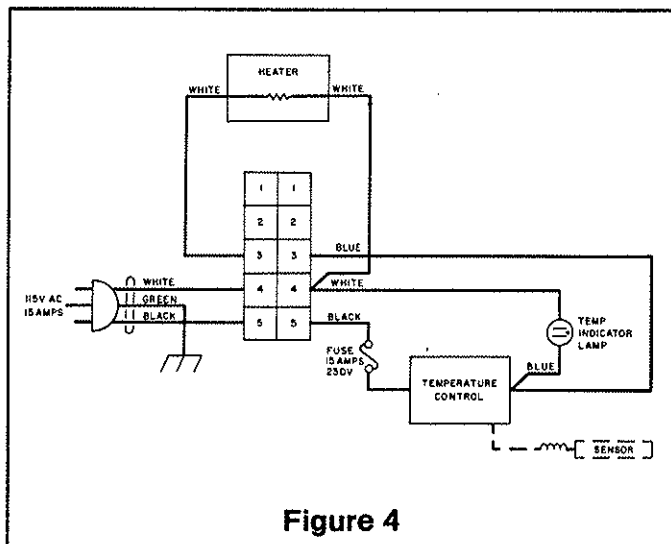


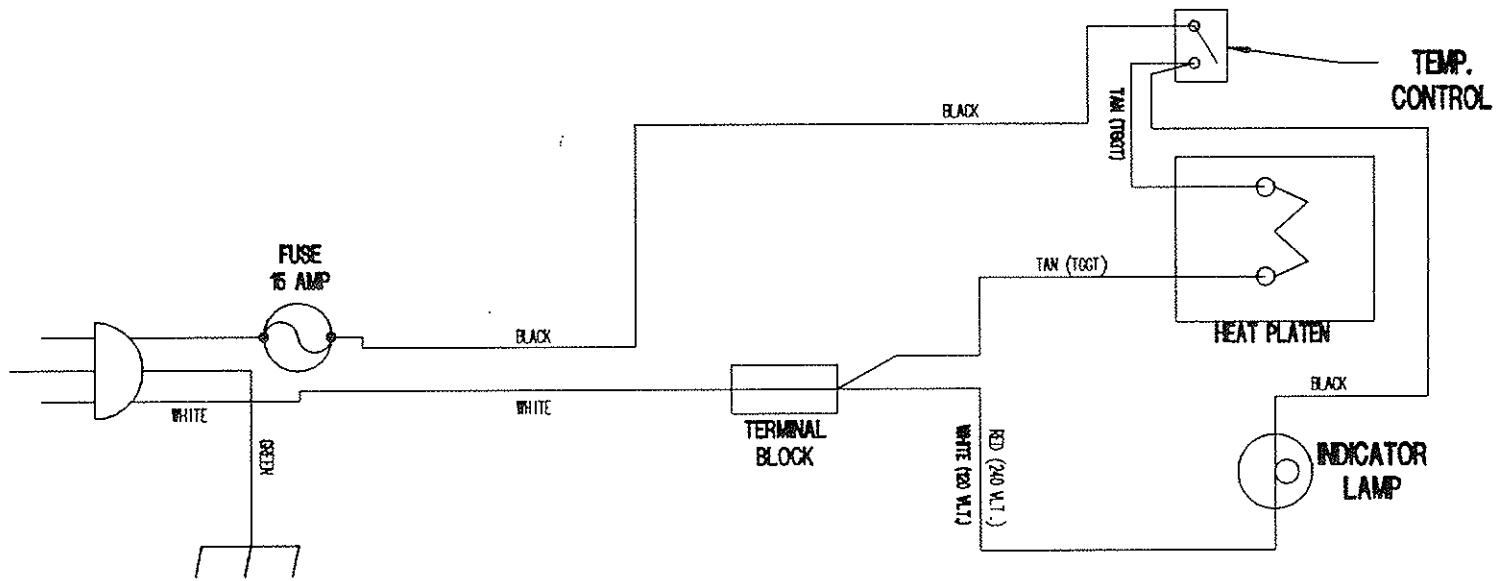
Figure 4

Heat platen removal

1. Disconnect power to machine.
2. Remove the 2 Phillips screws from the top of the instrument housing. Lift housing about 5 inches, and rest it in the open position. (see fig. 2).
3. Disconnect the two heat platen wires which come up through the guide post (terminals 3 and 4 on the terminal block).
4. Remove the heat platen wire clamps.
5. Remove the lower platen. Place some form of padding on the base of the machine to protect the teflon coating on the heat platen during disassembly.
6. Insure that there is adequate free length of capillary tube to allow the lowering of the heat platen. *The capillary tube is fragile. Make sure that it is not subject to any sharp bending or crimping.*
7. Using an allen wrench, loosen the 2 upper pivot pin set screws that hold the cam and handle assembly.
8. Using a long thin punch or screw driver, drive the upper pivot pin from the platen.
9. Slowly lower the heat platen onto the padding below. When the guide post has cleared the swing away arm casting, the wires may be pulled free.
10. Remove the clamp that retains the capillary tube to the heat shroud.
11. Carefully remove the temperature sensing bulb from the rear of the heat platen.

Model 515 principal components

Part	Stock No.
Bracket, cam left hand	MP-SB-0078
Bracket, cam right hand	MP-SB-0079
Bushing, teflon	MP-SB-0071
Cam, pressure mechanism	MP-SC-0080
Cement, silicone rubber	MP-PC-0006
Fuse 15A/3AB	MP-PF-0008
Fuse holder assembly	MP-PF-0009
Handle, swing away arm	MP-SH-0072
Knob, handle	MP-PK-0017
Lamp assembly	MP-PL-0020
Lubricant post	MP-PL-0023
Pad, 4" x 12" felt	MP-PP-0024
Pad, 15" x 15" foam	MP-PP-0025
Pad, 6" x 15" silicone rubber	MP-PP-0028
Pad, 10" x 15" silicone rubber	MP-PP-0029
Pad, 15" x 15" silicone rubber	MP-PP-0030
Pin, pivot	MP-SP-0083
Plate, machine identification	MP-PP-0032
Plate, name	MP-PP-0033
Platen, heat assembly	MP-SP-0074
Platen, heat assembly, complete	MP-SP-0075
Post, guide	MP-SP-0084
Ring, pressure adjusting	MP-SR-0073
Temperature control assembly	MP-PT-0052
Terminal block, screw assembly	MP-PT-0055
Thermometer	MP-PT-0056
Timer assembly	MP-PT-0058
Wire, harness	MP-PW-0063
Wire, power cord	MP-PW-0065



WIRING DIAGRAM
FOR
MODEL 520

INSTA MACHINE CORP.
CERRITOS CA.

240 VOLT, 2500 WATTS, 11 AMPS

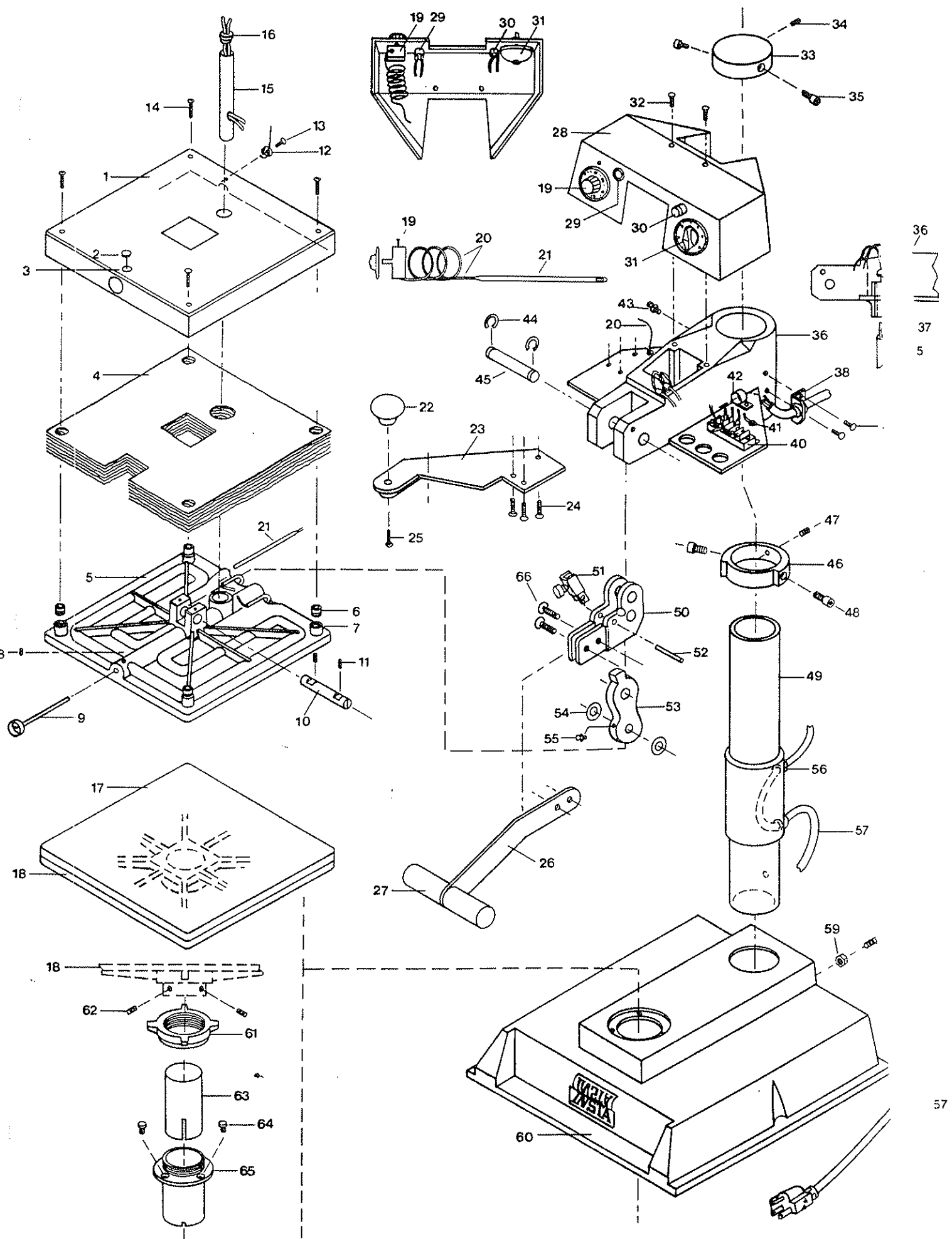
120 VOLT, 1750 WATTS, 15 AMPS

PART

61. ADJUSTMENT NUT
62. 3/8-163/4 SET SCREW
63. STEM LOWER PLATEN
64. 1/2-20X3/4 FLAT HD. SOC.
65. SUPPORT POST
66. 5/16-18X3/4 FLAT HD. SOC.

PART#

MPSR073
SS381634
700-35
SF142034
MPSR073
SF161834



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