---- <u>WARNING</u> ----

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. A MANUAL OR AIR SLIDE TABLE SHOULD BE USED WHEN STAMPING THESE SMALL PARTS.

A TRANSPARENT SAFETY GATE SHOULD BE INSTALLED TO PROTECT THE OPERATOR.

Because this Franklin press is so versatile, it is impossible for Franklin to supply a universal safety gate or slide fixture. A device should be made by the customer to protect his operators. Do not hesitate to consult the manufacturer for advice or quotations on custom built part loading devices, etc....

- 2. This press is furnished with two (2) hand buttons wired so that an operator must press both buttons to initiate a cycle. An anti-tie down feature is standard on these presses (except where automatic loading features are provided with presses custom built to order).
- 3. Any attempt, by the customer, to alter the wiring or construction of this press which renders the two (2) hand anti-tie down 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 unit should be mounted in a vertical position, near the press, 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 $\frac{1}{2}$ " line is recommended.
- 3. The lubro control unit filters the upcoming air removing moisture at the filter 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 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. In the lubricator bowl a supply of oil is gradually fed into the air line to properly lubricate the internal parts of the pneumatic system. 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.
- 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. Connect only to voltage specified on the machine.
- 7. To begin using your press, check to make sure that the head switch is in the <u>OFF</u> position and turn the main switch <u>ON</u>. The red light and the amber light at the bottom of the control box will come on if the thermostat is calling for heat. If only one of these lights is on, rotate the thermostat knob clockwise to approximately 250-350 degrees. The second light should come on indicating that power is on. The amber light indicates that the unit is calling for heat.
- 8. With the power switch ON but the head switch OFF, the machines will not operate. Turn the head switch ON. The red light indicating HEAD ON comes on. Now, when pressing the two (2) hand paddles the machine will activate. When the dwell timer is calling for the head to be in the down stroke position, the amber descending light will also come on.
- 9. 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 set-up 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 switched to the up position. The timer will then complete a time cycle (whatever is called for on the dial) and the head will return to the upward position.
 - <u>CAUTION</u>: 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.

- 10. The heat control is calibrated in degrees F and can easily be set by the operator. Only experience will determine the best temperature to use on the various materials you will be stamping.
- 11. Pressure on the die of a Model #2200 is thirty (30) times that on the pressure gauge. On the Model #2400, pressure is forty (40) times that on the gauge.
- 12. The solid state timing device, on this Franklin Press, in extremely accurate and is provided with two (2) control knobs. The large control knob, coarse dwell, is calibrated from 1-4 seconds. The small control knob, fine dwell, is calibrated from 0-1 second. Using the two (2) knobs together, very precise adjustments can be made as required.
- 13. Speed of the up and down stroke can be controlled at the main valve located at the rear of the upper casting. Turning the screws clockwise slows the stroke. Screws should be locked after adjustments are made with the check nuts provided.
- 14. A variety of dies and hand set types, slugs, etc., can be used with your press. For flat un-mounted dies, a flat dovetail should be used. This is a solid block of metal with machined parallel sides. Dies may be attached by using screws, glue or heat sensitive adhesive (Dura Die Mount). Steel, brass, zinc, magnesium and silicone rubber dies are frequently used with dovetails. The four (4) wall is used for hand set type, linotype or Ludlow slugs, type high dies, cuts, etc. Sometimes flat thin photoengraved or hand-engraved dies are mounted on metal blocks. These can then be held in the four (4) wall chase. Four (4) wall chases are especially convenient when several different dies or slugs are to be used or when a die is to be used along with handset type, etc.
- 15. To adjust the height of the upper portion of the press, so that the die in the down stroke position will be in proper relation to the part you are going to stamp, measure the distance between the top of the bottom of the die. Since the stroke of the machine is 3" and since the double end piston rod stop enables you to control with some precision the final height of the die in the stamping position; the upper assembly should be set at a point which would place the die 2-3/4" to 2-7/8" above the top of the piece to be stamped when the head is in the up position.
- 15a. Proper procedure for raising and lowering upper head assembly. Insert 3/8" Allen wrench in Left/Right screw clamping assembly and loosen until both wedges are released from rails (check both sides). With a socket wrench raise or lower head assembly by turning the nut at the top. Turn clockwise to raise, counter clockwise to lower. When correct height is reached, relock both Left/Right screws. The ideal operating condition is that the die be lower than the top surface of the part to be stamped but higher than the fixture. This allows the die to put sufficient pressure on the part to make a good impression and prevents damage to the die is the machine is actuated with no part on the

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fixture. <u>OBSERVE THE SAFETY PRECAUTIONS ON THE PAGES IN</u> THIS BOOKLET WHENEVER USING AIR TO POWER THE HEAD

16. FOIL PULL CONTROLS

In order to make the adjustments in this control area, foil must be strung through the foil pull mechanism.

The two (2) clamps on the play-out roll arbor are loosened and the outer clamp, spring and disc, are removed leaving the back arbor clamp and disc on the arbor.

The roll of foil is now slipped on the arbor with the coated side of the foil facing right so it will be next to the work when pulled under the stripper bars. The outer disc, spring and clamp are now slid on the arbor with both clamps left loose. The end of the foil then is strung under the stripper bars, coated side down, and the end placed between the knurled and rubber pinch rolls. Turning the rubber roll using the large pulley knob, the foil is rolled thorough the pinch roll from bottom to top and allowed to hand free. The square knobs which release the pressure between the rubber and knurled roll are now turned clockwise to allow the foil to be adjusted front to back between the pinch rolls.

The foil is now aligned front to back so that there is an even amount of foil extending over the stamping area in the front side as well as the back. The back clamp on the play-out arbor is now tightened. The front clamp is pressed against the play-out foil spring and the clamp tightened. Enough pressure should be put on this clamp spring to cause a drag when the foil is given a quick jerk. The rubber roll pressure knobs are now against the knurled roller. Foil play should now be taken up by turning the rubber roller by hand to tighten the foil between the play-out roll and the pinch rolls.

It should be noted that the parallel stripper bars should be parallel to the work table, since an angle on these bars will cause the foil to track to the high side of the air. It should also be noted that the small rubber bumper washers on the parallel bars are not foil guides but bumpers for the stripper bars when making contact in the down position. These rubber bumpers should be placed to the front and back between ends of the parallel stripper bar and against the vertical bars on each end. Without a part in the machine, the head should be cycled. It is not necessary that the head reach the full down position in order to make the foil pull work, as soon as the head starts down, the hand switches should be released and the foil advance will begin at the end of the foil dwell adjustment.

The two (2) Pnuetrol flow control valves on either end of the lead pull cylinder may now be adjusted so the pull of the foil by this cylinder in both directions, will be even and without jerky motions. If the pull is set too fast, it tends to jerk more foil from the play-out roll than is required to keep the foil tension taut under the stripper bars which can cause an inconsistent foil pull length.

The tension spring on the play-out roll can also be adjusted in conjunction with the speed controls on the pull cylinder to prevent this from occurring.

The foil end can now be wrapped around the rewind roller and any play in the foil between the pinch roll and the rewind roll taken up by turning the pinch rolls by hand.

The foil pull length is now adjusted to the minimum length of the job to be stamped. It is normal to have about an eighth of an inch space between transfers.

Although the air regulator controlling the air to the leaf pull cylinder valve is normally preset at the factory to 80 PSI, it should be set below the low point of the in-plant air system, prior to the speed control adjustments.

The jam nuts on the flow control valves should now be securely tightened.

MAINTENANCE OF YOUR FRANKLIN MACHINE

Like all find machinery, this Franklin Press should be kept clean, free of dirt and contamination. Pay close attention to the amount of moisture and oil in the lubro control transparent bowls. In addition, use a good grade of high temperature grease on the main ram. The foil feed rack gear clutch should be lubricated. No lubrication is required on the leaf pull bearings which are self lubricating teflon.

A high temperature grease should occasionally be wiped onto the die clamping screw and the clamp pivot.