WARNING!!!

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 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 hand anti-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 a 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 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 lower bowl to protect the delicate mechanisms 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 gage at the top of the unit.

- 4. In the upper bowl a supply of oil is gradually fed into the air line to properly lubricate the internal parts of the pneumatic system. Instructions covering the lubro control are shown on next page.
- 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 this press to 110V AC only. On the control box are the main switch, head switch and setup switch. Also found on the main control box are several indicator lights and the dwell control. The heat control is located below the main control box.
- 7. To begin using your press, check to make sure that the head switch is in the OFF POSITION and turn the main switch ON. 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 the unit is calling for heat. The red light indicates 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 machine will not operate. Turn the head switch ON. The red light indicating HEAD ON comes on. Now when pressing the 2 hand paddles (6-08300), 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 setup switch enables the operator to bring the head down for along period of time for setup purposes. To set the press up using the setup switch, turn the setup switch to the setup position (in the direction of the arrow) with the head switch on. Press both buttons. The head will descend and stay down until the setup 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. CAUTION: WHENEVER THE SETUP 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 POSITON, 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. This Franklin press will operate at pressures between 5 and 150 pounds per square inch. Pressure on the die is approximately 20 times pressure shown on the gage. Pressure should be adjusted to give a firm squeeze on the part and will increase as stamping area and hardness of the material increase.
- 12. The solid state timing device on this Franklin Press is extremely accurate and is provided with 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 seconds. Using the 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 upper cylinder port (7-30230). The upper screw controls the upstroke while the lower screw controls the downstroke. Turning the screws clockwise slows 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 unmounted dies, a hot plate chase should be used. This is a solid block of metal with machined parallel sides and a dovetail. 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 hot plate chases. The 4 Wall Chase 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 4 Wall Chase. Four 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.

Die or type holder can be inserted at either the right or left hand side of the 2" x 4" and 2" x 6" heads and at the front of the 3" x 6" head. On each holder an adjustable stop is provided for left right positioning (in the 3" x 6" head front back positioning of the die). Slide the holder to the stop and tighten the screw in block (7-20130) to clamp the holder in lace. When tightening this screw, use moderate pressure only using an Allen wrench with the long arm in the screw head turning with the short arm.

- 15. The clearance between the die and the bed of the press can be adjusted quickly and easily by following these steps:
 - A. Always disconnect the air pressure before inserting the setup handle and always remove the handle before reconnecting the air—SERIOUS INJURY TO THE OPERATOR CAN RESULT FROM OPERATING THE PRESS UNDER AIR PRESSURE WITH THE HANDLE IN PLACE. Using the setup handle (7-10190) lower the head as far as it will go with the die and die holder in place on the machine. Slide the part to be marked on its fixture into a position near the die. One of 3 conditions will exist.
 - a. The die will be higher than the part on its fixture.
 - b. The die will be lower than the part on its fixture but higher than the fixture without the part.
 - c. The die will be lower than both the part and the fixture.
 - B. 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 imprint and prevents damage to the die if the machine is actuated with no part on the fixture. To adjust the height of your machine, loosen the 4 bolts holding the clamp (7-10210) to the upper casting (7-10270) at the rear of the press

approximately one to two turns. If the die is above the part to be marked, turn the elevating handle (7-10160) counter clockwise allowing the head to lower until the surface of the die is below the surface to be marked. It may be necessary to place some hand pressure on the upper casting when it is to be lowered. If the die is below the part and below the fixture, turn the handle clockwise until the die is below the top surface of the part but above the top surface of the fixture without the part.

- C. Tighten the lock bolts and check again to make sure that the die is in the correct position. The same procedure can be used for setting the height of the press using the electronic setup switch rather than the operating handle. Observe the safety precautions on the pages of this booklet whenever using air to power the head.
- 16. Many kinds of roll leaf are available. It is important to select a grade that will work properly on the material you are stamping. If you encounter foil problems, send samples of the parts to b marked along with a description or sketch of the imprint to be made so that Franklin Manufacturing can help you select the proper roll leaf. Before sliding the roll of leaf onto the spindle (7-20190), a clamp (7-20310) and then the disc (7-40100) with the protruding bar should be placed on the spindle against support bar (7-20160). Roll leaf should be inserted on the spindle so that the inside of the roll will face the part to be stamped when it is threaded through the press. Then disc (7-20320), spring (6-05460) and a second clamp (7-20310) should be placed on the spindle.

Leaf should now be centered, the clamp near the support bar tightened and the other clamp tightened after applying a slight amount of spring pressure to the roll. The roll should be wide enough to completely cover the die with about ¹/₄" on either side. Turn the foil under the front and rear stripper bars (horizontal member between 7-20380 on each side), and then in between the knurled and rubber rollers.

For threading purposes, the square cam (6-05100) at the rear of the leaf pull is used to separate the rollers and ease the threading. Adjust the stripper bars to make sure that the foil is away from the die when the die is not in contact with the part and make sure that the horizontal holddown bars are relatively level. If the leaf steers off to one side or the other, adjustment of the holddown bar will cause it to travel straight.

The amount of leaf pulled on each stroke is determined by the position of block (7-20430) on bar (7-20460). Maximum leaf pull occurs when block (7-20430) is all the way forward. Fine control of leaf pull is accomplished by the screw in block (7-20450). Adjusting this screw also permits the die to clear the part before leaf starts to advance when pulling on the upstroke.

With some materials, foil must feed on the upstroke and with others on the downstroke. This conversion can be made by removing the screw on which block (7-20450) pivots. This block is attached to the rack (7-20440) which is contained in cast housing (7-20420). Remove the rack and block from the housing leaving the housing hanging on the leaf pull shaft. Turn the block and rack 180° so that if the teeth were pointing up they are pointing

down or vice versa. Rotate the housing (7-20420) to a position approximately 180° from its original position, re-insert the rack into the housing and replace the screw holding block (7-20450) to block (7-20430). The foil will now feed on the opposite stroke.

INSTALLATION OF REROLL ON MODEL 1020

Reroll consists of a bar (7-10400) and 2 mounting screws, a bracket, a reroll roller with pulley and shafts and a reroll spring. Tapped holes are located in the uprights (7-10120) just above the base casting (7-10110). Bar (7-10400) is to be installed between the 2 uprights at that point.

The steel bracket is to be mounted on the lower 2 bolts affixing clamp (7-10210) to head casting (7-10270). The reroll roller fits into the 2 slots in the bracket with the pulley facing the right hand side of the press as viewed from the front. The reroll spring is then threaded between the pulley on the reroll roller and pulley (6-03800).

MAINTENANCE OF YOUR FRANKLIN MACHINE

Like all fine 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 die clamp pivot.



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Hot Stamp Foil Vendors

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Company: API Foils Contact: Adrian Gonzalez Address: 10440 Ontiveros Place, Unit 1 Santa Fe Springs, CA 90670 Notes:

Company: Coated Film, Corp Contact: Sherry Morriss Address: 500 State St. Chicago Heights, IL 60411 Notes:

Company: Coding Products Contact: Mike Cairo Address: 111 West Park Drive Kalkaska, MI 49646 Notes: Class VI medical grade foils.

Company: Color Foil Contact: Peter Chan Address: 24 Birkendene Road Caldwell, NJ 07006-5717 Notes: Phone: (800) 255-4605 Fax: (562) 946-5743 Web Site: E-Mail:

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| Company: | Nakai International |
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| Contact: | Michael Dolan |
| Address: | 770-4 Broadway Ave. |
| | Holbrook, NY 11741 |
| Notes: | |

Phone: (800) 445-2684 Fax: (800) 232-8354 Web Site: E-Mail:

| Company: | Sanyo Corporation of America |
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| Address: | 1049 Elkton Dr |
| | Colorado Springs, CO 80907 |
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Phone: (877) 565-1888 Fax: (719) 265-9678 Web Site: E-Mail:

| Company: Great Western Foils, Inc. | Phone: (805) 375-4336 |
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| Contact: Mark or Brian Bowland and Joe Cortez | (866) GRT-FOIL |
| Address: 3537 Old Conejo Rd., Unit 105 | Fax: (805) 375-4337 |
| Newbury Park, CA 91320 | Web Site: |
| Notes: | E-Mail: |
| | |

To: Production Supervisor

From: Dick Olhoffer

Subject: Instructions for Franklin Model 1020

BASIC INSTRUCTIONS:

- I. Mount AFM-XYR fixture to Franklin base plate - put part on nest and position so area to be stamped lines up with Franklin die holder.
- II. Loosen the four (4) large Allen bolts on back of the Franklin machine: loosen just enough, .030" so you can turn the crank handle to lower/raise the carriage into position. You want 2 ³/₄" (two and three-quarters) from die holder to part.
- III. Turn on power to Franklin - air pressure should be connected - showing 60 to 80 PSI
 - A. Heat.....
 - B. Dwell.....
 - C. Depth stop...... (lock collar on shaft that extends from top of press) should be moved to top end of the threaded rod. It should not hit the orange plastic rings when press is down on the part. *See Section #10 on page 3 for rubber dies.
- IV. Mounting the die (when using heat tape or die mounting tape).
 - A. Sample die mount is included: Reorder from foil supplier.
 - B. Lay die on dark side, cut around die to liner with razor blade as already done, peel away from liner, lay on top of die (either side up) with no lumps, bends, creases, etc.
 - C. Position die on part.
 - D. Put Franklin in "set-up" position on control panel.
 - E. Push the two (2) hand buttons simultaneously.
 - F. Count to ten (10) and move set-up switch to run position. Die is mounted and ready to stamp parts.
 - G. To remove die, use a putty knife and pry loose from one edge. To clean die, soak in M.E.K., acetone, etc. Remove residue from Franklin steel dovetail die holder with stiff brush.

- V. Thread hot stamp foil (dull side down) through rollers to re-wind. Adjust amount to be used by turning set-screw in rack. When right amount is achieved, lock retaining nut.
- VI. Now you are ready to stamp! Make a few samples. If print is light or has voids, slightly increase dwell. You may also increase the heat setting in 10 degree increments - maximum is 325 degrees for styrene.
- VII. Make ready (Pressure sensitive cork) It may be necessary to put a layer of this material on the top of the nest. If you have a consistent low spot in the print copy, use masking tape to build it up (either on top of the cork, if you are using cork, or directly on the aluminum nest.)

ADDITIONAL INSTRUCTIONS:

- I. For help: Call me at home (714-962-2730) 7:30-8:30 a.m. or after 5:00 p.m. weekdays.
- II. Have foil supplier present when you are ready to start - if possible.
- III. Maintenance:
 - A. Oiler - Turn plastic knob on top oiler clockwise until closed. Open 1/3 of a turn.
 - B. Fill bowl 2/3 full with 10-weight NON DETERGENT oil. Check once a week.
 - C. Lightly add grease to center ram once a week when press is in daily use.

SAFETY PRECAUTIONS:

- I. NEVER allow more than one operator (at a time)!!!!!
- II. NEVER touch heated part with bare fingers.
- III. Make sure die holder is locked in place before stamping. Use Allen wrench. Never over-tighten especially when press is cold.
- IV. Put "set-up-run" switch in middle position when not running press or making die changes.
- V. Put wood block between lock collar and plastic rings when you disconnect the air pressure.
- VI. Turn off press when not in use - even for short periods of time.

HEAT TAPE OPERATION FOR METAL AND RUBBER DIES

Heat machine up to at least 300°.

Put die on part and position under hot stamp head.

Cycle machine to make sure that the head comes in contact with the die.

Put the machine in "set up" mode.

Put heat tape all over the die. Make sure that there are no wrinkles.

Cycle the head down and count to 20. Then turn the "set up" off to let the head return.

Count to 20 with the head up. This allows the heat tape and die to heat up.

Put the machine in "set up" again and cycle the head and count to 20. Then turn off the "set up" switch to let the head return.

Set the machine to the run mode and begin production.

When using a silicone rubber die, be sure to engage the Kensol/Franklin depth stop. Set the stop so the die CANNOT touch the part that you are stamping. One way to do this is to turn off the air. The head will drop down onto the part. Then turn the stop clockwise until it can no longer turn. Next, turn the air back on. Then turn the stop (1) full turn clockwise. When you cycle the press you should get a faint print. Finally, turn the stop to fine tune the machine.

UPPER CASTING ASSEMBLY

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