# Start-Up

1. **TOUCH AND HOLD** one finger on the screen for approximately 4 seconds, until the screen turns on.
2. Wait for the printer to initialize and the home screen to appear (30 seconds).
3. **OPEN THE NOZZLE** using the nozzle open arrow. The screen will show the nozzle opening.
4. **TOUCH THE GREEN START BUTTON** when ready to enable printing.

# Sensor Details

* The printer relies on a laser sensor to detect product, which was chosen because this technology is more capable than a photoelectric device.
* The red light on the sensor will flash when it is seeing something passing in front of it.
* If the packages come by the sensor back to back without any spacing whatsoever, it may not be able to distinguish between them.

# Shut Down Procedures

This printer takes less than a minute to start up and shut down so there is no reason to leave it in a ready-to-print mode when the line is down. If it is left in a ready-to-print mode when the line is down, solvent will be consumed unnecessarily.

* **Close the nozzle when the line is in a long delay to avoid using solvent.**
* Turn the printer off when leaving for the day by **1) PUSHING THE STOP BUTTON, 2) CLOSING THE NOZZLE** ,and **3) PRESSING POWER BUTTON.** Confirm **YES**, to power down.
* **DO NOT UNPLUG** the printer. Leaving it plugged in will keep fluids circulating and ready to run even though it is turned off.

# Print Head Location/Position

* The slit in the print head sleeve should be oriented perfectly vertical, and centered at the bottom half of the sleeve. Any skew from vertical will produce slanted text.
* **The print head should be located as close as possible to the containers without allowing it to be hit by the containers.**
  + Distance is approximately ½” from the container passing in front of it, but slightly behind the guard rail so it is protected from being hit.

# Loading a Job File

1. From the main screen touch the **JOB** tab on the top left side and then **LOAD JOB TO PRINT**.
2. The job file list will appear. **SELECT** the appropriate job by touching the file name (use the scroll bar on the left to see the rest of the list)
   1. There is a “Standard Print” file for both cartons and pails
   2. There is a file for each Sherwin Williams product
3. Touch the **OK** to accept your selection
4. When the printer returns to the main screen, look in the **TOP** **LEFT CORNER** and confirm you selected the right job.
5. Touch the **OPEN NOZZLE BUTTON** if the nozzle is closed.
6. Touch the **GREEN** **START BUTTON** to begin printing the new job file.
7. If the printer is already in Ready To Print mode, it will ask you to **CONFIRM** you are going to change to the new job file.

# Adding Ink or Solvent

**Do not add fluids unless yellow light is on and the printer indicates it is low on ink or solvent.** An entire bottle will fit only after this notification is on. It will print for approximately 3 hours when low on fluid, then shut down.

1. **VERIFY** what fluid is needed, ink or solvent
2. **RETRIEVE** sealed bottle of fluid, but do not break the seal
3. **ACTIVATE NEW FLUID. PLACE** the bottle’s label in front of the black rectangle RFID reader on the right side of the machine.
4. An activation window will pop up if the tag is successfully read. Press the **ACTIVATE** button and keep the bottle in front of the reader approximate 4 seconds until a window appears saying the tag was successfully activated.
5. **REMOVE** the fluid receptacle cap on the printer for the appropriate fluid.
6. **REMOVE** the bottle cap but do not break the seal.
7. **THREAD THE SEALED CONTAINER INTO THE APPROPRIATELY LABELED RECEPTACLE** on top of the printer. The seal will be punctured during this process.
8. Allow the bottle to **DRAIN COMPLETELY**. Remove bottle and replace printer receptacle cap.
9. **PROPERLY DISPOSE OF USED BOTTLE.** TIP: Allowing the residual fluid in the bottle to dry renders it non-hazardous. The bottle will dry out quickly if disposed of with the lid off.

# Cleaning the Printhead

**Only clean the printhead if: 1) the print quality is deteriorating, 2) the printer is telling you to clean the print head, or 3) there is a high voltage fault.** It should be cleaned as needed and not on a schedule.

1. **PRESS THE RED STOP BUTTON** on the touch screen
2. **CLOSE THE NOZZLE** using the nozzle close arrow button
3. **DEPRESS THE PRINTHEAD SLEEVE RELEASE BUTTON** on the printhead sleeve
4. **REMOVE THE PRINTHEAD** **CAREFULLY** from the protective sleeve (do not remove the sleeve itself from the printhead stand)
5. Keep **PRINTHEAD POINTED DOWN**
6. Using the squeeze bottle of solvent, **RINSE** the charge electrode (the red LED area) and gutter with the solvent squeeze bottle, and anywhere else ink is apparent. **Do not rinse anything else on the printhead except the exposed metal components.**
7. Always **DRY THE PRINTHEAD** with the air bulb or a cleaning air can (never use a rag!)
8. **REPLACE** printhead carefully into sleeve
9. Touch the **OPEN NOZZLE BUTTON**
10. Touch the **GREEN** **START BUTTON** to begin printing the new job file.
11. **VERIFY** print is good and no errors occur.

# Export or Import Job Files

All the East Chicago job files were loaded on both printers at start-up. Should someone at the plant change a job file and need to copy it to another Leibinger printer, a USB stick can be used to transfer job files.

* TIP: The USB stick should be less than 4GB.
* TIP: The printer will create the appropriate folders for the files. Do not disturb the folder structure on the USB drive or the job files cannot be imported.

1. From the main screen touch the **EXTRA** tab and then **EXPLORER.**
2. **SELECT** the appropriate job file(s) to copy
3. **CHOOSE “COPY TO USB”** if exporting files from the printer (or) “**COPY TO INTERNAL MEMORY”** if importing files to the printer.
4. TIP: Make sure when printers are used for back up that they have the most current job files copied to them.

# Editing a Job File (Supervisor Only!)

* The job files were checked at start up edits should not be regularly required.
* On cartons, the code was printing in approximately the center of the white band.
* On pails, the code was printing such that there was very little print distortion on the round pail.
* Only supervisors should edit job files, and they check for other issues before attempting to edit a job file.
* **THINGS TO CHECK BEFORE EDITING A JOB FILE:**
  + Is the sensor detecting the product properly? (TIP: Look for the red light to flash when a container passes by.) The Technical Dept has documentation for retraining sensor.
  + Is the print head in the proper position? (See Printhead Location/Position section above.)
  + Has the printhead stand been moved relative to the sensor, which will change the placement of the print?
  + Is the printhead slot oriented perfectly vertical in the bottom half of the sleeve?
  + If the print is in the right position, but print looks bad, clean the print head.

If the print is too far left or right of the desired position:

1. From the main screen touch the **EDIT CURRENT JOB** tab
2. Select the **TOOLS** button (gear & tablet icon)
3. Select **PRINTSTYLE POSITION** tab
4. Change the **PRINT GO DELAY** in increments of 20 mm to adjust position relative to the leading edge of the container (the leading edge is where the sensor detects it):
   1. **Increasing** **PRINT GO DELAY** positions the print further from the leading edge
   2. **Decreasing PRINT GO DELAY** positions print closer to the leading edge
   3. ***PLEASE RECORD DELAY SETTINGS FOR CARTON AND PAIL JOBS***
5. Hit the **SAVE** button after making a change and confirm the changes
6. **OR** select **PRINT WITHOUT SAVING** to determine if you like the change but without saving it

If the print is backwards or upside down:

1. From the main screen touch the **EDIT CURRENT JOB** tab.
2. Select the **TOOLS** button (the gear & tablet icon)
3. Select **PRINTSTYLE** tab
4. Change **ORIENTATION** unit print is showing correctly
   1. ***PLEASE RECORD PRINT ORIENTATION SETTINGS***
5. Hit the **SAVE** button after making a change and confirm the changes
6. **OR** select **PRINT WITHOUT SAVING** to determine if you like the change but without saving it

# Resetting the Product Counter (Supervisor Only!)

* If you want to track the number of prints done for a specific run, you can reset the counter to zero.

1. Touch the **PRODUCT COUNTER** area
2. Confirm the **RESET**

# Changing the Date or Time (Supervisor Only!)

* Time and date are tracked internal to the printer. Changes will be required periodically if the time is not the same as the HMI/PLC time.
* The printer should automatically account for daylight savings provided that setting remains selected.

1. From the main screen touch the **MAIN MENU** tab
2. Select **SETTINGS**
3. Select **BASIC SETTINGS**
4. Go to the **DATE/TIME** tab and make adjustments here

# Moving the Printer

1. **STOP PRINTER, CLOSE NOZZLE , POWER DOWN**
2. **UNPLUG PRINTER**
3. **REMOVE** printhead from sleeve, but leave sleeve in bracket (see instructions in Printhead Cleaning)
4. **INSERT** printhead into the sleeve mounted on the back of the printer
5. **SECURE** the printhead umbilical cord and the power cord so they are not dragging on the ground
6. **ROLL** printer to new location
7. **PLUG IN** **PRINTER** (do not leave printer unplugged)