Iconotech Customizer Movable Print Cylinder Case/Bag Printer

May 2011

Operating Manual

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SAFETY INSTRUCTIONS

Iconotech has developed the following general safety instructions for the Customizer Digital Printer. These instructions must be followed to ensure your safety, as well as the safety of others working on or around the equipment.

1. Read the Operating Manual

The operating manual contains specific operating and safety instructions concerning the installation, set-up, operation, adjustment, and maintenance of the Iconotech Customizer Digital Printer.

Failure to follow these instructions may result in serious personal injury, as well as severe damage to printer components.

2. Never Operate Printer Unless All Guards Are In Place

The guard panels on the printer have been installed to prevent accidental contact with moving parts that could cause serious injury. Removing these guards will expose moving parts, increasing the likelihood of accidental contact and injury to machine operators and service personnel.

3. Always Keep Hands And Clothing Away From Belts, Sprockets, Pulleys, And All Other Moving Parts

Some set-up procedures require working inside the printer while the lid is open. Always keep hands and clothing away from all moving parts when operating the printer with the jog button. Contact with these areas while the machine is running, even at slow speed, may cause serious injury.

4. Never Alter, Modify, Or Tamper With Plexiglas Cover Interlock Switch

The Plexiglas cover over the print cylinder area is interlocked with a switch that shuts the case printer off if the cover is opened. Altering the operation of this interlock switch in any way may result in serious injury to the machine operator and service personnel.

5. Always Disconnect Machine From Power Sources Before Making Repairs

Automatic machinery can start at any time unless power sources are disconnected. Working on the case printer while it is connected to power sources may cause serious injury if the machine starts unexpectedly. Use lockout devices on appropriate switches or power cords to prevent power from being restored accidentally.

6. Never Allow Untrained Personnel To Operate, Adjust, Or Service The Printer

Only trained personnel will be able to operate, adjust, or service the printer safely and correctly. Untrained personnel could be seriously injured, or could cause damage to the printer. All machine operators must read and understand the operating manual. All service personnel must read and understand the operating manuals.

7. Always Use Emergency Stop Button To Shut Machine Down Immediately In The Event Of An Accident, Jam, Or Component Failure

The printer is equipped with an emergency stop button located on top of the operator control panel. In the event of an accident, jam or other problem, activate the emergency stop button immediately to shut the machine off.

8. Never Attempt To Use Unauthorized Replacement Parts When Servicing Equipment

Using unauthorized service parts may affect the safe and reliable operation of the printer, and will void the manufacturer's warranty on any components that are damaged as a result of using these unauthorized parts. Only parts and components that have been specifically designed or approved for use with the printer may be used.

9. Always Keep Work Area Around Printer Clear And Free Of Discarded Cases, Bags, Die Cuts, Or Other Debris

Tripping, falling, or losing one's balance while around the machine may result in serious personal injury.

PRE-INSTALLATION

This section explains the site preparation necessary for installing the Customizer Case Printer. Site preparation includes:

- Providing electrical power
- Providing compressed air
- Providing required floor space.

Pre-Installation site requirements for the Customizer Printers:

Electric Power

Requirements: 120 VAC, 15 amps

Connection: Flexible 6' cord with a standard polarized, 3-prong plug (Supplied with machine).

Air System

Air Source: A source of clean, dry, compressed shop air is required.

Air Requirements: Minimum 80 psi at 2 cfm

Air Line: Minimum 3/8" I.D. x Maximum 25' long.

Air Connections: ¼" NPT quick-disconnect fitting at printer filter-regulator-lubricator (Customer supplied).

Floor Space

Space Requirements: See floor plan drawing

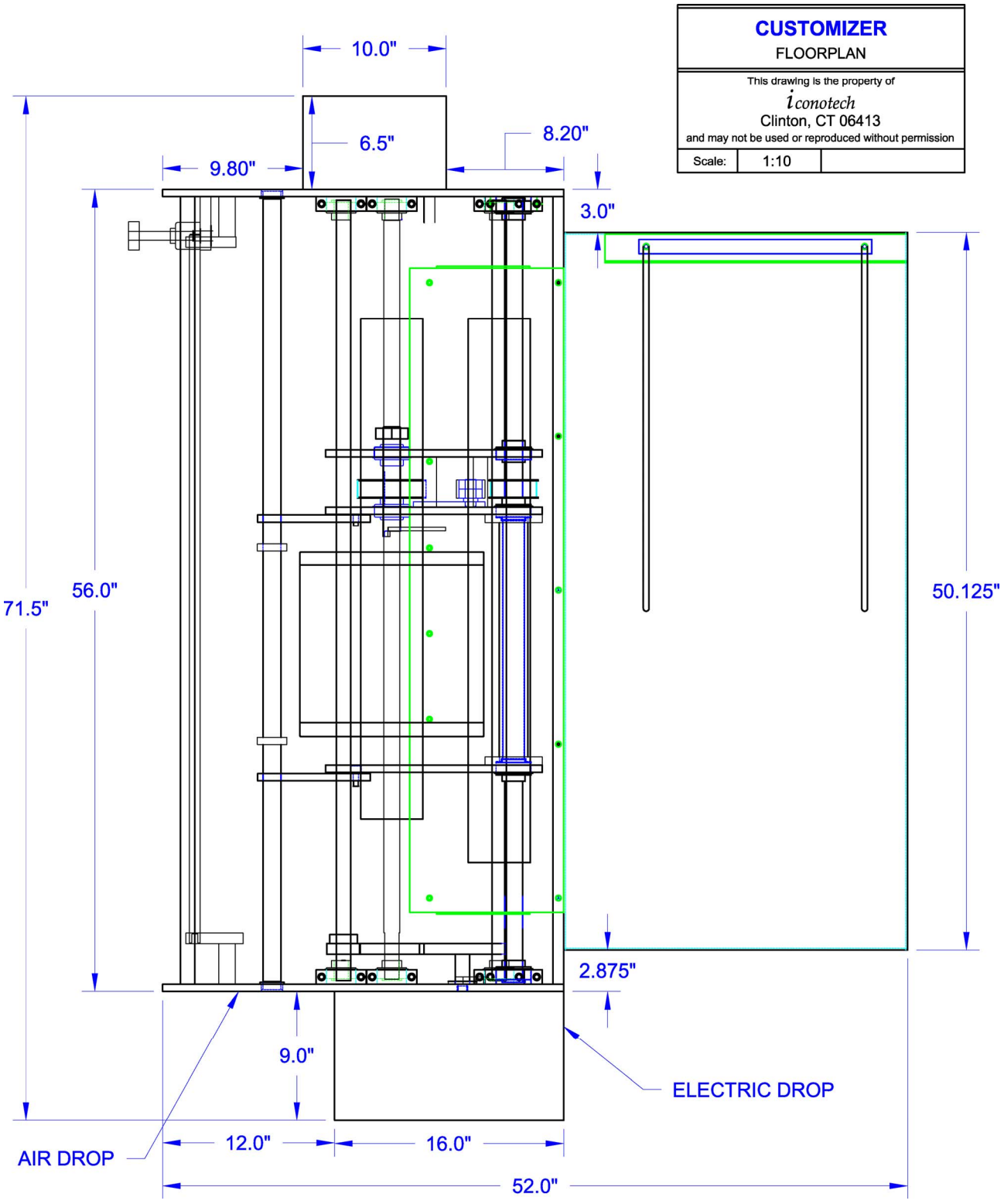
Starter Kit

1 Case – Black Ink	DCP-04T
2 Rolls - 1 Box - Imaging Film	DCP-305
2 Pads	DCP-460S
10 Loading Cores	DCP-12C
1 Ink "IN" Tubing	85329-AC
1 Ink "OUT" Tubing	85328-AC
1 Ink Tubing Clamp	16006

Additional Parts

Thermal Printer
LabelWorks Software
Print Cylinder Lift Bar
4 Adjustable Leveling Feet

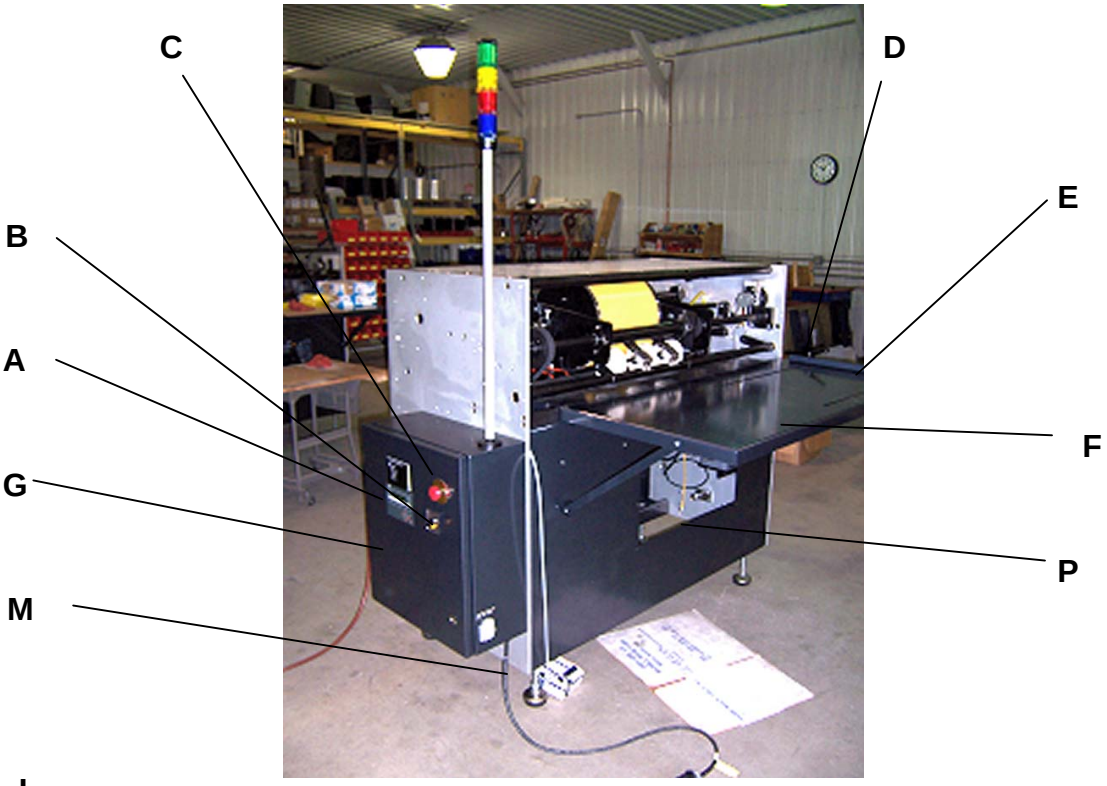
Floor Plan

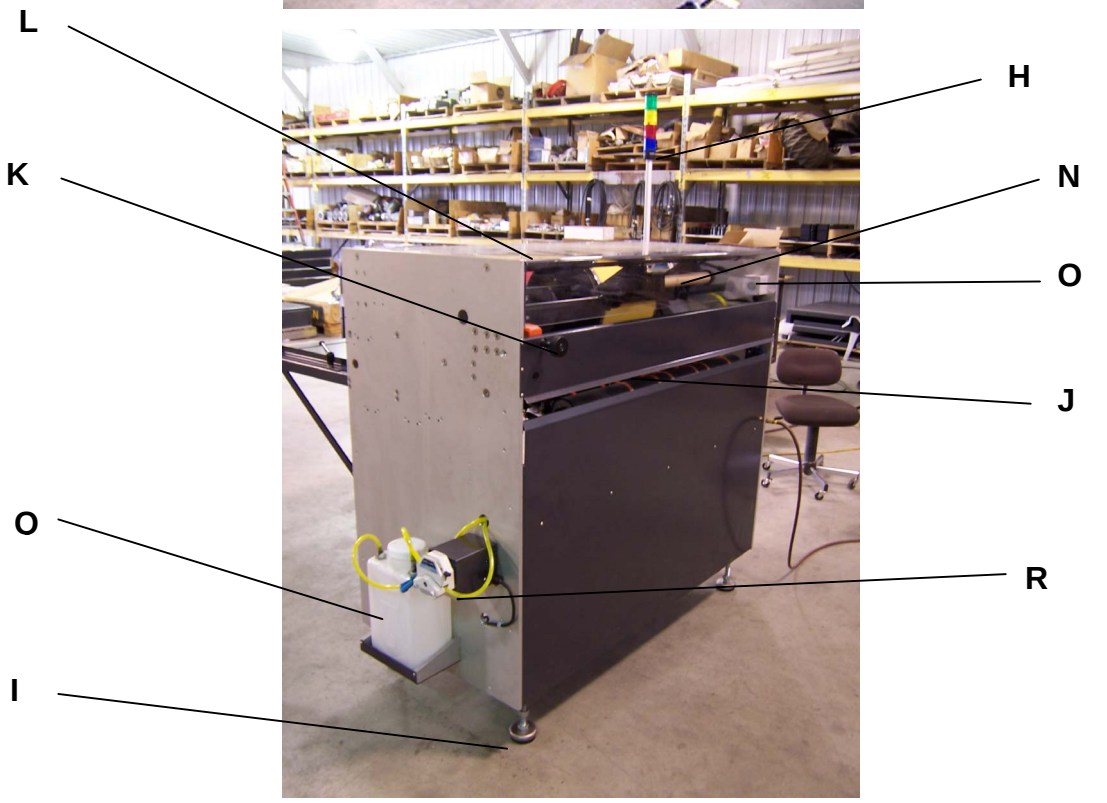

CUSTOMIZER
FLOORPLAN
This drawing is the property of
iconotech
Clinton, CT 06413
and may not be used or reproduced without permission
Scale: 1:10
10.0"
6.5"
8.20"
9.80"
3.0"
71.5"
56.0"
50.125"
2.875"
9.0"
ELECTRIC DROP
AIR DROP
12.0"
16.0"
52.0"

SPECIFICATIONS

Model	Customizer
Dimensions	71.5” Wide x 52” long x 54” high (1816 x 1321 x 1375 mm)
Weight	1000 Lbs.
Feed Table	50.125” Wide x 24” Deep (1273 mm x 590 mm)
Feed Table Height	39” (990 mm) (Adjustable with leveling feet)
Print Cylinder Speed	Variable, 25 - 60 rpm in 5-rpm increments
Capacities	Maximum size - 45” W x 40” L (1067 mm x 1016 mm) Minimum size - 10” W x 10”L (254 mm x 254 mm)
Thickness	¾” Maximum (19 mm) 1/16” minimum (1.5 mm)
Print Area	11” x 32” (280 mm x 812 mm)
Resolution	200 dpi (8 dots per mm)
Prints Per Stencil	Up to 2,500
Ink System	Automatic Using Dual Peristaltic Pumps
Ink Color	Single Color
Ink	Iconotech Formulation
Electrical	120 Volt AC, 15 amps
Overload Protection	Electronically controlled overload protection
Air	Minimum 80 psi clean, dry, shop air, 30 cfm.
Controls	Operator keypad with alphanumeric display
E-Stop Button	Top of Electrical Cabinet

DESCRIPTION





KEY	DESCRIPTION
A	**Operator Control Keypad & Display** – Controls printer operation
B	**Main On-Off Control Switch** – Turns power on or off at control panel
C	**Emergency Stop (E-Stop) Button** – Push button for emergency stops
D	**Feed Guide** – Aligns case or bag for proper feeding and image positioning
E	**Feed Guide Locking Handles** – Locks guide position.
F	**Feed Table** – Provides surface for feeding cases or bags into printer
G	**Main Electrical Enclosure** – Contains electrical components
H	**Status Light Pole** – Show status of printer
I	**Floor Mount** – Adjustable legs provide easy leveling
J	**Case/Bag Discharge** – Discharge opening for printed cases and bags
K	**Print Cylinder Height Adjustment Dial** – Adjusts print cylinder height
L	**Top Lid** – Clear lid allows view of print cylinder
M	**Power Cord** – Allows quick connection to electrical power
N	**Stencil Loading device** – Holds stencil for easy loading
O	**Jog Button** – Jogs printer for loading and unloading of stencil
P	**Access Panel** – Provides access to inside of printer
Q	**Ink Reservoir Jug** – Provides storage for up to 2 gallons of ink
R	**Ink In Pump** – Pumps ink into the print cylinder

INSTALLATION

This procedure explains the steps necessary to perform basic installation of the Customizer Printer. This includes unpacking through the connection to air and electrical power sources.

Upon completion of basic machine installation, follow the preliminary printing set-up procedure to prepare the machine for printing.

STEP	ACTION
1	Remove plastic shipping cover, and check the unit for signs of shipping damage. If crated, open crate. Report all problems to the carrier responsible for transporting the machine to your location. Notify Iconotech immediately of any damaged or missing parts so new parts can be ordered if necessary.
2	Open the parts box (Inside unit under Plexiglas cover, or taped to feed table), and check the contents using the supplies list provided on page 5. Notify Iconotech immediately if parts are missing.
3	Carefully transport the unit to its approximate installation site in the plant using a suitable lift truck. DO NOT remove any other packing materials or internal tie-downs from the unit yet. Lift and transport the unit carefully to avoid tipping.
4	Position the unit in its approximate installation location, and lower to the floor.
5	Remove the 8 screws that secure the rear access panel, and remove the access panel.
6	Remove the 4 lag screws (inside corners of frame) that secure the printer base to the shipping skid. (9/16 socket wrench required)
7	Reinstall the access panel, and tighten all screws securely.
8	Adjust the hex nut location on each of the four floor pads provided with the unit to a uniform distance of 6” from top of nut to bottom of pad. (Provides feeding table height of 39” - For other heights, adjust hex nut location accordingly.)
9	Using the lift truck, carefully raise the printer off the shipping pallet, and position 12 - 24 inches above final installation location.
10	Install the floor pads in the base of the printer by threading the stems into the threaded mounting holes. Do not tighten hex nuts until after final leveling adjustment.

STEP	ACTION
11	Lower the printer on to the floor mounting pads, placing the unit in the final installation position.
12	Remove protective paper from top cover. Peel slowly from corners for easiest removal. DO NOT use a scraper to remove paper.
13	Open top cover, and remove packing material and plastic tie-down straps from print cylinder area.
14	Using a level placed on the side frames and print cylinder, adjust the floor pads to provide a level installation. Using the tops of the side plates, check the machine for level fore and aft. Using the front exit shaft, check the machine for side-to-side level. Adjust using the leveling feet. NOTE: It is very important to get the machine level, particularly side-to-side.
15	When printer is level from side-to-side and front-to-back, tighten floor pad hex nuts against printer frame base to lock level adjustment.
16	Install feed table and secure to in-feed side of printer using hardware provided. Attach support arm and secure with hardware provided. (Feed table may be pre-assembled to unit. If so, check hardware for secure assembly, and tighten as required.)
17	Connect power cord to 120V 60 HZ power receptacle.
18	Turn power interlock switch on main control panel door to “On” position.
19	Install ¼” NPT quick-disconnect fitting on printer filter /regulator/ lubricator.
20	Connect unit to air supply using a quick-disconnect fitting at the filter-regulator lubricator, and set air pressure to 80 psi.
21	Check that the stencil loading device is centered on the print cylinder. Release locking collars and adjust as required.
22	The Customizer is now ready for preliminary printing set-up
	WARNING - Check Print Cylinder and surrounding areas to make sure all packing, tools, hardware, and other materials have been removed and there are no obstructions around moving parts.

Programmable Logic Controller

The Customizer Printer is controlled by a display unit attached to a programmable logic controller (PLC). The display is mounted on the operator side of the main electrical cabinet, where the operator can easily access it. The LED window displays a series of menus. The unit also has a numeric keypad and several action buttons.

Operator Display Panel

Programmed Control Functions – Description

RUN – Print cylinder rotates at set speed. If case is presented, it is taken by the feed rollers and printed. Machine continues to run until pre-set count is reached, or print cylinder rotates the predetermined number of times without a case having been presented (Set in the Auto Stop Function). If Print Count is set to “0”, system will continue to print as long as cases are presented. When system stops, it returns print cylinder to HOME position.

STOP – System will stop and return to HOME position.

MENU – Opens the menu system allowing user input for printer functions. See below.

HOME – Sends the print cylinder to the HOME position. HOME position is with the fill plug at the bottom (6 o’clock position), and the cylinder lift pins at the top (12 o’clock position).

CLEAR – Sets Print Speed to 60 cpm, returns Print Count to “0”, and Fine Adjust to “0”.

BACK – Takes the operator back one level in the menu system.

Display Control Buttons

The up and down arrows allow one to navigate up and down the menu structure.

The right and left arrows are used to change the Print Speed setting and, where required, to navigate left and right within the menu system.

The bent arrow is the “ENTER” key.

The left-facing arrow is the backspace key.

Menu Structure & Use

From the Home screen, pictured on the right, press MENU to enter the menu system.

The first level of the menu contains MACHINE SETUP and ADMIN MODE. To enter MACHINE SETUP you press ENTER.

The first selection is PRINT COUNT. You can set the actual number of cases you wish to print from 1-9999, or you can set the machine to run continuously by setting the count at “0”. When the screen at the right appears, simply press the number keys to obtain the PRINT COUNT you wish. Then press ENTER to confirm and BACK twice to return to the HOME screen.

If you press the down arrow key from the PRINT COUNT screen, you will come to the FINE ADJUST screen. Case weight, thickness, and length can affect print position, even though the case is laid out correctly in the formatting software. To make these small corrections toward the leading edge of the case or away from it can be entered in 1/10” increments. Negative numbers move the print towards the leading end.

Pressing the down arrow once more brings you to RUN SPEED. To set the running speed you use the right and left arrows. Left lowers the speed, right increases the speed in 5 RPM increments between 25 RPM and 60 RPM.

Normal running speed is between 35 and 60 RPM. Slower speeds may provide too much ink.

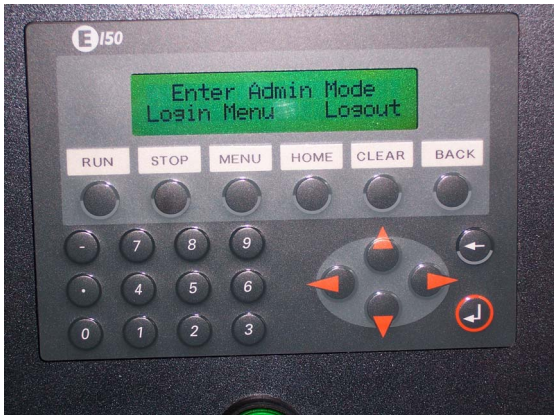
Pressing the down arrow one more time brings you to the START/FILL INK – IDLE SPEED menu. Both functions are set on this one screen. To set START/FILL INK time you press the appropriate numbers. You must press ENTER to confirm the new IDLE TIME. To adjust the idle speed, you use the right and left arrows as above. Speeds can range from 10 RPM to 60 RPM. Press RUN from this screen to activate this function. Both ink pumps and the print cylinder run during START/FILL INK. Generally, slower speeds are used for Filling. This mode can also be used to help spread the ink around in the cylinder, and to help prepare for startup after a lengthy shutdown.

Pressing the down arrow again brings you to END of DAY/EMPTY TANK. You can select an amount of time the out pump will run during which time ink will be pumped out of the print cylinder. If you run END of DAY, be sure to run START/FILL INK the next time you are going to use the printer. Otherwise, you will be low on ink. To set the amount of time, simply enter the desired time and press ENTER to confirm. Press RUN from that screen to start the pumping process.

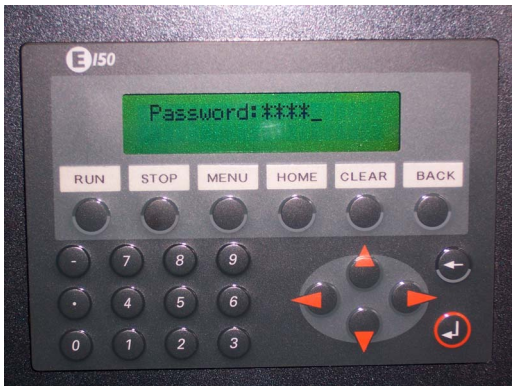
AUTO STOP is the next menu, one final down arrow, and it sets the number of cycles the press runs before stopping if no case is presented for printing. Numbers from 1-99 are allowed. If “0” is entered, the press will run until STOP is pushed. To set the number, simply enter the number desired using the number pad. Press ENTER to confirm. Press BACK twice to return to the HOME screen.

The second part of the menu system is the ADMIN MODE. From the MACHINE SETUP screen, hit the down arrow once. The screen at the right will appear.

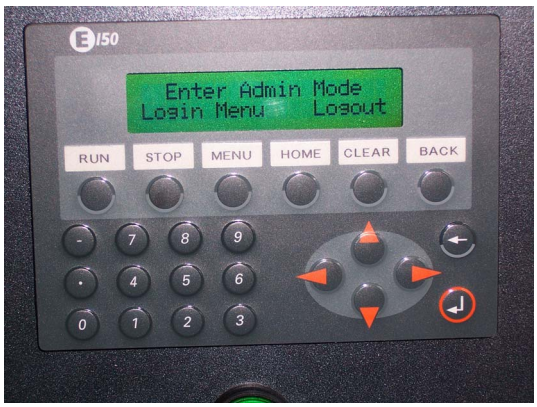
Press ENTER from the above screen and the screen at the right will appear. Press Login to begin the login process.



The screen at the right will appear. You type in your password, which you will be given when the machine is installed. Then you press ENTER.



After pressing ENTER at the PASSWORD screen, you come to this screen again. Press MENU to enter the ADMIN mode.



The screen at the right appears. It is the menu screen for ADMIN. You have three choices: Life, which shows how many cycles the press has run since it was built; Clock, which allows you to set the real-time clock; and Pass, which allows you to set your own password for these administrative functions. These screens are displayed below:


E150
MAINTENANCE
LIFE COUNT: 1367
RUN
STOP
MENU
HOME
CLEAR
BACK


E150
Set System Clock
10/17/05 13:14:48
RUN
STOP
MENU
HOME
CLEAR
BACK


E150
Password 1 1234
OK
RUN
STOP
MENU
HOME
CLEAR
BACK

Print Set-Up

Preparing the Customizer Printer for printing requires:

- Installing a pad and stencil on the print cylinder
- Adjusting the feed table guide to position the case or bag

Ink Pad Installation On Clean/New Cylinder

1. Bring the print cylinder to HOME position.

2. Fill the ink container with 1 gallon of ink.

3. Remove the stencil loading device.

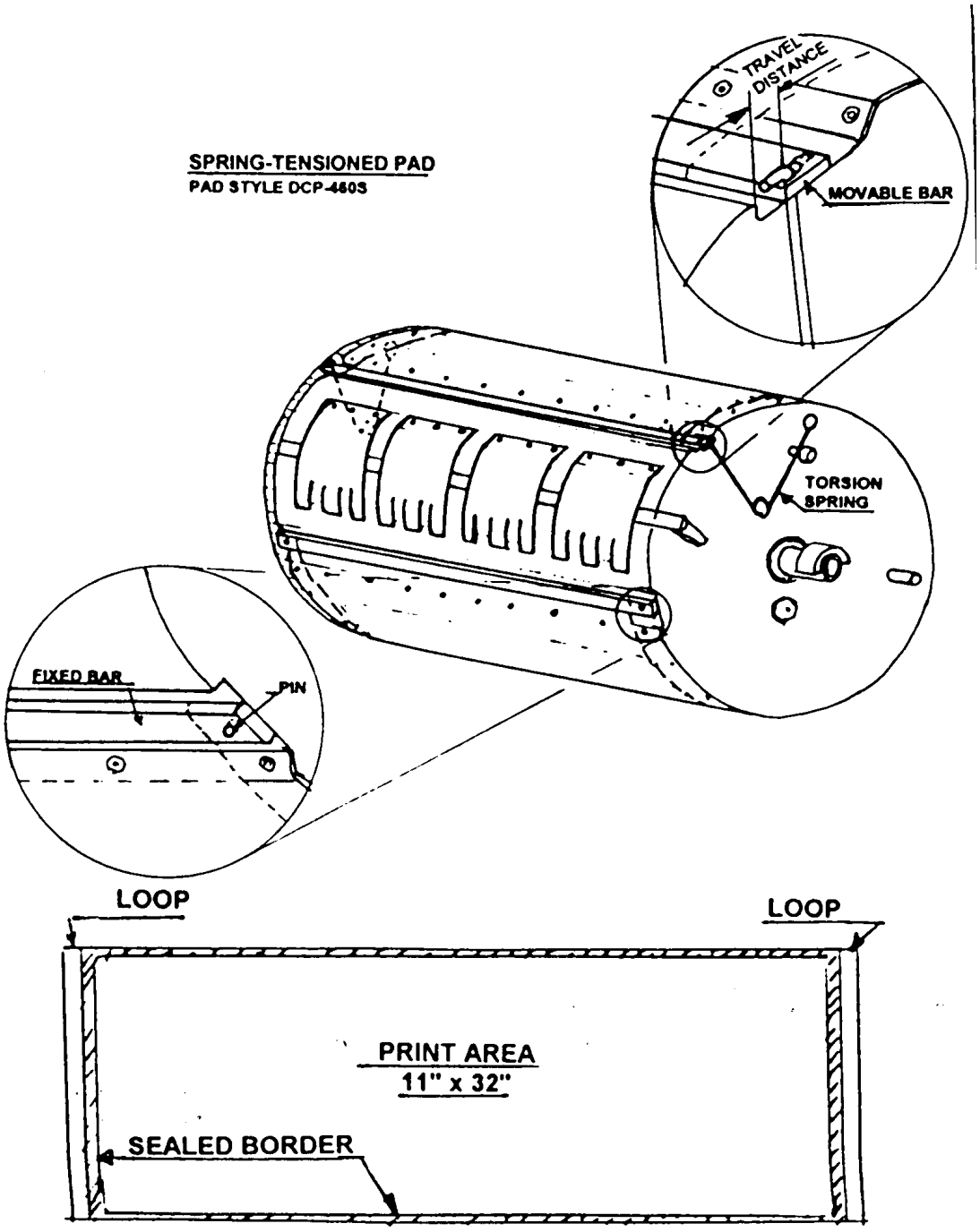
4. Jog cylinder until the leading edge bar is at the 11 o'clock position.

5. Put the bar with round holes through the loop at one end of the pad. Center it and put the bar on the two pins. Rotate the cylinder while keeping tension on the pad, to keep the bar from falling off the pins, until the trailing loop is at the 11 o'clock position. Insert the bar with slotted holes through the loop. Center the pad. Tilt the bar to insert the spring hooks. With hooks inserted, make sure the bar lays flat. Lift the spring over the screw on both sides, giving tension to the pad. Make sure the bar is free to move and that the pad is straight and centered all around the cylinder.

6. Reinstall the stencil loading device.

7. Put on a new imaged stencil. It will be necessary to tape the free trailing end to keep it in place. Proceed to ink up the print cylinder as outlined under Automatic Ink System, page 25. In general, for a new or clean cylinder, allow 1/2 hour to fill the print cylinder with ink.

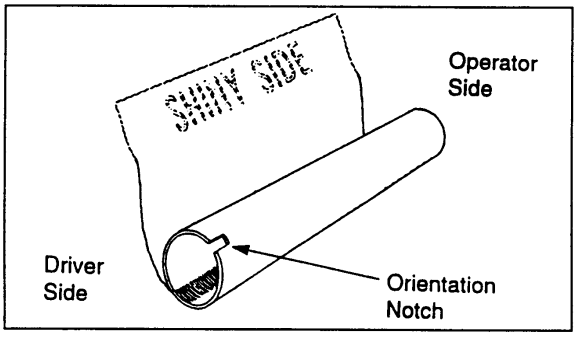
8. If an ink leak develops, make sure the spring loaded end of the pad is free to move, and that the bar has not reached the end of its possible travel.



Spring Tensioned Pad – Part # DCP - 460S (12" cylinder)

Stencil Loading

1. Create an imaged stencil using the LabelWorks software and Iconotech thermal imager.



2. Carefully roll stencil on loading core, shiny side of stencil in. Start rolling at the trailing edge of the stencil image. (The trailing edge is the end of the stencil exiting last from the thermal imager.) Notch in core goes to left.

3. Unscrew knob on stencil loading device (left-hand thread), and slide loading core with stencil onto shaft, engaging slot on core with pin in device shaft. Screw knob back on shaft to secure core.

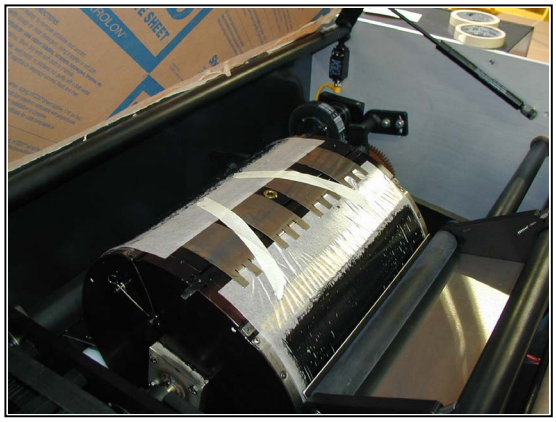
4. Jog print cylinder to place print cylinder clamp fingers slightly above loading device rubber roller.

5. Open print cylinder clamp fingers by lifting shaft handle on right side of print cylinder, and advance stencil under fingers using rubber roller knob.

6. When stencil is inserted to bend in the fingers, release lifting shaft handle to close fingers to grip leading edge of imaged stencil. Make sure stencil is flat, wrinkle free, and centered.

7. Using the Jog button, gradually rotate print cylinder to wrap stencil around cylinder. Smooth stencil in loading device as cylinder rotates to keep it flat. Keep light tension on stencil loading core to help keep stencil smooth.

8. Tape trailing edge of stencil to print cylinder and leading edge of stencil using masking tape.



9. Rotate print cylinder to HOME position. If cylinder is inked up, you are ready to print.

Stencil Changing

1. **Before removing old stencil –** Print new stencil and wind onto loading core. Place loading core on stencil loading device shaft, ready for loading on print cylinder. See “Stencil Loading” for procedure.

2. Jog print cylinder so that clamp fingers are close to loading device rubber roller for easy access to stencil, and remove masking tape from old stencil.

3. Open clamp fingers with lifting shaft, and pull stencil out of clamp area. Release handle.

4. Remove old stencil by pulling leading edge away from print cylinder while rotating print cylinder using Jog button inside printer.

5. Wipe off any accumulated ink at ends of pad and at clamp fingers.

6. Load new stencil as outlined under “Stencil Loading”.

10. Run sample cases to confirm image location and printing quality. Adjust settings as required to place image in desired location on case or bag.

    NOTE: Scotch tape can be used to repair tears or pin holes in stencil.

Automatic Ink System

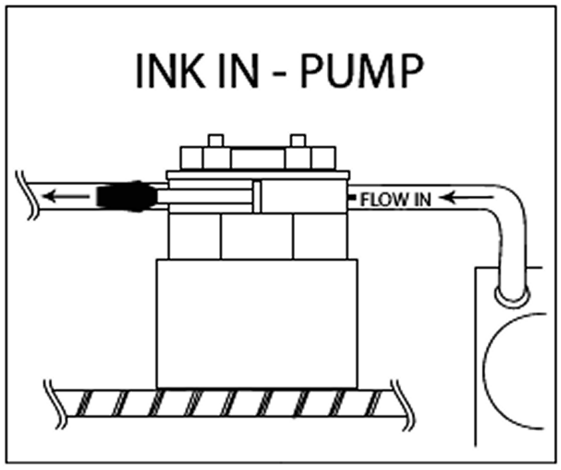
Inks are specially formulated for the Case Printer and are provided in one-gallon containers. Inspect all ink containers and follow all instructions carefully.

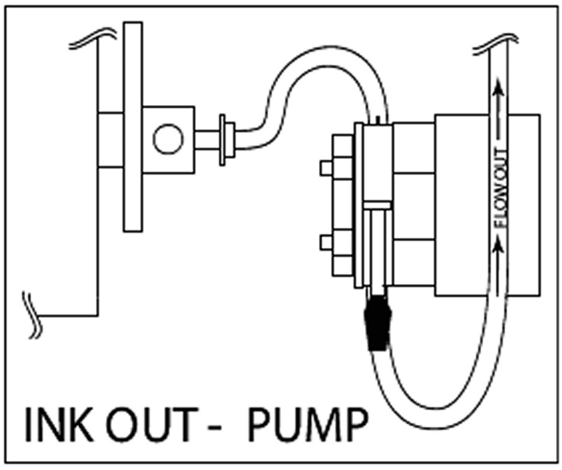
The ink delivery system employs two peristaltic ink pumps that supply and retrieve ink from the print cylinder. The pumps are identical with the exception of the tubing used. The ink in pump, located next to the ink supply container, is equipped with #15 special TYGON tubing. Ink is drawn from the supply container through a strainer, and is pumped up to the cylinder where it enters the cylinder through the drive side of the retractable shaft.

The ink out pump is located near the print cylinder on the operator side. It draws ink from the print cylinder through a tube attached to the central shaft and, through the shaft pin, and discharges it back into the ink supply container. This pump employs large diameter #24 special TYGON® tubing.

The two pumps work together to maintain the proper ink level. Once the cylinder and pad are completely inked, both pumps run at the same time to ensure an adequate ink level. No matter what print speed you choose, the appropriate level of ink is maintained in the print cylinder.

CAUTION
The ink pumps operate in one direction only, therefore it is critical to route the tubing in the proper direction through the pumps. Improper routing through the ink in pump will starve the print cylinder of ink producing light and eventually no print. Improper routing through the ink out pump will leave excess ink in the cylinder during printing and may cause ink leaks around the print pad. Note the proper routing per the diagrams below.





NOTE
If the printer's pumps are left on for an extended period in manual mode while not printing and the cylinder is in a HOME position, ink will be pumped out due to the 1/3 higher capacity of the ink out tubing as compared to the ink in tubing.

If the print cylinder is left for a period of time in an upside-down position, ink will come through the imaged area of the stencil, and also through the edges of the pad. Always return the cylinder to home position.

At the end of the day, release the clamping lever on the ink pumps to eliminate a "set" in the tubing.

Ink In Procedure

1. Press MENU on the PLC.
2. Press ENTER to go into MACHINE SETUP.
3. Press the DOWN arrow until you come to START/FILL INK
4. Set for 15 minutes.
5. Set the Idle speed to 10 RPMs.
6. Press RUN to start the pumps and print cylinder.
7. You should be able to see ink entering the pad.
8. When the pad is fully saturated, you are ready to print.
9. You may need to run this cycle more than once.

Setting Up Print Job

The set up of a print job starts with creating a print layout on the computer and producing the stencil in the thermal printer. The Customizer's operation is initiated based on the leading edge of the case or bag.

Ideally, the print image will be designed to be centered on the print cylinder as well as on the bag, die cut, or body panel of the case being printed. The center of the print cylinder can then be the reference point for setting up the print job. On large boxes and bags, the image may not be centered, requiring that the operator be informed of the design so that trial and error placement of the printed image can be avoided.

The feed mechanism is speed compensated to give the same imprint location at all speed settings. However, to compensate for variations in weight and size of material being printed, a RUN OFFSET function has been included. This allows the operator to move the image being printed forward or backward based on the actual printing results. It also allows offsetting the print up to 120" for printing on very long objects.

Setting up a print job requires a simple six-step procedure:

1. Put stencil on cylinder (See Page 21).
2. Set print pressure (See Page 27).
3. Align the feed guide bar for proper location of case or bag (See Page 29).
4. Set count (See Page 30).
5. Set speed (See Page 30).
6. Print sample and make final adjustments (See Page 31).

These procedures as described in detail on the pages indicated.

Adjust Print Pressure, Cylinder Drop & Lift Height

Print Pressure

Print pressure is the dimensional interference between the measured thicknesses of the print media verses the height or the dimensional opening of the print nip. For the Iconotech printing process this interference or print pressure should be no greater than 1/8" on corrugated materials and 1/32" on craft bags. It is recommended to run with as little pressure as possible, if full print can be achieved with less, there is a dramatic increase in the life of the print stencil as well as the long-term life of the machinery.

Print Pressure Settings

Different thickness print media requires the print nip height to be changed in order to generate proper print pressure. Two controls are used to manage print cylinder drop and lift. **Drop Height** controls the actual print pressure and **Lift Height** controls the amount of lift in-between print media pieces.

Drop Height, DH

Drop Height is the print pressure setting, the height to which the print cylinder will drop when the cylinder is in the down or printing position. The dial indicator labeled DH is calibrated to be at zero in the maximum down position, when the print cylinder is just touching the impression roller. The thickness of the print pad in this case will create the print pressure. As the knob is adjusted the indicator will increase in value adding dimension to the height of the print nip. The indicator does not translate to any dimensional value but is rather a numeric indicator that will allow repeatable set-ups.

Lift Height, LH

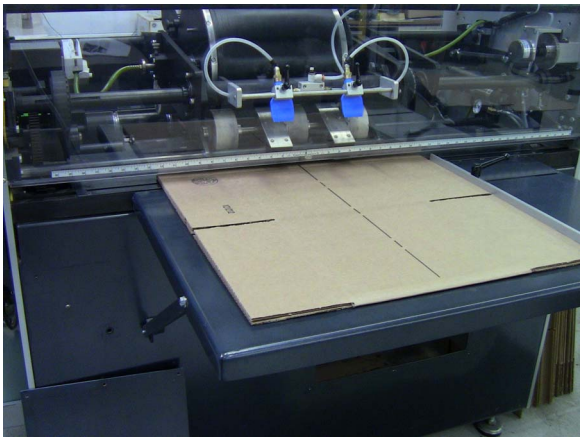
Lift Height is the amount of lift given to the print cylinder after it is done printing the individual blank or has rolled through the 32" print window, whichever comes first. The dial indicator labeled LH is calibrated to be at Zero when it produces no lift or is at a minimum setting. This indicator does not translate to any dimensional value either but is rather a numeric indicator that will allow repeatable set-ups.

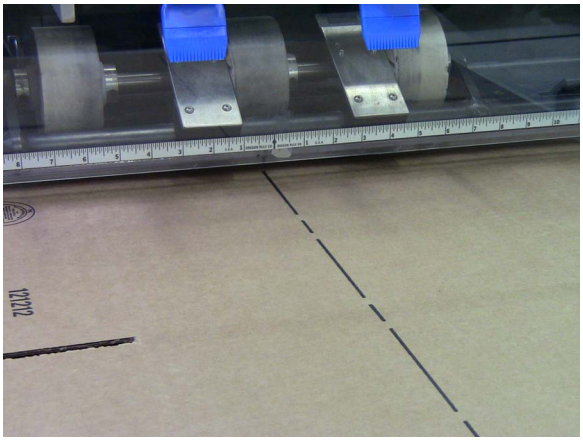
Suggested print cylinder height settings.
As a starting point the following values have been worked out as suggested settings. The actual settings may differ based on the actual thickness of the media type.

MEDIA TYPE	DH	LH
Bag	10	10
Single “B” flute	50	35
Single “C” flute	65	45
RSC “B” flute	90	55
RSC “C” flute	110	55
Single “BC” flute	125	65
RSC “BC” flute	220	100

Align Guide Bar

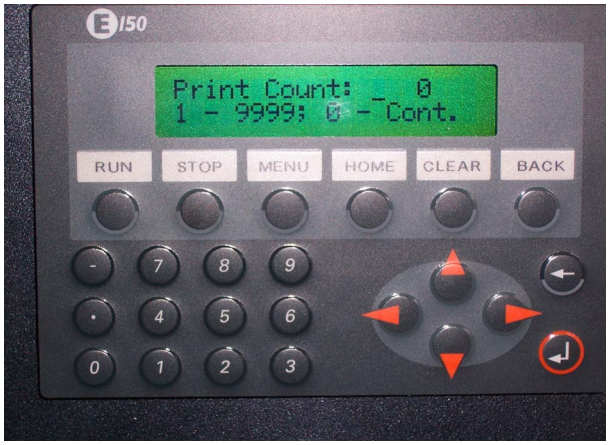
1. Loosen guide bar handles, and move far enough to allow case or bag to be aligned with print cylinder.
2. Place case or bag to be printed on infeed table, and align desired ***center of printed image*** with ***center marking on infeed opening*** of print carriage. Be sure to use desired image location (not case or bag center) when positioning for printing.
3. Slide case or bag forward until it contacts the stops inside the in-feed opening. Make sure to be in firm contact with more than one stop.
4. Slide guide bar over until bar contacts side of case or bag.
5. Make sure guide bar is square with the infeed table, and tighten guide bar knobs securely to hold alignment position. Best results may be achieved with guide bar square to the press, but slightly to the side of the object to be printed. Use finger to keep alignment.





Set Count

From the HOME screen, press MENU. Then press ENTER. PRINT COUNT will appear. Enter the number of cases to print. Press ENTER to confirm. Then press BACK twice to return to the HOME screen. If PRINT COUNT is set to “0”, cases can be printed indefinitely. Cases will be counted as they print.



Set Speed

From the HOME screen, press MENU. Then press ENTER. Press the down arrow three times to see the view at right. Speed is adjusted using the right and left arrows. Left lowers the speed in increments of 5 RPM’s. Right increases speed in the same way. When the correct speed is set, press BACK twice to return to the HOME screen.

Print Sample

Press RUN to start machine. Feed case up to stops. Nip rollers will take case and send it through the printer.
Press STOP to stop machine after case is printed.

Check image for proper placement on case or bag. Measure distance toward or away from case edge that image location must move.

To move image, press MENU and the press down arrow twice. The FINE ADJUST menu will appear.

Movement ***toward*** leading edge is a negative adjustment.

Movement ***away*** from leading edge is a positive adjustment.

Enter desired movement in inches and tenths of inches. For values less than 1 inch, enter the decimal point first. For negative numbers, enter the minus sign first. Press ENTER to confirm and BACK twice to return to the HOME screen.

Adjust feed guide position (side-to-side movement) as needed to position image in desired location on case or box.

Feed second test case into unit, and check image location again for correct positioning. NOTE: Print image position can vary up to 1/4” in direction of print.

Adjust Guide Rollers

The out feed guide rollers must be able to contact the printed object, and must not contact the print area. These rollers move with the print cylinder. Only adjust them in for small objects so that the edges of those objects touch the rollers to provide a smooth exit. The rollers do not require resetting for any thickness of material.

At no time should the guide rollers be set so close together that they will roll on the printed image. If allowed to roll on the image, the rollers will smudge the case or bag, and transfer the image outside of the desired image area.

NOTE: When printing narrow cases or bags, it is important that at least one guide roller is rolling on top to guide the case or bag out at the exit end.

Printing Operations

After all necessary adjustments have been made and desired image position and quality have been obtained, normal case and bag printing operation can be started.

1. Prepare the feeder following all instructions for loading and setup.

2. Start the feeder

3. A case will move forward against stops.

4. As each case is presented, it will be printed, exiting the opposite end of the machine.

5. Feeder Failure, out of cases, or end of run:

    - Printer stops after rotating the number of revolutions set in AUTO STOP without any case or bag being fed, or when print count has been reached, and then goes to HOME position. Automated Press is set to stop after 2 rotations. To stop during a run, press STOP.

    - If printer will not be used for more than a few hours, open printer lid, and slide scrap case under print cylinder to catch any ink droplets.

Start of shift/start of day printer start-up:

1. Check print cylinder area for debris. Remove scrap case from under printer cylinder.

2. Start the printer by turning on power and the air supply. If the ink pad needs to be replaced, refer to the instructions for installing and inking the pad.

3. NOTE: If the printer has set idle for more than 3 to 4 days, lift the Plexiglas cover and wipe the ink pad with paper towels or lint free rags while rotating the cylinder by pressing the JOG button repeatedly. Wipe from end to end by holding the towel against the pad while it rotates. This will remove oil from the ink that might have accumulated while it was idle.

4. Move the ink tubing from its previous position in the ink pumps and close the clamps on it. Close the Plexiglas cover.

5. Perform ink in if ink out operation was performed at last shutdown. See page 25.

6. NOTE: If the printer has sat idle for an extended time period, measured in weeks, it is a good procedure to now print a case, preferably 32” or more long, or corrugated dunnage to see that you get complete ink lay down without any blank spots that

would be most likely caused by oil. If some oil spots show up you can perform another wipe down as outlined in #3 and print another box until you get complete print.

7. Put a new stencil on print cylinder.
8. Set printer for current print job (location of feed guide, count, speed, fine adjust)
9. Close lid
10. Prepare feeder.
11. Print sample cases to confirm that all printer settings and adjustments are correct.
12. Start/resume printing.

End of day printer shutdown:

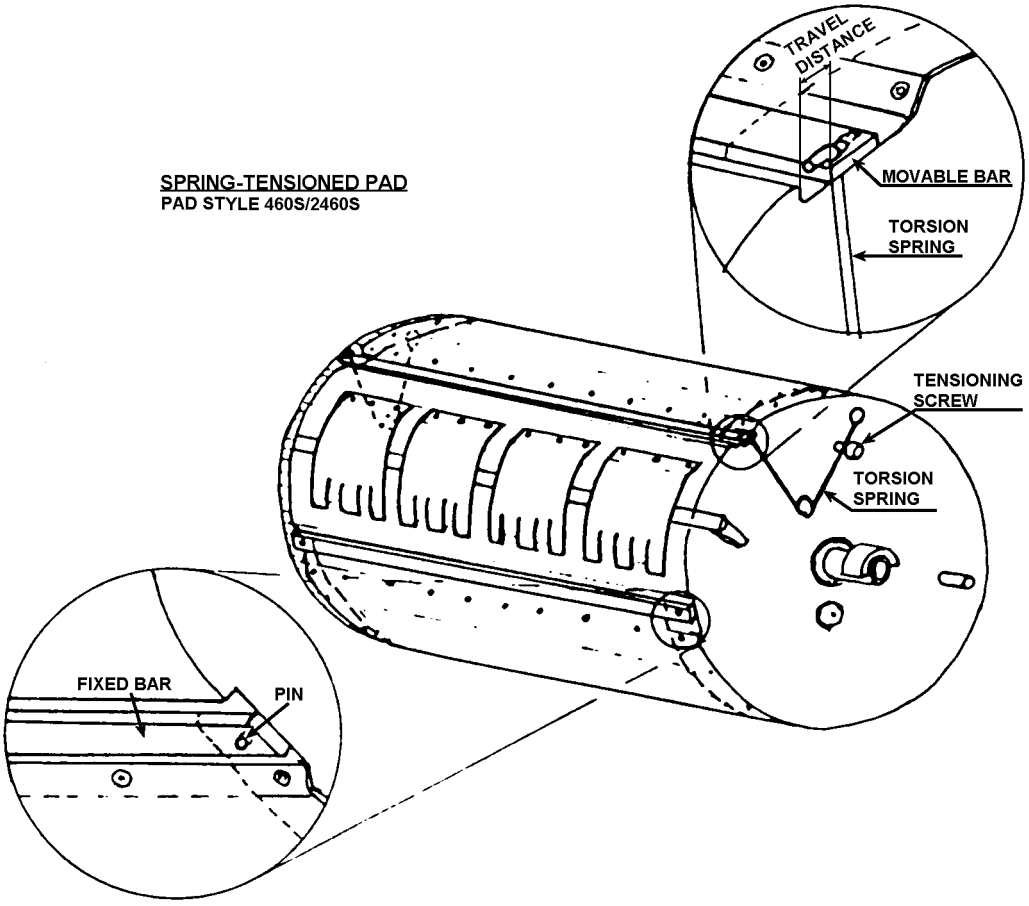
1. Remove and discard the stencil as explained in the Imaging Film section.
2. After discarding the stencil, leave the cylinder with the trailing end of the ink pad at the 11 o'clock position and wipe away any excess ink at the trailing end of the pad.
3. Return the print cylinder to the HOME position. (Pressing HOME will always accomplish this if the lid is closed.)
4. Run the ink out procedure as shown on page 15.
5. Unclamp both ink pumps by lifting the levers to release pressure on the TYGON® tubing and close Plexiglas cover.
6. If the machine will be idle for more than a day, put an old case under the print cylinder to catch any dripping.
7. Turn off power and air.

Pad Replacement

Pad replacement is performed while print cylinder is installed in printer. This requires an assistant to jog the print cylinder while the pad is being removed.

1. With the print cylinder in HOME position perform an ink out operation until the return flow into the ink jug is air bubbles. Normally this should take about 10 minutes unless there is excess ink in the cylinder.

2. Remove the stencil loading device. Put a used corrugated box under the print cylinder to catch any dripping ink.



3. Rotate print cylinder 180º from HOME position so the stencil clamping area is up.

4. Leave the stencil on the pad. Lift the torsion springs off the tensioning screws and remove movable bar from pad.

5. Lift the fixed bar from the two pins and remove it from the pad. Note the pins are set at an angle and the holes in the bar are also drilled at an angle. Set the bar

down so the right and left sides are in the same orientation as when the bar was on the cylinder. Start rolling up the old pad by rolling it inward with the stencil out to clear the area near the pins that hold the fixed bar.

6. Put the fixed bar through the loop at one end of the new pad maintaining the right and left orientation explained in the previous step. Note the holes in the end of the bar should be at the same angle as the pins so that the bar can lay flat on the cylinder. Center the pad on the bar and put the bar on the two pins.

7. With one hand, keep tension on the new pad by pulling down on its free end while you slowly JOG the print cylinder around. Continue to roll up (inward with the stencil out) the old pad. Make sure the new pad goes on straight.

8. When the print cylinder has completed a revolution, discard the rolled up old pad. While maintaining tension on the new pad, insert the movable bar through the pad loop. Center the pad on the bar. Tilt the bar to insert the torsion spring hooks in the bar slits. With hooks inserted, make sure the bar lays as flat possible. Lift the spring over the tensioning screw on both sides, giving tension to the pad. Make sure the bar is free to move and that the pad is straight and centered all around the cylinder. The movable bar may not lay totally flat in its slot on the print cylinder until the pad is inked. Wipe off edges and clamping fingers if necessary.

Maintaining the Pad

Every so often, check the pad for cuts or tears. If you observe any, replace the pad. Check weekly that the pad is under sufficient tension and that the tensioning bar has not reached the end of its possible travel. The life of the pad is dependent on those two things.

Maintenance Schedule

Iconotech suggests that regular preventive maintenance checks and procedures be performed to help extend the life of machine components and keep the case printer running at peak performance.

The following preventive maintenance procedures should be performed at the intervals indicated:

Weekly

Check pressure gauges on FRL assemblies and adjust accordingly - setting should be 70 PSI unless a different setting provides better print quality.

Check emergency stop buttons and Plexiglas lid interlock switch for operation. Tag machine if case printer does not stop immediately, and repair as required before using machine.

Check for noises that may indicate loose belts. Adjust as required.

Ink in and out tubing for wear (move to new location)

Lubricate cam-follower tracks, lifting print cylinder, in side plates.

Monthly

Check oil level in FRL lubricant reservoir, and fill if necessary

Inspect belts for excess wear and replace as required.

6 Months

Check lubricant level in gear box

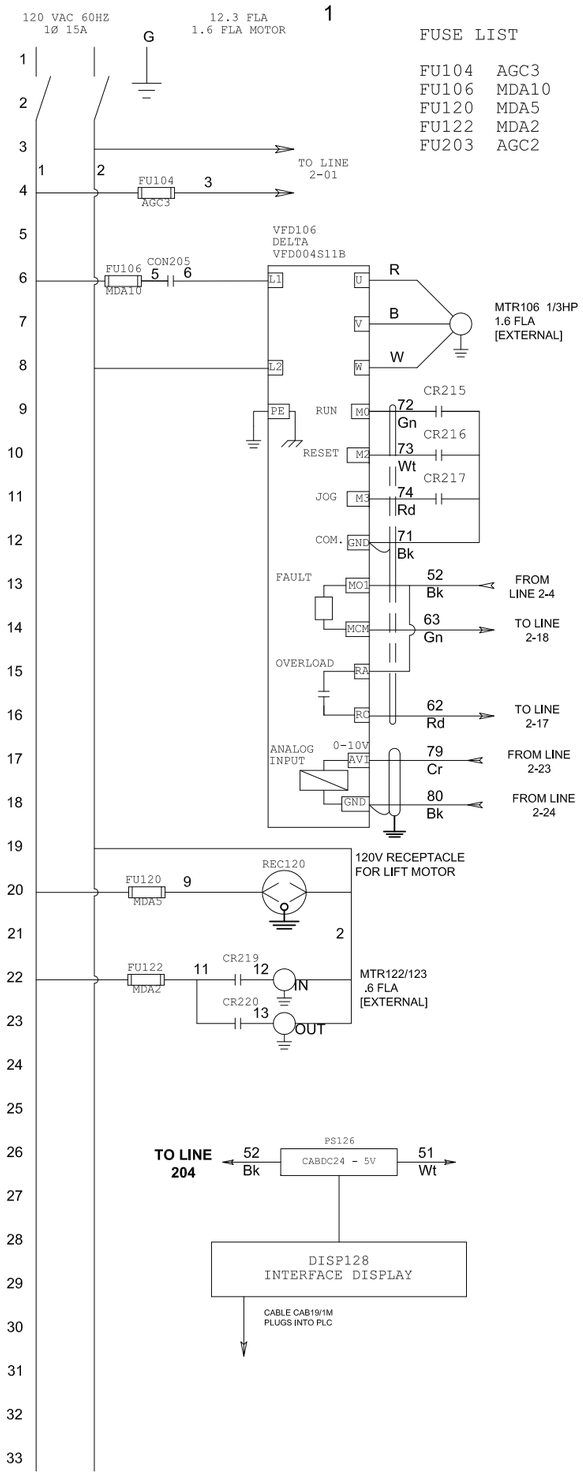
Check hardware for tightness at non-adjustable mounting points and tighten as necessary.

Check exit roller pillow block.

Troubleshooting Chart

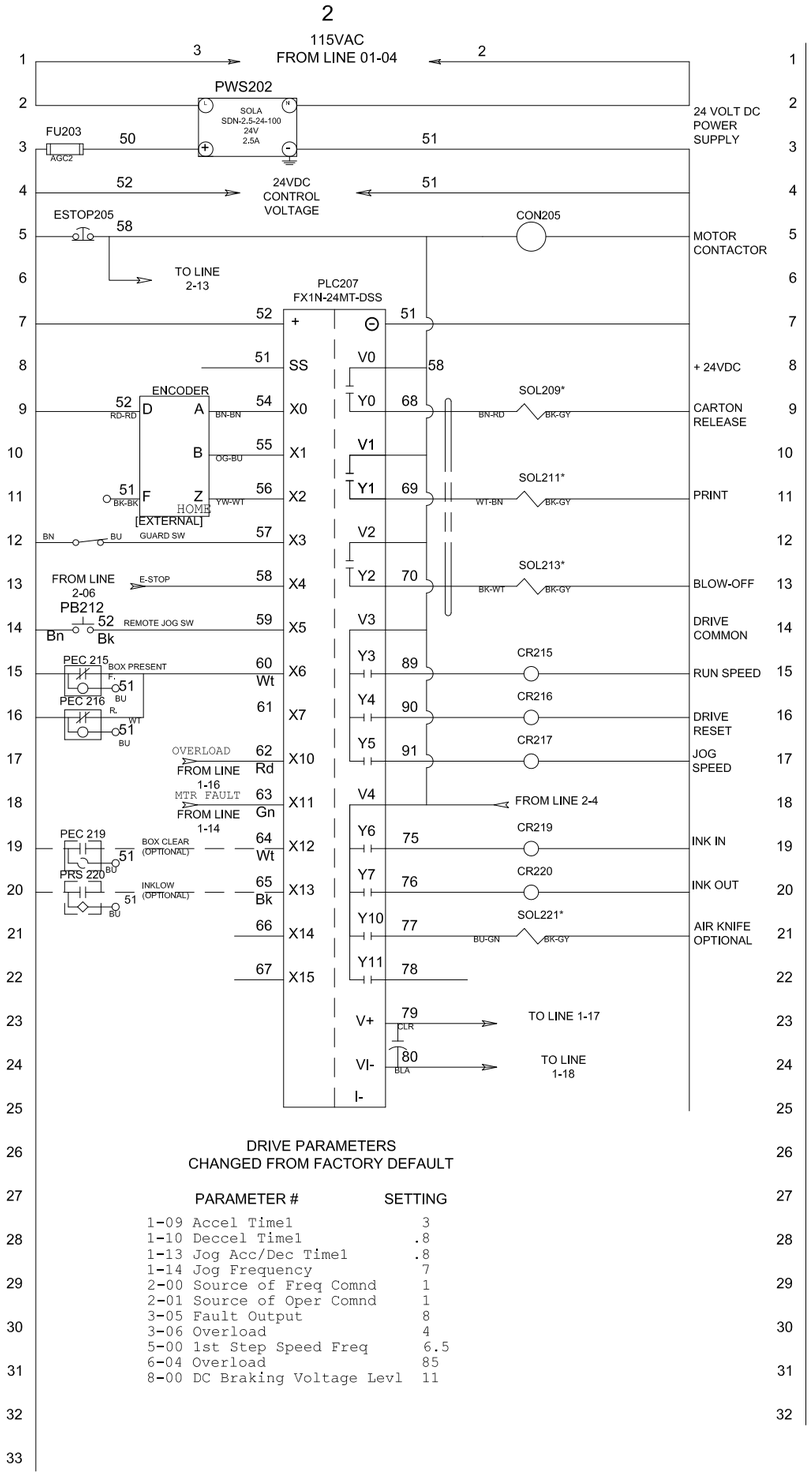
PROBLEM	CAUSE	REMEDY
Pad leaks at sides.	Loss of pad tension.	Replace Pad.
Ink separation at pad.	Printer idle 4 - 5 days.	Remove stencil, run pad directly on cases, or wipe pad thoroughly with paper towels. Load new stencil.
Light print.	Low ink level.	Check ink pump and hoses for correct operation. Check ink level in reservoir
	Gap between print cylinder and impression roller too big.	Decrease gap using print cylinder height adjustment screw.
	Low air pressure	Check air regulator and increase pressure. Min. pressure is 60 psi.
Image skewed	Guide Misadjusted.	Readjust guide and tighten handles securely to hold position.
Ghost image appears on bottom of case or bag.	Print cylinder contacting impression roller.	Adjust cylinder stop.
Image streaked	Exit rollers misadjusted.	Move exit rollers out of image area. Set height for proper clearance.
Small dots appear on print	Stencil worn.	Replace stencil.
Ink welling out at at leading and/or trailing end at rest.	Loose Pad. Too much ink in print cylinder	Replace pad Check that ink is returning to ink reservoir. If not, check ink out tubing, ink out pin and pump.

PROBLEM	CAUSE	REMEDY
Print smudged	Previous case may have skidded.	Check pinch rollers to confirm tight gap. Check stencil for tearing or delamination. If damaged, replace stencil. If stencil is O.K., then continue printing.
Stencil and/or pad consistently move toward one side of print cylinder.	Printer may be out of level. Cases may be fed unevenly.	Level printer carefully. Check case guide for alignment.
Print looks wrinkled or distorted.	Stencil may be wrinkled.	Release at trailing end, pull carefully but firmly. Re-tape. Run 2 - 3 scrap cases, or replace stencil.



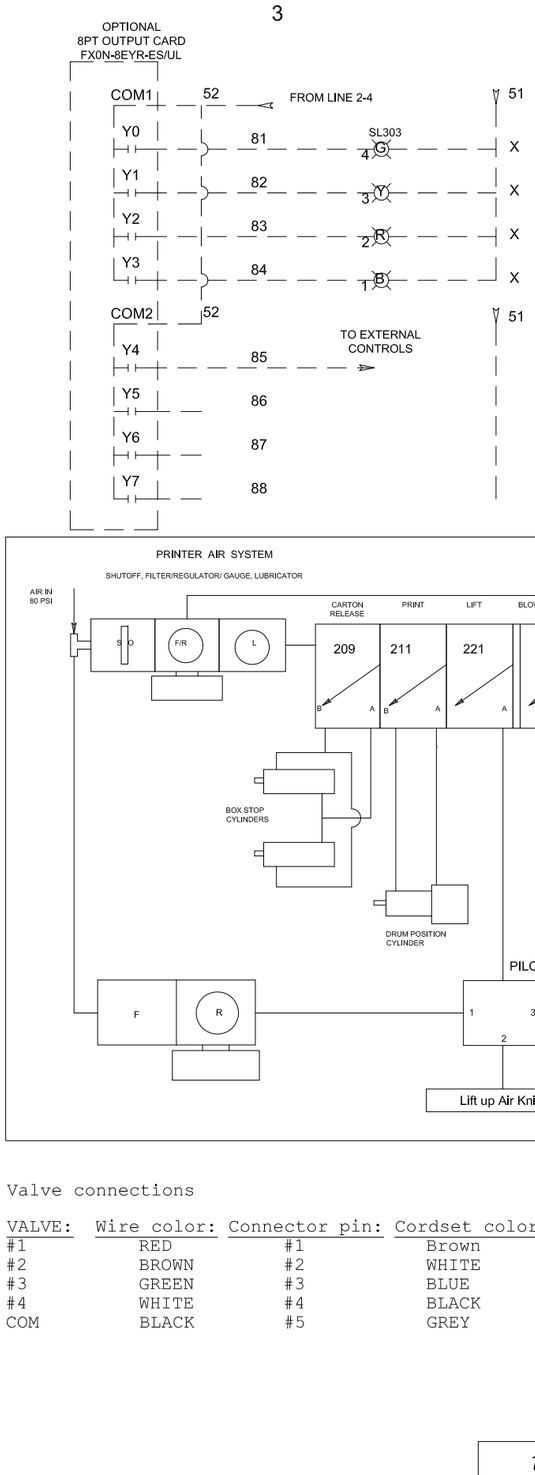
FUSE LIST

FU104	AGC3
FU106	MDA10
FU120	MDA5
FU122	MDA2
FU203	AGC2



DRIVE PARAMETERS CHANGED FROM FACTORY DEFAULT

PARAMETER #		SETTING
1-09	Accel Time1	3
1-10	Deccel Time1	.8
1-13	Jog Acc/Dec Time1	.8
1-14	Jog Frequency	7
2-00	Source of Freq Comnd	1
2-01	Source of Oper Comnd	1
3-05	Fault Output	8
3-06	Overload	4
5-00	1st Step Speed Freq	6.5
6-04	Overload	85
8-00	DC Braking Voltage Levl	11



Valve connections

VALVE:	Wire color:	Connector pin:	Cordset color
#1	RED	#1	Brown
#2	BROWN	#2	WHITE
#3	GREEN	#3	BLUE
#4	WHITE	#4	BLACK
COM	BLACK	#5	GREY

*=Make up valve bank # THC-11388

Parts Lists

The following pages contain information concerning the components and assemblies that make up the Iconotech Case Printer. These pages may be consulted to identify the location, quantity, and part number of the various components used on the machine. In addition, each manufactured part is stamped with a part number

When placing an order for spare or replacement parts, be sure to note the serial number of the machine to help ensure that the correct parts are shipped.

If you encounter difficulties when attempting to install new parts on your case printer, call Iconotech before proceeding with any modifications to the parts or case printer.

We have identified four categories of spares parts as described below. Parts in the first two groups are based on normal wear and what we know will happen within certain maintenance intervals. The third group is parts that will not exhibit wear until they fail in a catastrophic manner. The last group is an exhaustive bill of material.

The first list titled IMPORTANT PARTS contains parts in the first three categories indicating which of the three they fall into. The EXTENDED PARTS list follows these more critical parts.

Consumable Parts
These parts are required or recommended to be changed every 6 months or about 1.5 million prints depending on productivity and operating conditions.

Wear Items
These are parts expected to be changed, due to normal wear and tear, over a 1-2 year period depending on productivity and operating conditions. These parts will not cause catastrophic failures but instead retard productivity due to the machinery slowly falling out of adjustment. These conditions will cause modified and time consuming operating procedures to ensure reasonable print quality and throughput.

Critical Up Time Parts
These are parts recommended to have on hand in order to assure maximum up time. A failure of any of these parts will be a catastrophic failure, rendering the machine unable to operate and preventing production until the part has been replaced.

Extended Parts List
A complete list or bill of material of the printer and restacker relevant to the extended lifetime of the equipment.

Part #	IMPORTANT PARTS Description	Qty	Type
	Printing and Ink Management		
16840	SPRING, INK PAD TENSION	2	Critical
85329-AC	TUBING, INK SUPPLY -15, 7FT	1	Consume
85328-AC	TUBING, INK RETURN -24, 10.5FT	1	Consume
16006	CLAMP, INK TUBING	1	Wear
14391	INK PUMP	2	Critical
14393	MOTOR, INK PUMP	2	Critical
4976	SHAFT PIN ASSEMBLY, INK-IN	1	Wear
15743	O-RING, CHECK VALVE	2	Wear
15747	O-RING, SHAFT PIN SEAL	2	Wear
0200100	PRINT CYLINDER, 12 INCH	1	Critical
	Electrical		
48137	ENCODER E2320001443	1	Critical
34030	SENSOR, NIP FENCE S18SP6LPQ	2	Critical
12640	SENSOR, EXIT SC350A-332-10	1	Critical
12625	INTERACTIVE DISPLAY E150 type 03250A	1	Critical
32066	POWER SUPPLY SDN-2.5-24-100	1	Critical
12636	STACK LIGHT MODULE 855E-24 TL8	1	Critical
12632	STACK LIGHT, BLUE 855E-24 TL6	1	Critical
32070	STACK LIGHT, GREEN 855E-24 TL3	1	Critical
32069	STACK LIGHT, RED 855E-24 TL4	1	Critical
12627	PLC FX1N-24MT-DSS	1	Critical
44026	FREQUENCY DRIVE VFD004S21B	1	Critical
30925	FUSE - FU103, FU104, AGC3	2	Critical
30878	FUSE - FU106, FU108, MDA10	2	Critical
30868	FUSE - FU120A, FU120B, MDA5	2	Critical
30877	FUSE - FU122A, FU122B, MDA1	2	Critical
30838	FUSE - FU203, AGC2	1	Critical

IMPORTANT PARTS			
Part #	Description	Qty	Type
	Pneumatic		
12643	VALVE, PNEUMATIC, THC-1116	1	Critical
12931	CYLINDER, PNEUMATIC, NIP, CR-091.5-DXP	1	Critical
83160	CYLINDER, AIR C-171.5-DP	1	Critical
83141	CYLINDER, PNEUMATIC, FENCE, C-091-DXP	1	Critical
	Drive		
12620	AC MOTOR, MAIN DRIVE 33180S3EA56CFL	1	Critical
17121	GEARBOX, REDUCER F715-10-B5-H	1	Critical
16136	DRIVE BELT, MAIN 390H100	1	Critical
16100	BELT, INTERMEDIATE 240H100	1	Critical
16052	BELT, PRINT CYLINDER DRIVE 300H100	1	Critical
4946	DRIVE SHAFT ASSEMBLY, PRINT CYLINDER	1	Wear
4118	ROLLER, NIP W/BUSHINGS	3	Wear
NR41-12	ROLLER, EXIT W/BUSHINGS	2	Wear
15060	BELTING, 1/4" PRINTER EXIT DRIVE	6	Wear

EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
89476	AIR CYLINDER MOUNT	2
3212	AIR KNIFE MNT SUPPORT MAD-3212	2
3213	AIR KNIFE MOUNT MAD-3213	2
79837	AIR KNIFE SUPPORT ROD	1
12272	BEARING BALL 1616 DC	4
12276	BEARING BALL 1623 DC	2
12278	BEARING BALL 1630 DC	4
12283	BEARING BALL 1641 DC	2
1638	BEARING BLOCK ER-16	6
1640	BEARING BLOCK ER-20S	1
79791	BEARING BLOCK ER-20S	1
12317	BEARING CARTRIDGE ER-16 (1")	6
12321	BEARING CARTRIDGE ER-20S	4
12330	BEARING CARTRIDGE ER-28	3
12009	BEARING FLANGE FC2-25 1	2
11737	BEARING FLANGE FF-1011	2
11738	BEARING FLANGE FF-1011-4	2
11756	BEARING FLANGE FF-1213-1	2
11762	BEARING FLANGE FF-1314-2	2
11716	BEARING FLANGE FF-723	2
11726	BEARING FLANGE FF-843-4	2
17685	BEARING RLS14-2RS	2
11851	BEARING THRUST TT-1205-1	2
16100	BELT GEAR 240H100	1
16136	BELT GEAR 390H100	1
16052	BELT TIMING 300H100	1
4129	BLANK DISCHARGE	6
4126.1	BLANK SIDE PLATE	1
3981	BLANK STOP	5
3982.1	BLANK STOP	5
3983	BLANK STOP	1
3980	BLANK STOP AIR	1
3978	BLANK STOP PIVOT	2
3979	BOX STOP PIVOT MOUNT	10
79825	BUSHING MOUNT	2
49793	CABLE TIE MOUNT	6
12615	CAPACITOR	1
75791	CLAMP 1"	12
75768	CLAMP 1/4"	3
75794	CLAMP 3/16"	1

EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
75796	CLAMP 3/4"	4
79811	CLAMP ARM	1
79821	CLAMP ARM	1
75481	COLLAR RULAND (1)	4
75482	COLLAR RULAND (1-1/8)	2
75478	COLLAR RULAND (5/8)	2
75549	COLLAR RULAND ALU 3/4	4
75548	COLLAR RULAND ALU 5/8	6
31882	CONTACTOR	1
49151	CORD, DRIVE MOTOR	12
34332	CORDSET, INK PUMP	2
35006	CORDSET, PHOTO EYE	4
13658	COUPLING 3 JAW	1
83141	CYLINDER AIR C-091-DXP	3
79819	CYLINDER HEIGHT	1
79814	CYLINDER HEIGHT BUSHING MOUNT	1
79815	CYLINDER HEIGHT BUSHING MOUNT	1
79816	CYLINDER HEIGHT HEX	1
79818	CYLINDER HEIGHT HEX NUT	1
4196	CYLINDER HEIGHT ROTATOR STOP	1
79834	CYLINDER SIDE PLATE	1
15656	DIGITAL READOUT CE986153	1
15660	DIGITAL READOUT CE986153-3/4	1
17688	DIGITAL REAODUT CE986654	1
14732	DIGITAL SLEEVE CE987950	1
15548	DIGITAL SLEEVE CE987960	2
31066	DIN RAIL	1
3993	DISCHARGE BELT DRIVE	1
4116.1	DISCHARGE BELT DRIVE	1
56926	DISCHARGE BELT DRIVE PULLEY	6
4232	DISCHARGE END PANEL	1
3966.1	DISCHARGE GUARD	1
89481	DISCHARGE NIP ROLLER BRACKET	2
79813	DISCHARGE NIP ROLLER SHAFT	1
4114.1	DISCHARGE ROLER SHAFT	1
1641.1	DISCHARGE ROLLER	1
30419	DISCONNECT	1
30421	DISCONNECT HANDLE	1
1364	DISCONNECT NEEDLE	2
16917	DISPLAY	1
12626	DISPLAY COMCABLE	1

EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
75835	DOWEL PIN 1/4 X 1-1/4	5
75645	DOWEL PIN 3/8 X 1-1/4 SS	2
75680	DOWEL PIN 3/8 X 2-1/2 SS	5
44025	DRIVE FREQUENCY	1
1432.1	DRIVE SHAFT	1
4248	DRIVE SIDE PLATE WITH HOLES	1
3345	DRUM	1
79806	DRUM DRIVE BELT TENSIONER	1
79800.1	DRUM DRIVE MOUNT	1
79801.1	DRUM DRIVE MOUNT	1
1703	DRUM DRIVE MOUNTS SPACER	2
3952	DRUM LIFT HANDLE	1
89477	DRUM LIFT SHAFT	1
79795	DRUM LIFT/STOP ARM	1
79838	DRUM LIFT/STOP ARM	1
79802.1	DRUM MOUNT	1
1365.2	DRUM MOUNT PIN	1
1431.2	DRUM MOUNT PIN MAD	1
6143	DRUM MOUNT PIN THUMB SCREW	2
4212	DRUM REST/PIN HOUSING	1
79826	DRUM STOP HEX	1
79839	DRUM STOP HEX	1
79831	DRUM STOP HEX SHAFT	1
79693	DRUM STOP KNOB	1
79842	DRUM STOP KNOB	1
89485	DRUM STOP SCREW	1
89486	DRUM STOP SCREW	1
79828	DRUM STOP SHAFT	1
79830	DRUM STOP SHAFT	1
79841	DRUM STOP SHAFT	1
67692.1	DUAL EYE MOUNT	1
105151	ENCLOSURE	1
11157	ENCODER	1
89478	ENCODER MOUNT	1
89473	EXIT NIP MOUNT	1
89474	EXIT NIP MOUNT	1
4209	FAIR LANE CRUSH	6
4210	FAIR LANE CRUSH	4
14405	FAN BLADE	2
4230	FRAME LEG SUPPORT	2
84912	FRL W/ SHUT OFF	1

EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
79797	FRONT DRUM SUPPORT SHAFT	1
30838	FUSE AGC2	1
30925	FUSE AGC3	1
30878	FUSE MDA10	1
30912	FUSE MDA2	1
30868	FUSE MDA5	1
3638	GAS SPRING MOUNT MODIFICATIONS	2
79805	GEAR BELT PULLEY 20HB100 MOD	1
89487	GEAR GUARD	1
14393	GEAR MOTOR, INK PUMP	2
2111	GEAR/PULLEY IDLER	2
2112	GEAR/PULLEY SPACER	1
79803	GROB HUB	1
79817	GROB HUB	1
MAD-21562	GROUND BAR SHORT	1
MAD-2115.1	GUARD HINGE W/BRKT	1
14604	HANDLE ADJUST 28402	2
30422	HANDLE EXTENSION	1
1893	HANDWHEEL 6" X 5/8"	1
3581	HEADSHAFT DRIVE GEAR	2
3582	HEADSHAFT DRIVE GEAR SPACER	3
2117	HINGED GUARD	1
4146	IDLER GEAR AXLE	1
4112	IMPRESSION ROLLER FREE	1
4113.1	IMPRESSION ROLLER FREE WHEELIN	1
4011.1	IMPRESSION ROLLER SHAFT	1
4229	INFEED AND DISCHARGE	4
4231	INFEED END PANEL	1
3986.1	INFEED END SUPPORT	1
4064	INFEED END SUPPORT	1
63773	INK PUMP MNT, OUT	1
2384.2	INK PUMP MOTOR COVER	2
2291.2	INK PUMP MOTOR MOUNT HOLE	2
2292.1	INK PUMP MOUNT	4
MAD-3563	LEG BOLT MAD-3563	4
MAD-3566	LEG PAD NON-SKID	4
MAD-3565	LEG WASHER FORMED	4
87229	LEGEND FINE ADJUST	1
87231	LEGEND JOG	1
30087	LEGEND YW ESTOP	1
0004066	LOAD TABLE	1

EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
4005.1	LOAD TABLE BLANKSTOP	5
4008	LOAD TABLE NUT BLOCK	1
4007	LOAD TABLE SUPPORT	2
4006	LOAD TABLE SUPPORT BRACKET	2
79829	MITER GEAR	4
12620	MOTOR, MAIN DRIVE	1
87843	MOUNT BLOCK	2
79798.1	MOVABLE SIDE PLATE	1
79799.1	MOVABLE SIDE PLATE	1
79788	MOVEABLE PRINT CYLINDER	1
4214	NIP PIVOT SHAFT OILITE FF-1213-1 MOD	2
3976	NIP ROLLER AIR	1
79809	NIP ROLLER MOUNT	1
79810	NIP ROLLER SHAFT	1
80122	NT M NIP 1/4X1/8 NPT	2
3822	ONE REV SHAFT	1
4071	ONE REV. SHAFT	1
89480	ONE REV. SHAFT	1
89479	ONE REV. SHAFT BEARING MOUNT	1
4249	OPERATOR SIDE PLATE	1
3209	OUTBOARD INK	2
3210	OUTBOARD INK TANK	1
1719	OUTER PLATES SUPPORT ROD	1
34030	PHOTO EYE	2
34089	PHOTO EYE REFLECTOR	2
1433.1	PIN HOUSING	1
75633	PIN ROLL 1/4 X 1-1/2	19
75643	PIN ROLL 1/4 X 2	1
75671	PIN ROLL 1/4 X 2-1/2	2
75673	PIN ROLL 1/8 X 1-1/4	2
75678	PIN ROLL 1/8 X 1-3/4	1
79820	PIVOT PIN	1
79824	PIVOT PIN	1
80423	PL CONNECTOR MALE 68PL-4-4	1
80089	PL CONNECTOR MALE W68PLP-4-2	6
12629	PLC ANAOG OUTPUT CARD	1
12627	PLC CPU	1
MAD-4213	POLYT INFEED GUARD	1
14277	POWER CORD	1
79790	PRINT CYLINDER ADJ.	1
79792	PRINT CYLINDER SCREW BLOCK	1

EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
79789	PRINT CYLINDER SIDE	1
MAD-3242	PULLEY TAPERLOCK	2
1706	PULLEY TL20H100 MOD	1
1704	PULLEY TL30H100 MOD	2
14391	PUMP HEAD MASTERFLEX EASY LOAD	2
10332	RECEPTACLE FACE PLATE	1
34484	RECEPTACLE FS4.4-0.5/14.5	2
34333	RECEPTACLE RECESED, INK PUMP	2
10331	RECEPTACLE, EXTERNAL POWER	1
56926	REDI-ROD 3/4-10 LH SS	6
17121	REDUCER F715-10-B5-H	1
1659.2	REDUCER MOUNT	1
12611	RELAY	5
75581	RETAINING RING	2
11061	ROD END MB4Z	5
11085	ROD END MM4Z	5
11110	ROD END MW5Z	2
75625	ROLL PIN 3/8 X 1-1/2	4
75624	ROLL PIN 5/16 X 1	2
3991	ROLLER IDLER GEAR	1
3992	ROLLER IDLER GEAR	1
MAD 3082	ROLLER IDLER GEAR	1
15736	SEAL O RING 2572	16
15743	SEAL O RING 2579	2
15778	SEAL O RING 2593	4
67693	SENSOR MOUNT	2
76043	SHOULDER BOLT 5/8 X 1-1/2	1
76015	SHOULDER BOLT 5/8 X 3/4	1
76015	SHOULDER BOLT 5/8 X 3/4	1
73963	SKT SET SCREW 3/8-24 X 1-1/4	1
89475	SLIDE BLOCK	2
79807	SPACER	2
79808	SPACER	2
79832	SPACER	2
79833	SPACER	1
79835	SPACER	1
16706	SPRING C0420-038-1000S	2
16702	SPRING E1000-148-7000M	2
79793	SPRING PIVOT	1
79794	SPRING PIVOT	1
74138	SPRING PLUNGER 3/8-16 X 5/8	1

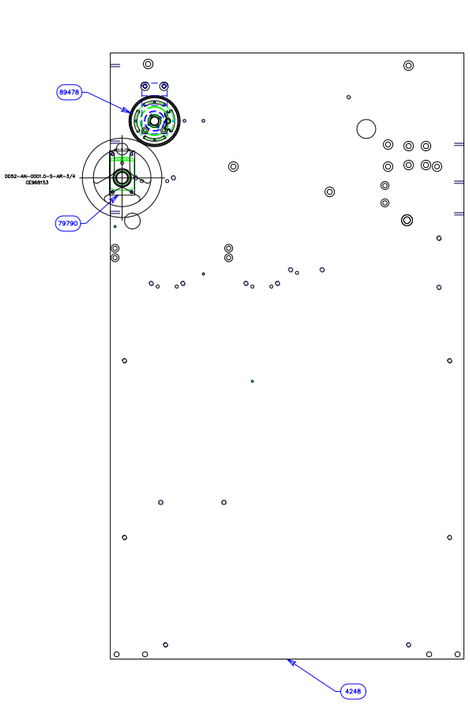
EXTENDED PARTS LIST		
PART #	DESCRIPTION	QTY
16583	SWITCH BOX, JOG	1
30258	SWITCH LIMIT	1
45077	SWITCH P/P, ESTOP	1
12228	SWITCH PB, JOG	1
15604	TAPE MYLAR 1/2 L-R	1
15603	TAPE MYLAR 1/2 R-L	1
4002	TAPERLOCK BUSHING	1
4003	TAPERLOCK BUSHING	1
MAD-3248	TAPERLOCK BUSHING	2
MAD-3249	TAPERLOCK BUSHING	1
31082	TERMINAL 1 TIER	14
31088	TERMINAL BARRIER	1
31084	TERMINAL END RETAINER	6
31019	TERMINAL FUSE BARRIER	1
31016	TERMINAL FUSE BLOCK	5
31093	TERMINAL JUMPER RAIL	1
31089	TERMINAL LBL STRIP	1
32104	TERMINAL SEPARATOR	1
79836	TOP COVER STOP	2
2009.1	TRANSFER GEAR AXLE	1
2007	TRANSFER PULLEY 20HB100 MOD	1
2008	TRANSFER SPUR GR NFS1272A MOD	1
85000	TUBE POLY-FLO 1/4	50
17779	VALVE AIR PILOT	1
12643	VALVE ASSY, 3 VALVE W/CBL	1
75409	WASHER LOCK #6 INT TO	1
12932	WHEEL DR754-20W-R	5

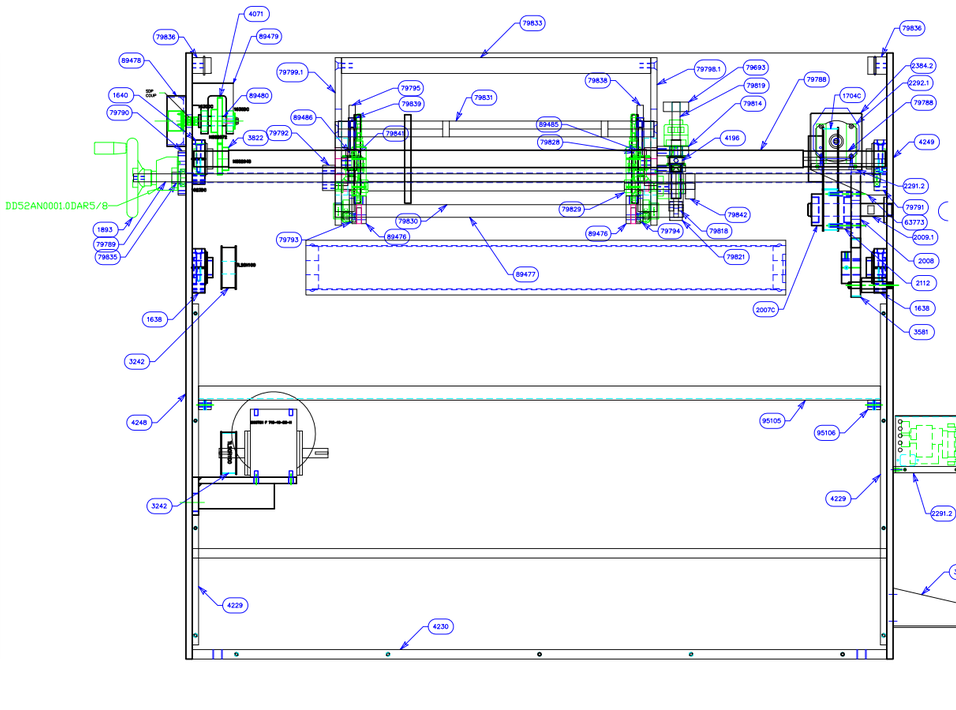
	STENCIL LOAD DEVICE	
2287	STENCIL LOAD BEARING HOUSING	1
2284	STENCIL LOAD CAM	1
2116.1	STENCIL LOAD DRUM	1
2126	STENCIL LOAD DRUM FEED ROLLER	1
2289	STENCIL LOAD FRICTION DISK	1
2290	STENCIL LOAD FRICTION PIN	1
2105	STENCIL LOAD MOUNTING BRACKET	2
1707	STENCIL LOAD NESTED SIDE PLATE	1
2286.1	STENCIL LOAD PAPER TUBE MTG SH	1
2283	STENCIL LOAD PAPER TUBE ROLLER	1
1711	STENCIL LOAD SHEET SPRING	1
2108	STENCIL LOAD SHEET SPRING	1

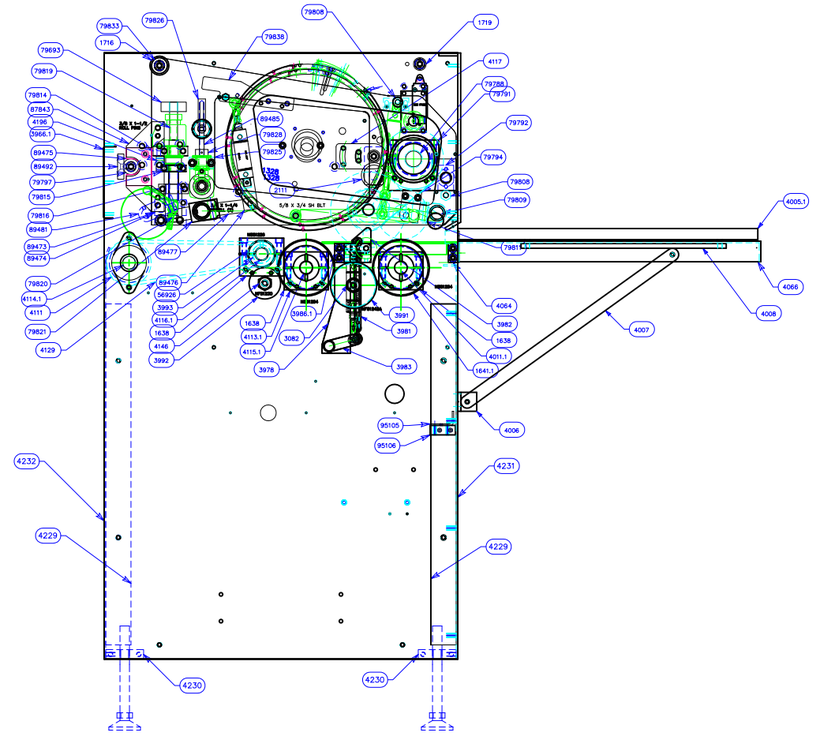
	STENCIL LOAD DEVICE	
1708.1	STENCIL LOAD SIDE PLATES SPACE	1
12550	BEARING BALL 6005 2RS1	2
11692	BEARING FLANGE FF-607-2	2
3356	BEARING LOCK NUT NO5	1
75483	COLLAR RULAND SP20F (1-1/4)	2
75651	DOWEL PIN 1/4 X 1	4
75685	DOWEL PIN 1/4 X 2	2
12930	NUT JAM SS RH 10-32	5
75673	PIN ROLL 1/8 X 1-1/4	2
75679	PIN ROLL 3/32 X 5/8	1
75631	PIN ROLL 5/32 X 3/4	1
73202	SKT CAP FL SS 5-40 X 3/8	4
73962	SKT SET SCREW SS HEX CUP PT	5
16711	SPRING C0180-032-1380M	1
16713	SPRING C0300-047-3000S	2

Drawings

Customizer, Movable Cylinder #1
Customizer, Movable Cylinder #2
Customizer, Movable Cylinder #3
Customizer, Movable Cylinder #4
Print Cylinder
Ink Pump Assembly
Stencil Loading Device







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This drawing is the property of ICONOTECH P.O. Box 918, Clinton,CT 06413 and may not be used or reproduced without permission			
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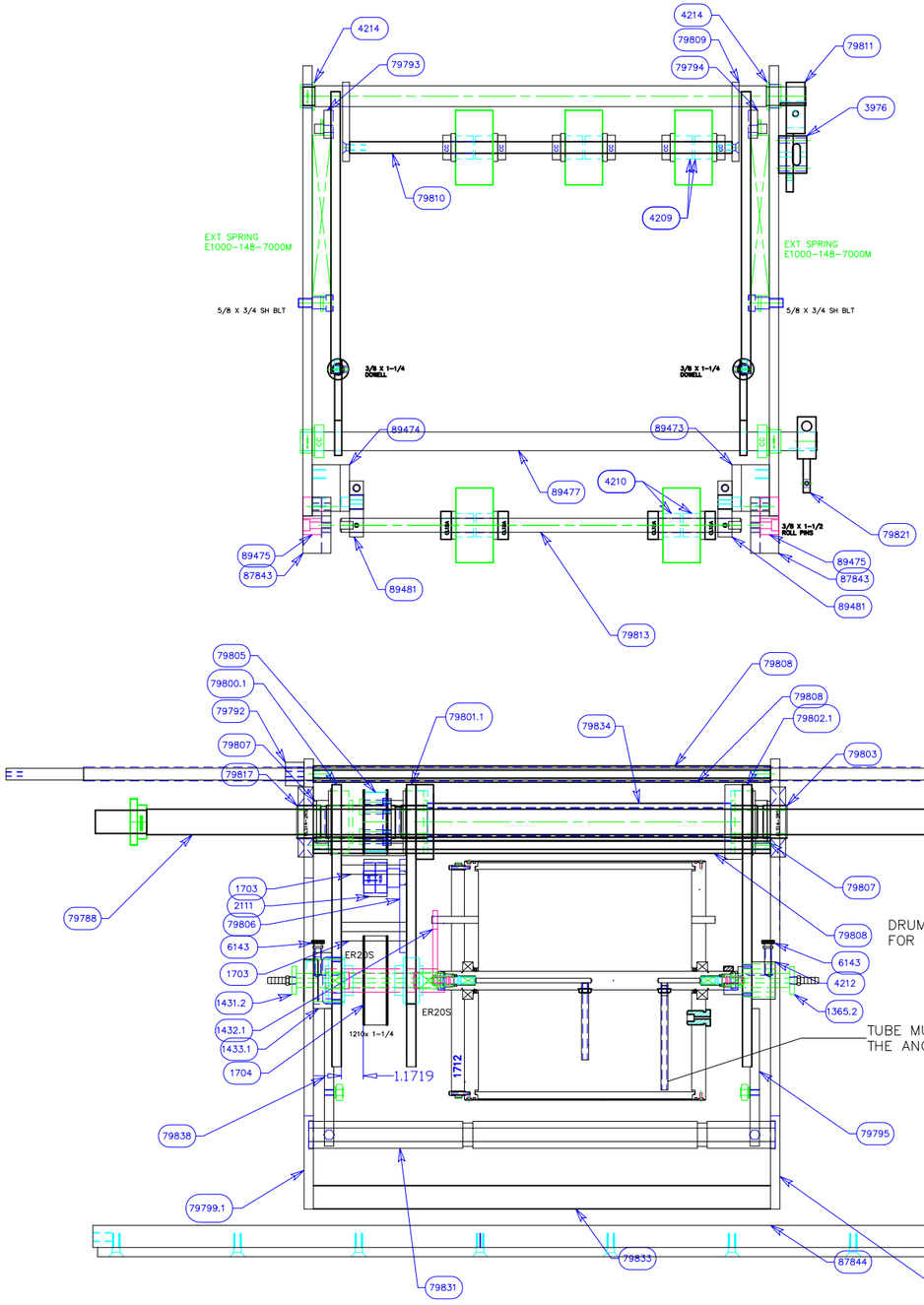
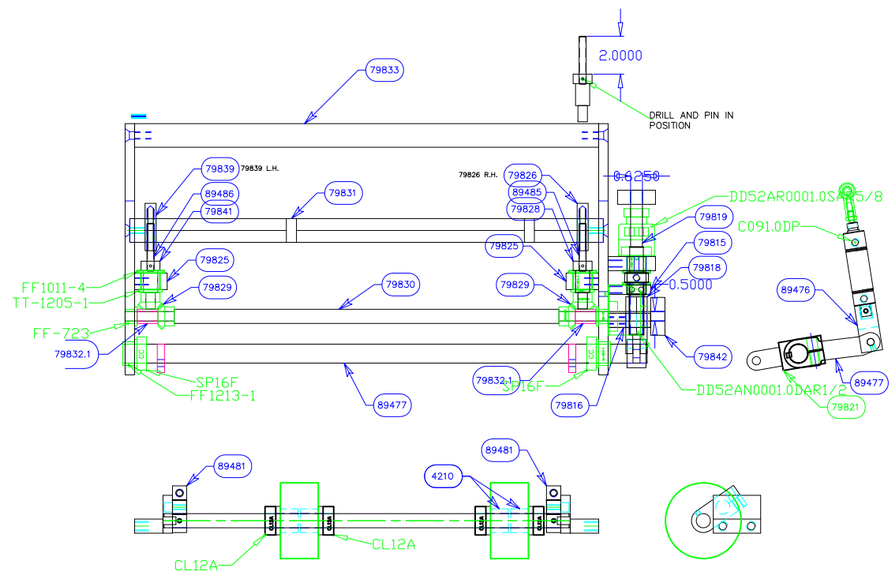
.000 ± .005			
FRACTIONS ± 1/64	QTY:	DESCRIPTION:	
ANGULAR: ± 1°		MATERIAL LIST:	Scale: Drawing number:



DRUM ASSY SHOWN IN FRONT VIEW
FOR CLARITY

TUBE MUST BE INSTALLED WITH BEVEL TOWARDS BLANK INFEED SO
THE ANGLE WILL SCOOP IN THE INK



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.000: ± .005		This drawing is the property of ICONOTECH P.O. Box 918, Clinton,CT 06413 and may not be used or reproduced without permission	
FRACTION: ± 1/64	QTY: DESCRIPTION:	Date: 1/18/2010	Drawn by:
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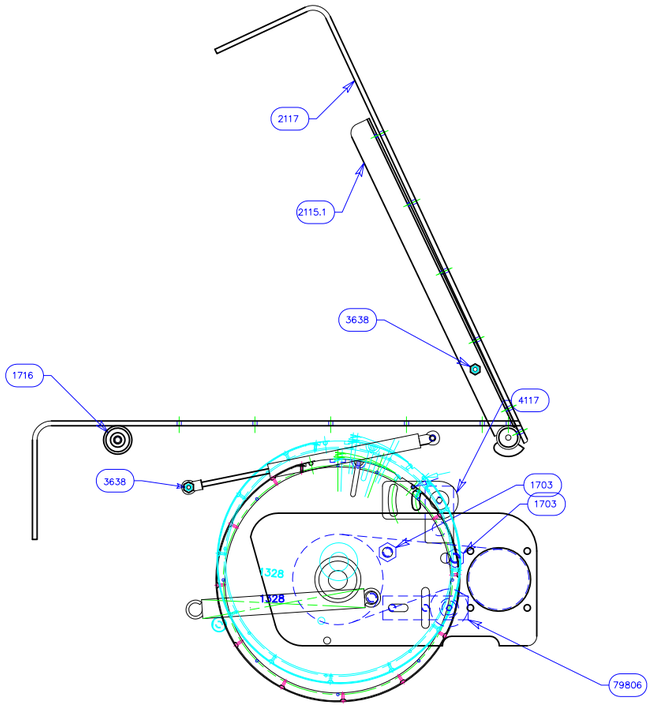
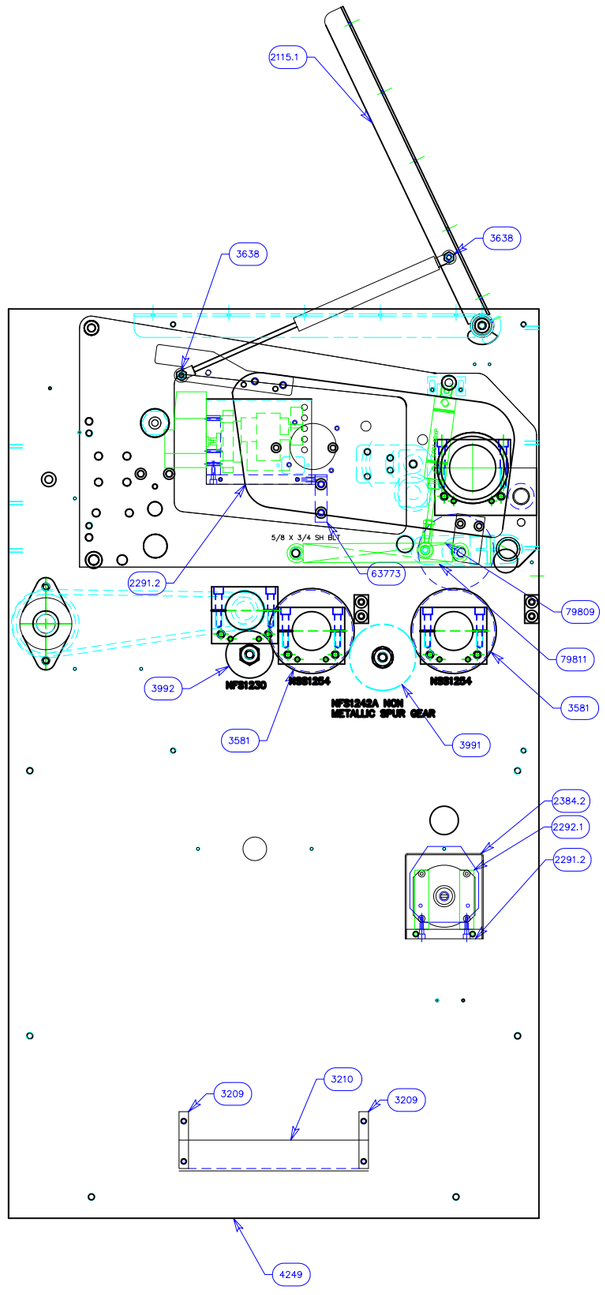
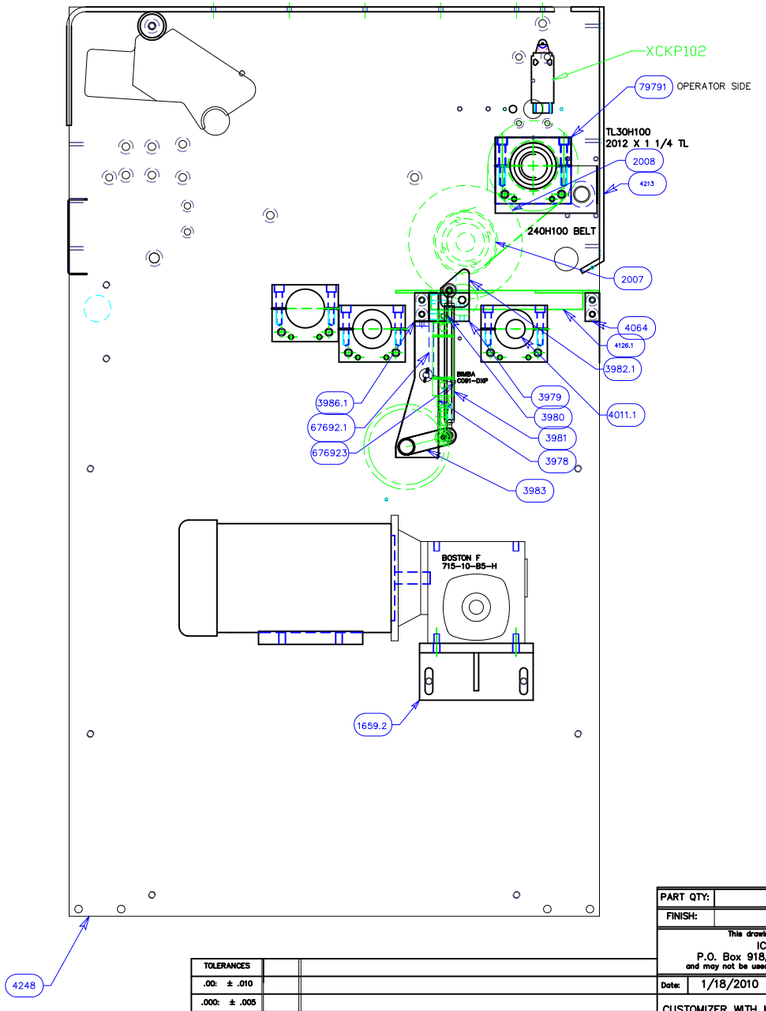
		Scale:	Drawing number:







TOLERANCES		PART QTY:	Job #
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FRACTION: ± 1/64	QTY: DESCRIPTION:	Date: 1/18/2010	Drawn by:
ANGULAR: ± 1°	MATERIAL LIST:	CUSTOMIZER WITH MOVABLE PRINT CYLINDER	
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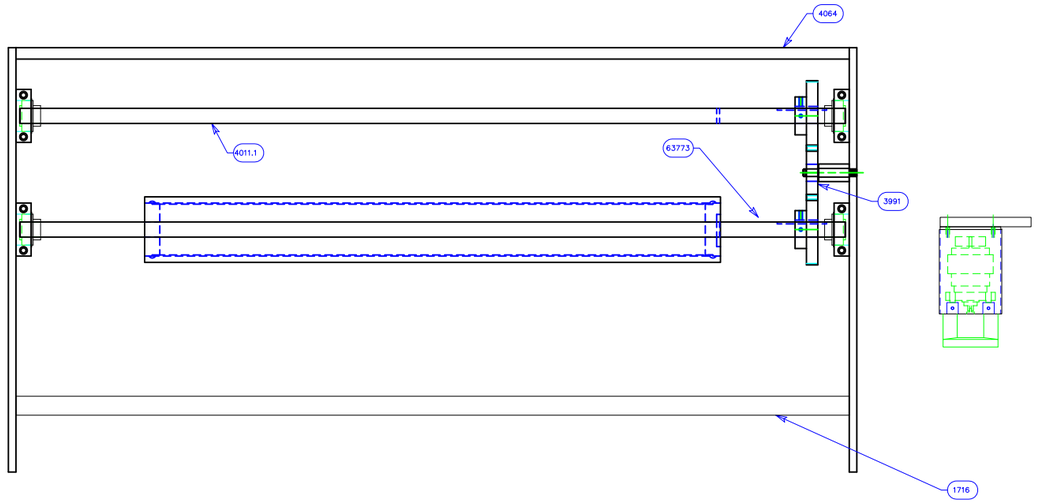

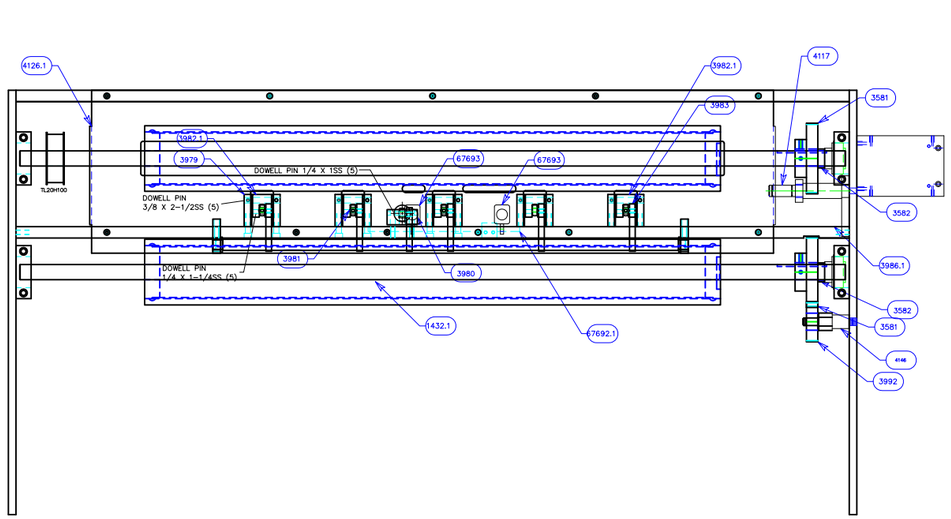

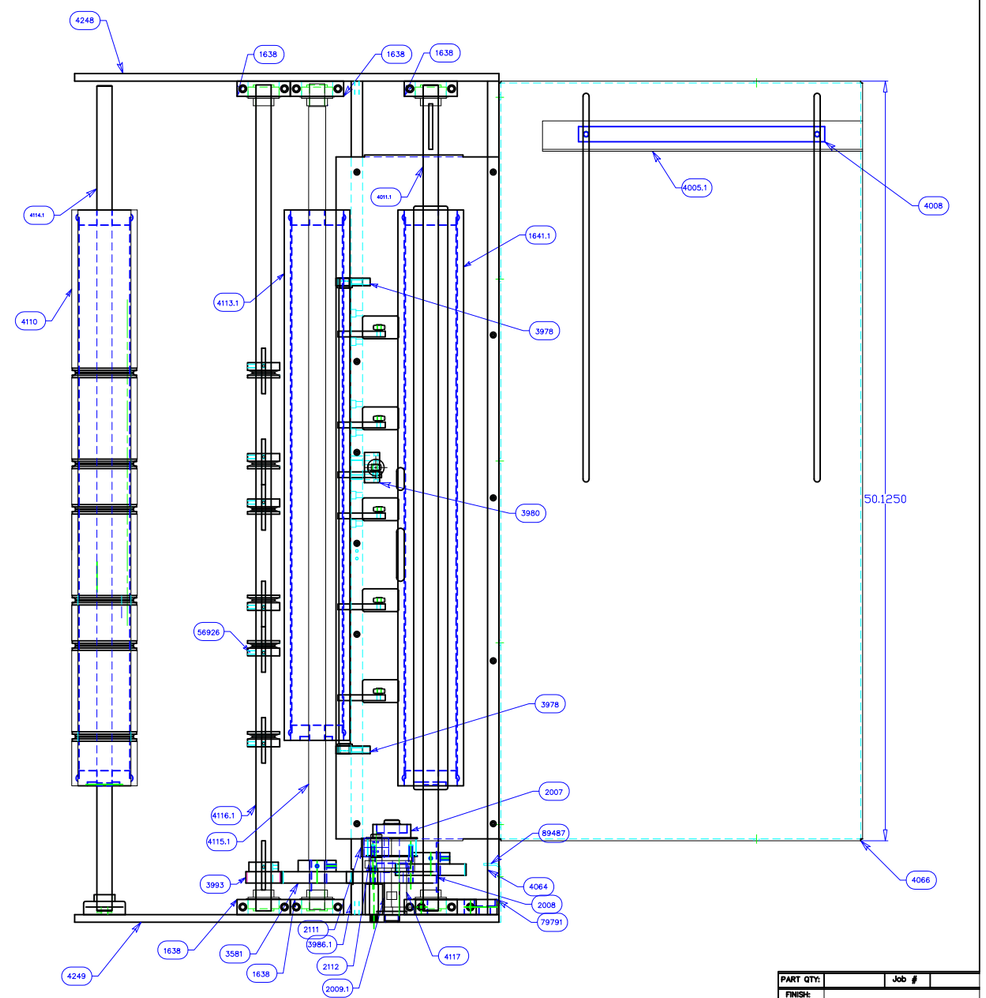

PART QTY:		Job #	
FINISH:			
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TOLERANCES		Date: 1/18/2010	Drawn by:
.00: ± .010		CUSTOMIZER WITH MOVABLE PRINT CYLINDER	
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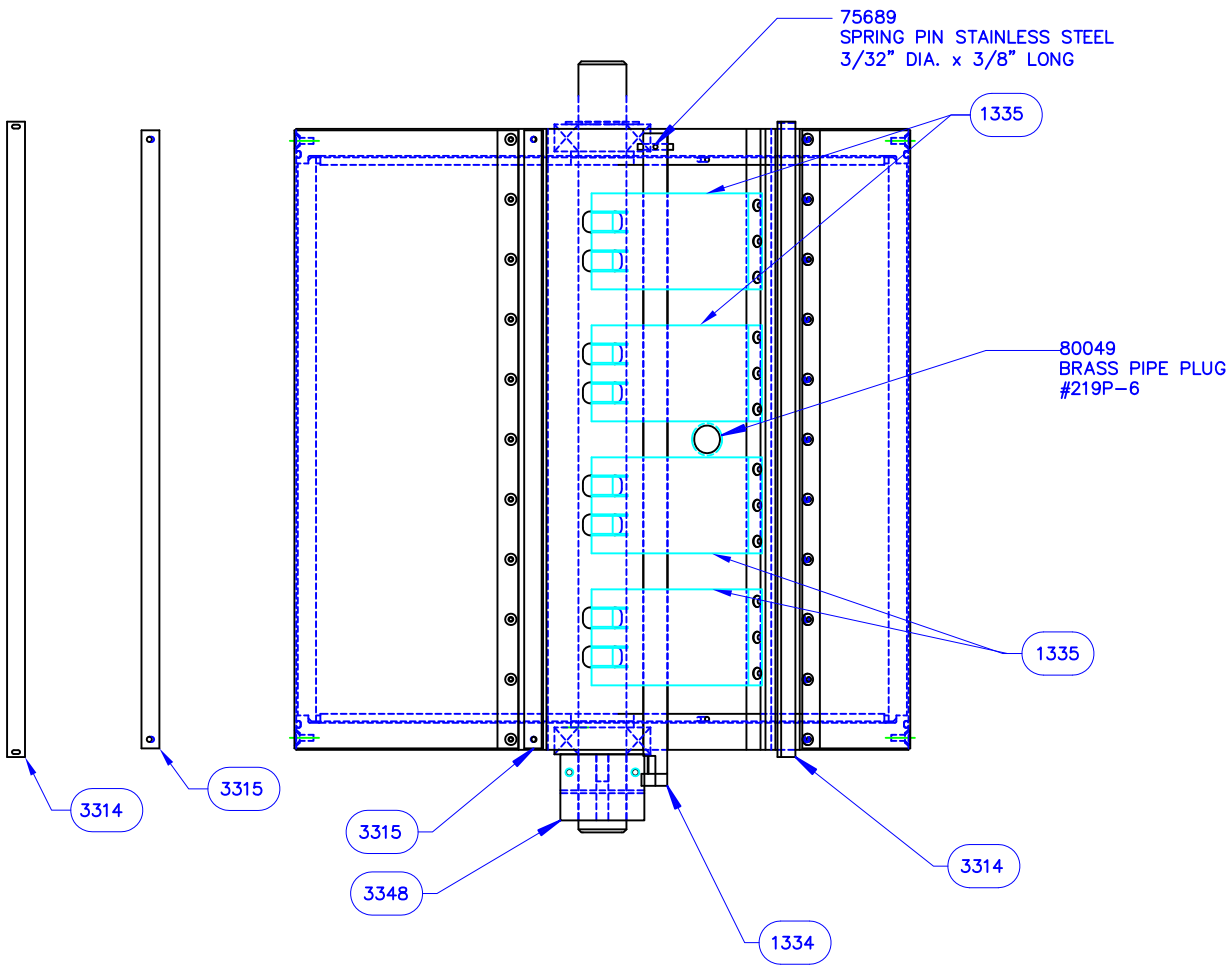
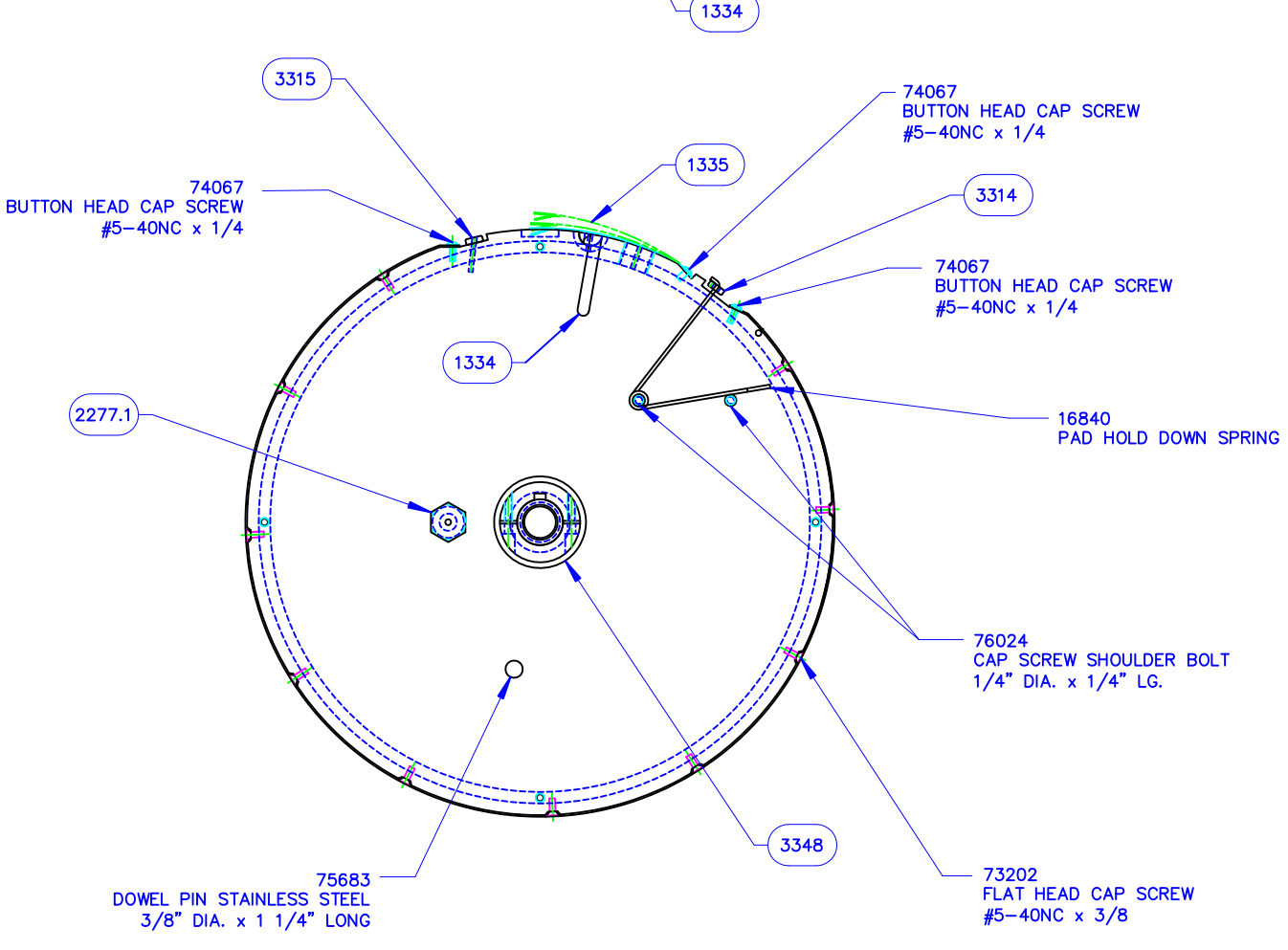
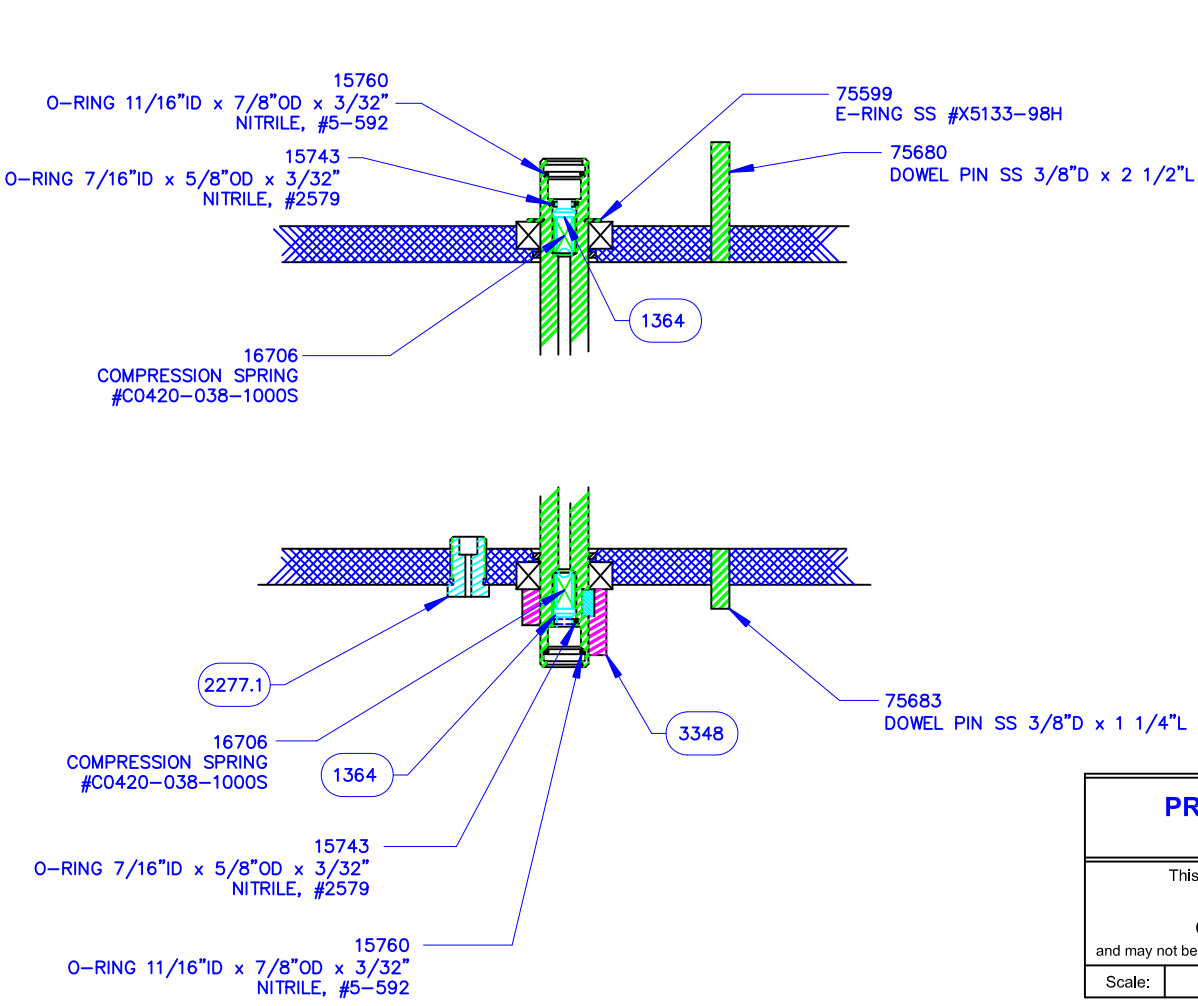
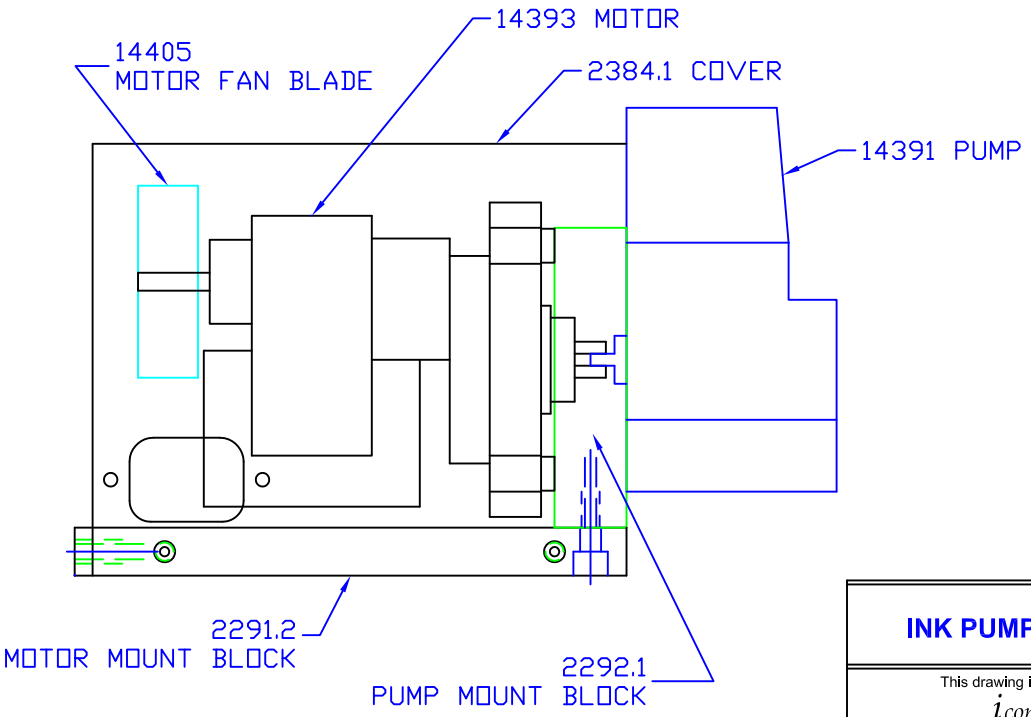






PRINT CYLINDER
CUSTOMIZER

Scale:	1:4	



INK PUMP & MOTOR

Scale:	1:2	

STENCIL LOADING ASSY

Scale:	1:4