Section 1

Installation

This section contains important installation instructions that must be followed to properly install and prepare the Case Printer for set-up and operation.

Pre-Installation of Case Printer with Restacker & Roller Conveyor System

Following are the site requirements and basic layout (see sketch at the end of this section):

Electric Power 230 V AC, 60 Hz, single phase, 20 Amp. protected. (When ordered as a unit, the restacker is equipped with a connection into press, and roller conveyor is connected to restacker with standard plugs.) Main connection point is on right side of printer control cabinet with a polarized, 4-prong push and twist connector.

Air System A clean source of dry shop air is required. Minimum 80 PSI at 20 CFM for press with air blow-off and restacker.
Air Line: Minimum 3/8" I.D. x 25" long.
Connections: 1/4" NPT T-fitting to printer filter-regulator-lubricator on right side of control cabinet. Bottom of the T-fitting is piped to junction box on outside of driven side. A quick-connect coupler is provided to plug in air hose from restacker. Restacker has it's own filter-regulator-lubricator.

Electric Power for Countries with 50 Hz
The printer, restacker, and conveyor are equipped with components capable of handling the local power: 240 V AC, 50 Hz, single phase, 20 Amp protection. Specific wiring requests and components must be included in order and quoted.

Before installing, check to ensure that the necessary supplies and accessories are enclosed. They should have been shipped with the printer, restacker, or conveyor.

CASE PRINTER

- User manual
- Electrical schematic diagram
- Print cylinder lift bar
- 4 Adjustable leveling pads
- 1 Ink pad
- 1 Ink jug with fittings
- 1 Ink in tubing
- 1 Ink out tubing
- 1 Thermal imager
- Iconotech printer drivers
- 1 Print layout creation software

RESTACKER and CONVEYOR

- Electrical schematic diagram
- 2 Caster wheels with V-grooves
- 2 Caster wheels, plain
- 1 Angle iron rail for restacker
- 1 Cable mast for conveyor
- 1 Power cable to conveyor electric motor with accessories

INSTALLATION OF THE CASE PRINTER SYSTEM WITH RESTACKER & CONVEYOR

Installation of a system should begin with locating restacker in proper position in designated area. Because restacker is fixed in place, moving on rail that is anchored to floor, it is of the utmost importance that rail be properly located. (See sketch at the end of this chapter.)

Installation of the Restacker

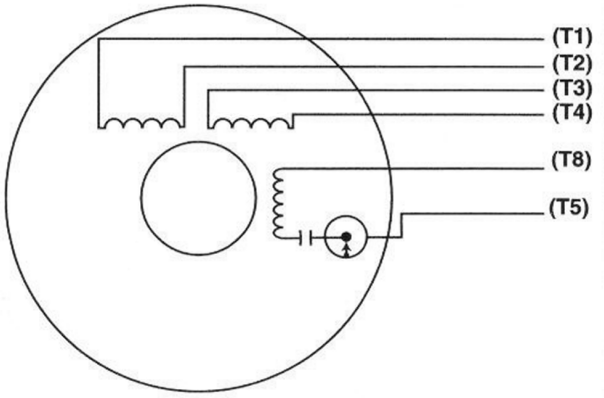
1. Unload restacker from crate and mount the 2 grooved casters on exit end of restacker and the 2 plain casters on entrance end.
2. Drop restacker down on angle iron rail with the two grooved casters riding on rail.
3. Move restacker back and forth on rail from resting notch, in operating position, to resting notch in service position, providing access to print cylinder. Restacker should roll freely and stay securely in both notch locations.
4. Carefully check whether restacker is level, both side-to-side and front-to-back. Although it is not sensitive to being absolutely level, it is somewhat dependent on floor level and care should be given to provide a level floor location. To level restacker, shims will have to be placed between caster mounting plate and bottom of restacker.
5. Anchor rail to floor in the appropriate place as both the conveyor and press will be aligned to the restacker.

Installation of Conveyor

1. Conveyor is shipped in two crates: 1.) 34" x 31" x 126" and 800 lbs. 2.) 52" x 31" x 108" and 1,000 lbs.
2. Uncrate and mount the legs as marked. Flip the sections over and mate them together, making sure that the sprocket halves for line shaft drive are lined up. Bolt sections together. Install the Deldrin chain couplings.
3. Move conveyor into location, allowing min. 3/4" space between restacker frame and conveyor frame, to allow restacker to roll back and forth.
4. Center of roller conveyor should be aligned with the "0" position on the measuring scale on restacker. Generally, the center support wheel on exit conveyor splined drive shaft is mounted in center position.
5. Make sure conveyor is properly located and properly elevated to the correct height, per sketch. Anchor both legs at ends of conveyor and all other legs in a staggered fashion. Make sure the single legs are anchored.
6. The conveyor is shipped in such a manor that the breather port on the gearbox is pointed up and thus retains the oil.
7. Drill for mast and install it at the starting end of the conveyor to allow the stacker to be moved back and forth.
8. Install the electrical cable by attaching the cable on the inside of the outside rail with cable ties. Wiring connections to the conveyor motor are as follows.

LINE	L1	L2	JOIN
MOTOR LEADS	T1	T4, T8	T2, T3, T5

CONVEYOR MOTOR



9. All controls for conveyor are located in control cabinet on restacker.
10. For proper operation, remove the o-ring drive belts on the first three rollers and the last four rollers of the conveyor.
11. Mount an "L" bracket (1 1/2" x 2 1/2" x 5 1/4" long) in the middle of the angle iron across the end of the conveyor, with the 2 1/2" side up. This will stop the cases from rolling off the end, as well as making it convenient to grab a stack.

Installation of the Printer

1. Uncrate printer and remove lag bolts in each corner that hold printer to skid.
2. Lift case printer off skid by using a forklift with long forks. Move forks in from driven side forward of midpoint. It might be necessary to lift driven side and block it up in order to get forks in. Put a board across fork ends underneath bottom pan, to distribute weight and protect paint.

WARNING
Keep hands and feet clear of machine base when lifting machine off skid. Do not work or place hands under machine base unless machine is securely supported at all four corners.

! NOTE !
Do not lift or attempt to maneuver the case printer into position using the control panel enclosure for support

3. With the printer lifted up, remove skid. Mount leveling feet at each Corner. Place printer in proper location allowing a 3" space between printer and restacker per layout print. Operator side is offset toward the operator 2 3/4" in relation to the side of the stacker. Using a long straight edge, check the alignment of the feeder side panel and the stacker side panel with both set at the same number on the measuring tape. Adjust the press side to side for correct line-up.
4. Make sure that machine leveling mounts are evenly adjusted. Level machine from side-to-side using low-end platform and the front cross shaft under Plexiglas cover as leveling surfaces. (Move O-rings out of the way.) It is of the utmost importance that printer be level for proper ink flow in print cylinder and for maintaining level printing on cases. Out of level can cause wrinkling of stencil and skewing of pad. Check level of print cylinder by aligning the level with one row of perforated holes. The print cylinder should be absolutely level.

5. With main power disconnect in off position (green field) connect the 230V, 60 Hz., single phase power to connecting twist plug.
6. Attach pneumatic supply line to inlet port of filter-lubricator-regulator assembly mounted on side of control panel enclosure. Air supply may be attached using appropriate quick-disconnect pneumatic fittings if desired. When quick-disconnect fittings are used, always install self-checking female fitting on air hose to prevent whipping of hose when air line is disconnected from FRL assembly. Set regulator gage to 70 PSI. Fill lubricator with 10 weight non-detergent oil. Set oil drip rate to minimum, per manufacturer's instructions.
7. Connect restacker air-electrical and signal wire to proper quick-connects in junction box on printer. Connect conveyor power plug to proper connector in the junction box on the inside lower exit corner of the stacker.

WARNING
READ USER'S MANUAL AND ALL SAFETY INSTRUCTIONS BEFORE ATTEMPTING TO START OR OPERATE CASE PRINTER.
Failure to read and follow all instructions may result in serious injury or damage to case printer

8. Perform visual checks of each of the following items before turning restacker, conveyor, and printer on for the first time, and correct items as required:

    - Drive chains are properly engaged with all sprockets.
    - Drive belts are properly seated on pulleys.
    - Pneumatic tubing fittings and connections are properly tightened and are leak-free.
    - Ink pump power cords are securely engaged.

9. READ ALL SAFETY INSTRUCTIONS AND USER'S MANUAL BEFORE PROCEEDING! All service personnel performing maintenance, adjustments, or repairs on the Case Printer must understand the operation of the machine before attempting to perform equipment service. After completing reading and review of these materials, return to Step #8 of the installation procedure.
10. Set filter-lubricator-regulator on Restacker to 60 PSI (located on driven side). With the main breaker on the press control cabinet in "ON" position, turn restacker selector switch to "ON" position. "ON" light should now be on and roller conveyor should be running.
11. Push "EJECT" button. Flipper arms should drop and return and eject conveyor should be running.
12. Turn power to Case Printer "ON" by turning main switch lever counterclockwise to "white" area on switch base.

    A. Set Speed to "10" by turning Speed selector knob dial.
    B. With no cases in magazine, start Case Printer by pressing "RUN" button on control panel. Press will run only three cycles and stop.
    C. Start press again and, immediately, press "E-STOP" (Emergency Stop) button on control panel. Machine must stop immediately. If machine continues to run, turn power off at main switch, and consult troubleshooting guide section of operating manual before proceeding.
    D. Pull "E-STOP" button back up, and restart case printer using "RUN" button. Go to the second "E-STOP" button on case in-feed side of machine, and press button. Machine must stop immediately. If machine continues to run, turn power off at main

switch, and consult troubleshooting guide section of operating manual before proceeding.

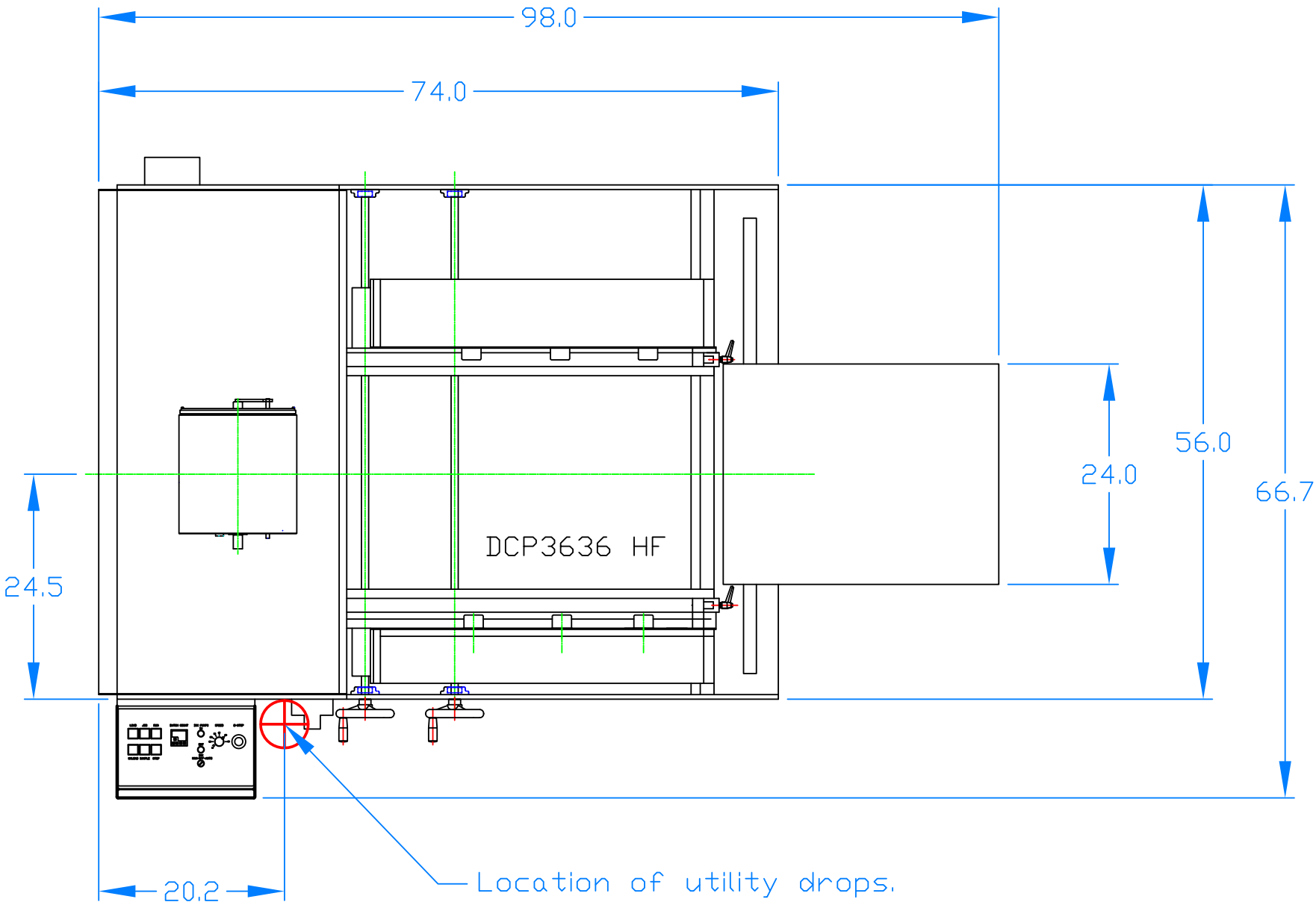
E. Turn pump selector switch to "MANUAL." Push "INK IN" button. The pump roller rotor should turn clockwise looking at it from the front of the pump. Turn selector switch to "OFF". Repeat for "INK OUT" pump.
F. Go to case out-feed side and, with machine running, lift Plexiglas cover up. Machine must stop immediately. If machine continues to run, turn power off at main switch, and consult troubleshooting guide section of operating manual before proceeding.
G. While holding down the "JOG" button and keeping the machine running, count the number of print cylinder revolutions per minute. Use the clamp area on the print cylinder as a reference point to count revolutions. Case Printer should run at speed set on speed selector knob. If Case Printer speed does not agree with Speed knob setting within a reasonable tolerance, consult troubleshooting guide. The frequency shown on the AC drive unit inside the cabinet should correspond to the RPM of the print cylinder.
H. Start the press and immediately press the "STOP" button. The print cylinder and feed chain should continue for 4 revolutions before stopping.
I. Press "Stop" button, and allow machine to come to a complete stop at "HOME" position.

13. Turn the Main Power Switch on the Control Panel to "OFF".
14. The Case Printer is now ready for mounting of the printing pad, inking, loading of print film, and running as described in the user's Manual.
15. Place the copy of the Electrical Wiring Diagram that was shipped with the machine in the control panel enclosure to help ensure availability in the event of a service call.
16. Do not attempt to make any adjustments. Modifying or altering control panel components will prevent the Case Printer from operating normally, and may lead to damage of other machine components, and unsafe operating conditions.
17. Do not attempt any repairs outside the scope of this operating manual. Doing so will void your warranty, and may lead to improper or unsafe operation, and damage to machine components.
18. Never attempt to use non-authorized or makeshift parts. Doing so will void your warranty, and may lead to improper or unsafe operation, and damage to other machine components.
19. For factory authorized service, contact Iconotech at 1-800-521-0194.

Check	Spec.	Tolerance	Procedure	Adjustment	Location
Drive Speed – Print Cylinder	10 RPM	±½ rpm	Count RPM	Call Service Technician	Call Service Technician
Drive Speed – Print Cylinder	60 RPM	± 1 rpm	Count RPM	Call Service Technician	Call Service Technician
Print Cylinder – Home Pos.	0° (12:00)	±1/8”	Observe Print Cylinder Lift Pin Position	Move “HOME” Proxy Switch	Electrical Cabinet
Fuse #110 – FNQ-R-10	10 Amps	N/A	Check FU110 Position	Replace	Electrical Cabinet
Fuse #111 – FNQ-R-10	10 Amps	N/A	Check FU111 Position	Replace	Electrical Cabinet
Fuse #125 – FNQ-R-3	3 Amps	N/A	Check FU125 Position	Replace	Electrical Cabinet
Fuse #201 – AGCI	1 Amp	N/A	Check FU201 Position	Replace	Electrical Cabinet
Drive Chains in Sync.	No Chattering	N/A	Listen for Unusual Noise/Chatter	Drive Side Sprocket Hub	Chain End Sprocket
Print Cylinder Up/Down Speed	No Banging	N/A	Raise/Lower Print Cylinder	Up/Down Flow Control	Left Air Solenoid Valve – Inside
Ink Pump Flow Rate – In	100 ml/minute	± 5 ml	Measure Output with Metric Measuring Cup	Check Pump Setup	Ink Pump – In
Ink Pump Flow Rate – Out	150 ml/minute	± 5 ml	Measure Output with Metric Measuring Cup	Check Pump Setup	Ink Pump – Out

Check	Spec.	Tolerance	Procedure	Adjustment	Location
Ink Out Pump Tube Walking	Stationary	N/A	Ink Out, 1 notch on fork If Necessary	Use Forks On Pump	Ink Pump – Out
Ink In Pump Tube Walking	Stationary	N/A	Set Blue Clamp Tight Enough to Stop Walking	Use Blue Clamp	Ink Pump – In
Drive Belts	¼" Deflection	±1/8"	Squeeze At Midpoint Between Pulleys	Adjust Idlers	Idler Pulleys
Main Drive Belt	½" Deflection	±1/8"	Squeeze At Midpoint Between Pulleys	Adjust Tension	Main Motor Gear Box Platform
Stencil Load Feed Friction	Smoothes Stencil	N/A	Check For Positive Stencil Feed with Some Tension	Adjust ¼" SHCS in, to increase friction, out to decrease. Lock nut.	Bearing housing above shaft nut.
Hold-Down Nylon Screw on Cylinder Shaft Pins	Locks Tight	N/A	Tighten Screw Firmly – Shaft pin assembly must be locked tightly	Tighten/Inspect	Print Cylinder Shaft Pin Housings (each end)
Ink Pump Rotation	Clockwise	N/A	Look At Pump From Front	Reverse Wires	Control Cabinet (Only by Electrician)
Overload Sensor	Trips as Required	.1 Sec.	Stops Drive Motor When Case Jams	Call Service Technician	Call Service Technician

Note: See Sections 8 & 9 – Adjustment Procedures and Troubleshooting, for complete instructions on all major adjust procedures.


98.0
74.0
24.0
56.0
66.7
24.5
DCP3636 HF
20.2
Location of utility drops.