

MODEL 115 INSTRUCTIONS

HOT STAMPING

Basically, hot stamping is a transfer process. You will transfer the color, for example, imitation gold, from the foil to the product. Heat is required to make the color release from the plastic backing and stick to your product. Along with the heat that is required to release the color, pressure is also needed to bond the color to your product. Finally, the amount of time that this pressure is maintained, dwell, is also important to the process.

These three basic principles are established on your 115 machine as follows:

1. You pull down on the handle and apply pressure.
2. You hold the handle down for an appropriate amount of time—dwell.
3. Finally, heat is electrically produced and thermostatically controlled.

Along with these three major functions, we added the ability to automatically feed the foil as well as hold interchangeable type and dies securely.

In the following instructions, reference numbers are to the accompanying drawings.

ELECTRICAL CONTROL (Drw. 115-012)

Your 115 machine is fully grounded for your safety. Never remove the ground plug from the line cord (15-088) (Drawing #115-012). Do not use around water or in a wet area. Obey all safety rules as you would for any electrical device.

The 115 machine is available as either a 115 volt, 50/60 cycles A.C. 500 watts or 230 volt, 50/60 cycles A.C. 500 watts. Be sure that you have the appropriate machine for your power supply. Check the manufacturer's label on the left side of the machine to verify this information.

The electrical cover (Drawing #115-012) has on it the master power switch (CH-4). Always turn the machine OFF with the master power switch. Do not use the thermostat as an ON/OFF switch or disconnect the A.C. line cord unless necessary. Push the switch up for ON and down for OFF.

There are also two indicator lights on the electrical cover, a red light (IND-6) labeled ON and an amber light (IND-7) labeled READY. The red light acts as a power indicator light. When you turn the machine ON, the red light will indicate that there is power going to the machine. The amber light works in conjunction with the thermostat. When your machine has reached the desired temperature, the amber light will glow. It is normal for the amber light to periodically blink on and off, much as an oven would, in order to maintain the proper temperature.

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HEATER HEAD (Drw. 115-010)

Remember, the purpose of a heater head is to heat dies. NEVER touch any exposed metal parts on the heater head; you may be burned.

PIVOTING HEAD

In order to begin, you must first place the die or type (see instructions for loading self-centering multi-line jaw attachment) that you wish to use in the heater head (Drawing # 115-010). To do this, you will pivot the head up into the loading position. Grasp the head lock handle (10-220) with your right hand and the left hand jaw adjusting knob (#19-022) with your left hand. Disengage the head lock by pulling it towards you. Pull the head up with your left hand and re-engage the lock by pushing it back. The head should now stay up with the jaws (#115-025) facing you.

LOADING HEAD—FOR DIES

The self-centering jaws are designed to locate your dies on the same center line every time you change them, making job set-up much easier. In order to open the jaws, twist the jaw adjusting knobs (# 19-022) toward you; in order to close the jaws, turn the knobs away. Open the jaws wide enough to insert your die. Maximum recommended die length is 6 ¼". Insert your die. Be sure that it is flat against the plate (# 115-027) and tighten jaws. Do not over tighten. Tighten the thumb screw (#15-082) down against the width of the die. Maximum width is 2". Release head lock and return head to the printing position and relock. **NEVER OPERATE MACHINE WITHOUT LOCKING THE HEAD IN THE DOWN POSITION.** In order for the copy (lettering) of your die to be centered by the self-centering jaws, the die must be centered on its base. Dies should be "type high" (.918") and mounted metal.

SET HEAT

The thermostat has settings from "0" to "8". No. 5 is factory set to correspond to 250°F. this is a good temperature to start with. You may wish to increase or decrease the temperature depending on the results obtained. In order to increase the heat turn knob (#15-029) to a higher setting. To lower heat, turn knob to a lower one. There is a thermometer (C00-1) on your heater head to assist you in selecting the correct temperature settings. The amber indicator light on the electrical cover will light when the head is at the desired temperature.

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FOIL RAIL (Drw. 115-013)

In order to put foil on your machine, refer to Drawing # 115-013 for help. First remember the shiny smooth side of the foil is the backing. The powdery or dull side is your contact or printing side.

FOIL SPACING

Remove the foil tension handle (6-09830) from the foil arbor (115-163) on the right side of the machine. Remove the wood spacer kit, which consists of two (2) ¼" (10-188-4) spacers, and two (2) ½" (10-188-5) spacers. There are also two (2) aluminum foil flanges (10-066).

We use these parts to locate the foil in the proper printing position.

For example, if you are using a 1 ¾" wide die, you may want to use a 2" wide roll of foil. Place a ½" spacer on the foil arbor, then a ¼" spacer, then aluminum foil flange and your foil. Be sure that your foil rolls over the top and to the left. Place another flange on the arbor, then a ½" spacer and a ¼" spacer. Replace foil tension spring and clamp collar. DO NOT OVER TIGHTEN OR FOIL WILL NOT BE FREE TO MOVE.

FOIL TRACK

Refer to drawing #115-013 for foil tracking. The foil will go by and under the right tape guide (115-058), under the head, then under the left tape guide and up and over the knurled roller (115-047) from right to left. The foil will be drawn between the knurled roller and the rubber roll (115-060).

FOIL GUIDE

When the head is in the UP position, the foil should not touch the die. The tape guides are adjustable up and down. Loosen the set screw on the back of the feed rail and slide the guide up or down so that the foil is not in contact with the die and tighten the set screw. Do this to both sides.

STRAIGHT TRACK

When tested at the factory, your machine was tracking properly. If it gets out of line for any reason, proceed as follows:

Tracking is the line that the foil travels on. If the foil tends to run to the back of the machine or toward the front, the tracking is off. This will cause wasted foil and possibly jam the foil feed. The foil should travel in a straight line parallel to the feed rail (115-046). In order to correct the tracking, simply check the tape guides (115-058) and be sure that they are coming out straight from the feed rail. If not, twist them a little, tighten the set screw and check tracking again. Repeat until tracking is straight.

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FOIL FEED (Drw. 115-000)

The amount of foil feed is determined by the location of the feed rack block (7-20431) on the rack support rail (115-055). See Drawing # 115-000. If the adjusting block is at the very end of the support rail, you will have maximum foil feed. To shorten the foil feed, loosen the thumb screw and slide the block down the rail to the right. Lock the block in place and check the feed. You want only as much foil as necessary to do the job.

WORK SAVER STOP

There are several threaded holes on the right side of the ram. See Drawing # 115-000. These holes are designed for a stop (10-181) to prevent the head from returning all the way to the top of its stroke.

Since the machine is designed with a maximum 2 5/8" stroke, there is no need for you to have to move the head any more than necessary. Insert the stop into a hole that will give you the least travel and yet still allows easy access to the work table. Remember the stroke of the machine affects the foil feed. The shorter the stroke, the less the foil feed. Find a system that works well for you.

HANDLE

The 115 press handle (115-009) is set off at a slight angle for ease of operation and comfort in use. Insert the handle into the pinion shaft (115-005).

SLIDE TABLE STOP

There is a fine adjustment on your slide table. See Drawing # 115-000. To move your slide table (115-041), you must loosen the Allen screw beneath the left side of your worktable. A wrench is supplied with the machine. To adjust the stop (115-071), loosen the wing nut and turn the black knob (15-095) to move the stop in or out. For shipping purposes, the table and stop are set all the way back. Screw the stop forward about 1" and lock the wing nut securely. Push slide table firmly against stop and tighten screw under slide table. It is helpful to push firmly down on the left side of the table. This will assure that the table is in the proper position. This same procedure will allow you to accurately move your worktable in or out in order to locate your work easily. It also allows you to slide the worktable out and return it to the same place every time.

GAUGE

Place the part to be stamped on the slide table beneath the die. Use the back gauge (115-039) to locate the part back to front and lock the gauge in place. Adjust the side stop (115-084) to locate the product left to right. Make several test prints to insure proper location.

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IMPRESSION

If you are printing on a firm solid object, it is fine to place your work directly on the slide table. However, if you are printing on a soft thin object such as paper, you will need a make ready or impression pad beneath your product in order to assure a quality printing job. Two pieces are supplied with your machine. The back of a writing tablet, desk blotter or other such materials make excellent impression pads.

LEVELLING TABLE

If at any time your print becomes uneven, for example, heavy on one side, light or no print on the other, this indicates that your table needs to be leveled. To level the table, loosen the nuts on the base casting (115-001). See Drawing # 115-000. To make one side print heavier, thread the nuts down. To make one side print lighter, thread the nuts up. Make all adjustments in small amounts; for example, ¼ turn at a time, then tighten the nuts and test print. It is good to adjust one corner at a time. Repeat procedure until satisfied.

STEP BY STEP PROCEDURE

1. Plug machine in.
2. Turn Master Switch on.
3. Set Thermostat for # 5 (250° F.)
4. Place Die in head.
5. Lock head in the printing position.
6. Put foil onto foil arbor.
7. Thread foil onto feed rail.
8. Check foil guides.
9. Adjust foil tracking.
10. Locate product on slide table using back gauge and side stops.
11. Test Print.
12. Adjust table, if necessary.
13. Set stops in side of ram.

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14. Set foil feed.
15. Print.

HELPFUL HINTS

Fuzzy Print

If letters, such as O's and D's, are filled in, you may be using too much dwell. If the print is still fuzzy with a short dwell, you may be using too much heat. Reduce temperature setting. Wait for the head to cool down and try again.

Light Print

If print is light or partial, you may not be using enough pressure or a long enough dwell. If you increase the pressure and dwell and the print is still too light, turn the temperature up. Wait for head to heat up and try another print.

Light On One Side

If the print seems light on one edge and heavy on the other edge, the slide table may not be level or the type or die may not be set correctly. Adjust leveling screws and check for correct seating of type or die, and try another print. Check to be sure that the entire die is covered with fresh foil.

Foil Does Not Cover Die Left to Right

If fresh foil does not cover entire die from left to right, make sure that the feed rack is set for the proper feed.

Foil Does Not Cover Die Front to Back

If foil does not cover the die from front to back, check that the foil is wide enough to cover the die. Also check tracking to be sure the foil is not running off either to the front or back.

ACCESSORIES

FOIL REWIND (115-014)

A device for rewinding used foil. It keeps used foil out of operator's way and work station clean; also helps to keep static electricity from winding the foil around the feed rolls. Attaches with two bolts.

BOX CHASE - 2" X 6" (115-173) and 2" X 3.75" (115-187)-

Designed to hold multiple lines of type or a combination of type and dies. The box chase clamps inside the self-centering jaw when loaded and ready for use. See illustration and loading instructions.

Type Sticks - 115-171 (12 & 14 Pt. type)

115-172 (18, 24 & 36 Pt. type)

Designed to hold only one line of type – These type sticks will print up to

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5 1/2" in length. Ideal for situations where the same information must be repeated and resetting the type each time can be avoided.

DEPTH STOP (115-113)

Attaches to top of ram with one bolt. The depth stop prevents machine operator from applying too much pressure and damaging the part.

IMPRESSION PADS (115-118)

The impression pads come in packages of three. Each pad is 4' x 10" and is used when printing on soft thin objects, such as paper.

AIR POWER CONVERSION (115-093)

This unit attaches to your hand-operated press with four bolts to convert it to an air press. Must be used in conjunction with an air compressor.

2" BUILD UP KIT (115-101)

Provides additional spacing between heater head and worktable. Maximum number of kits that can be added is three.

BUSINESS CARD GUIDE—FOR INDIVIDUAL CARDS OR LABELS (115-119)

Clips onto and is used in conjunction with table guide.

Cards slip easily over a clear plastic backing into the proper stamping position.

DIE BLOCK - - 3/4" X 2" X 6" (115-095)

Aluminum block to hold dies with either use of die bond tape or fastening die to block with counter sunk screws.

NUMBERING HEAD - - SEQUENTIAL NUMBERING - - UCH-1

Standard heads have 1/8" high characters, 7 digits. The first four digits (up to 9999) advance automatically by the activation of a plunger. The last three digits must be advanced manually.

FOIL

Standard sizes are 1", 2" or 3" x 200' long. There are a total of twenty seven colors including metallics and pigments. Contact customer service for a foil chart.

Please contact our order department if you have any further questions regarding our machines, accessories, parts or hot stamping in general.

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ADDENDUM TO MODEL 115 OPERATING INSTRUCTIONS AND DRAWINGS AIR-OPERATED MODEL 115

1. A hot stamping press applies high pressure with heat to the article being marked. Care should be taken by the operator to keep hands free of the stamping area whenever the equipment is connected to air and electricity. When handling large articles, hold them by the sides so that the hands are not under the stamping head. When handling small articles, loading onto fixtures should take place away from the stamping area.
2. This press is furnished with two hand buttons wired so that an operator must press both buttons to initiate a cycle.
3. Any attempt by the customer to alter the wiring or construction of this press which renders the two hand anti-tiedown circuit useless **IS COMPLETELY UNAUTHORIZED AND PROBABLY WILL RESULT IN SERIOUS INJURY TO THE OPERATOR.**
4. This machine was thoroughly tested before shipment. Please remember that any machine can malfunction for a number of reasons beyond the manufacturer's control. If the operator detects any malfunction, this press should be immediately turned off and the shift foreman should be notified at once.
5. It is extremely important to remember that when servicing or setting up this equipment, electrical power should be shut off and the air line completely disconnected to prevent accidental actuation of the stamping head.

On Receipt of the Press

1. Remove the upper portion of the crate from the skid, remove bolts holding the press to the skid, and locate the press on a sturdy bench or table which places the work area of the press at a convenient height.
2. The lubro control is mounted so that the operator can easily keep an eye on the oil and moisture levels in the transparent bowls and adjust the pressure as required. Air supply should be connected at the opening provided. A 3/8" line is recommended.
3. The lubro control unit filters the incoming air removing moisture at the lower bowl. It is necessary to periodically drain the filter bowl to protect the delicate mechanism of the valves, cylinders, etc. The pressure regulator controls the

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amount of pressure on the cylinder and, therefore, on the die. Pressure can be read directly on the gauge at the top of the unit.

4. Instructions covering the lubro and filter control are attached.
5. Following the instructions regulate the oil flow until very small amounts of oil are noticed at the muffler on the exhaust port of the air valve at the main cylinder.
6. The control box contains the following switches and lights:
 - A. Red "On" Light - - top left red indicator light.
Indicates that machine is "on" and is activated by the "power switch" located directly beneath it.
 - B. Amber "On" Light - - Indicates that the solenoid is energized giving air power the head of the machine. Activated by the "Head" switch located directly beneath it.
 - C. Dwell Timer - - A solid state timing device, extremely accurate and is provided with two control knobs. The large knob, Course Dwell, is calibrated on a 0-5 scale; the small knob, Fine Dwell, is calibrated on a 0-1 scale. Using the two knobs together, very precise adjustments can be made as required.
 - D. Red "Descending" Light - - When the dwell timer is calling for the head to be in the down stroke position, the "Descending" light will come on.
 - E. Amber "Heating" Light - - Located under the dwell timer indicates that the thermostat is calling for heat. Will shut off when machine has reached indicated temperature.
 - F. "Set Up/Run" - - The set-up switch enables the operator to bring the head down for a long period of time for set-up purposes. To set the press up using the set-up switch, turn the switch to the "Set Up" position with the "Head" switch on. Press both buttons; the head will descend and stay down until the set-up switch is flipped to the "Run" position. The timer will then complete a time cycle (whatever is called for on the "Dwell Timer" dial, and the head will return to the upward position.

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CAUTION: WHENEVER THE SET-UP SWITCH IS BEING USED, BE CAREFUL NOT TO PUT YOUR HAND BETWEEN THE TOP OF THE HEAD AND THE BOTTOM OF THE MAIN FRAME UPPER CASTING BECAUSE SHOULD POWER FAIL WHILE THE HEAD IS IN THE DOWN POSITION, THE HEAD WILL RETURN IMMEDIATELY.

- G. The control box is protected by the fuse located at the bottom left of the box and marked "FUSE".
- 7. This Franklin press will operate at line pressure between 10 and 100 pounds per square inch. Pressure on the die is approximately nine times pressure shown on the gauge. Pressure should be adjusted to give a firm squeeze on the part and will increase as stamping area and hardness of the material increase
- 8. Speed of the up and down stroke can be controlled by the flow control valve located on the side of the cylinder. The upper screw controls the downstroke while the lower screw controls the upstroke. Turning the screws clockwise slows the stroke.

Operation and Maintenance of Filter, Regulator and Lubricator

- A. Filter - - The polycarbonate plastic material used to manufacture the plastic bowls and the sight glass on metal bowls may be attacked by certain chemicals. Do not use this filter on systems with air supplied by a compressor lubricated with synthetic oils or oils containing phosphate esters or chlorinated hydrocarbons. These oils can carry over into the air lines and chemically attack and possibly rupture the bowl or sight glass. Also, do not expose the bowl or sight glass to material, such as carbon tetrachloride, trichloroethylene, acetone, paint thinner, cleaning fluids, or other harmful materials, for they too will cause the plastic to craze and/or rupture.

To clean, it is not necessary to remove filter from line. To maintain maximum filtering efficiency and to avoid excessive pressure drop, the filter must be kept clean. Turn drain valve to remove any bowl accumulation before it reaches level of lower baffle. A visible coating of dirt or condensate on filter element or excessive pressure drop indicates cleaning is necessary.

- B. Regulator - - To adjust reduced pressure settings, loosen lock screw in center of knob and turn knob clockwise to increase pressure setting and counter clockwise to lower setting.

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If air supply is kept clean, the regulator should provide long periods of uninterrupted service. Erratic regulator operation or loss of regulation is most always due to dirt in the disc area. To clean, shut off and depressurize air line and disassemble the regulator.

When reassembling, make sure the disc assembly is firmly in place and that the disc stem fits into center hold of diaphragm assembly. Tighten bonnet slightly more than hand tight (to 50 inch pounds torque).

- C. Lubricator - - To fill, shut off air supply, remove either of the two fill plugs and fill with oil to within ¼” of the top of the bowl. For most conditions, the use of a high-quality S.A.E. # 10 (S.U.V. 150-200 SEC 100° F) is recommended. Start equipment and operate a few minutes to permit system to fill. Check lubrication of the equipment by holding the thumbnail or a mirror near the exhaust opening - - a slight film of oil should be deposited each exhaust cycle. A heavy film indicates over-lubrication and the drops per minute should be reduced by turning adjustment screws clockwise. Clockwise rotation of adjusting screw decreases lubrication; counter-clockwise rotation increases lubrication. Do not turn adjusting screw more than 1 ½ turns counter-clockwise from the closed position.

If air and oil are kept clean and the oil level never allowed below end of dip tube, the lubricator should provide long periods of unattended service. If the oil drip rate diminishes or requires continual re-adjustment, it is an indication that the felt filter contained inside of the filter holder located at the bottom of the dip tube is dirty or has become clogged. With the air line pressure shut off, remove the bowl, and using a pair of tweezers or similar instrument, remove the dirty filter element. Apply compressed air to the lower end of the dip tube to make sure that the oil delivery system is free and clear of impediment. Insert a clean new filter element, wash any parts requiring cleaning with denatured alcohol and re-assemble unit.

In addition, use a good grade of high temperature grease on the main ram.