
QUICK REFERENCE

for the
FREEJET 330TX PLUS

Dear New FreeJet 330TX PLUS Owner:

Congratulations on becoming the owner of the #1 award-winning DTG printer series in the industry! OmniPrint International has been proudly serving our clients since 2004, providing cutting-edge direct-to-garment print technology that has time and time again been recognized as an industry leader.

We thank you for supporting a humble, family-owned business that continues to grow year after year. The OmniPrint family was built on the dreams that created America as coined by Truslow Adams; the dream of a land in which life should be better, richer, and fuller for every person, with opportunity for each according to their ability or achievement.

With the talented, hard-working efforts of the personnel team at OmniPrint, we created the FreeJet 330TX PLUS; a DTG printer that not only had the best quality in the industry, but the best production and maintenance costs to enhance the user's simplicity and profitability; a service we pride ourselves in providing for our customers. We wish you the best in this journey with your new printer. All of us at OmniPrint are happy to assist you with anything you need to help you success with your printer. Because at OmniPrint International, we don't just create printers; we create successful users.

Victor Peña
Victor Hugo Peña
CEO & President
 **OmniPrint**
International
Simplicity. Profitability.



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Support and Training Resources

Congratulations on your purchase of the best DTG printer in the business!

The OmniPrint team is continuously working to provide the most innovative and useful tools for you to run a prosperous business. We want you to be successful!

If you have any questions, issues, or concerns, we are here to help:

Training Department

email:

training@omniprintonline.com

OmniPrint Academy

web:

academy.omniprintonline.com

Technical Support

email:

support@omniprintonline.com

phone: 949-484-4181 option #2

Knowledge Base

web:

kb.omniprintonline.com/

Head Strikes

One of the most damaging problems that can occur to your printer is a Head Strike, or a Head Rub. Avoiding this will not only extend your printer head's life, but will save you both time and expensive repairs.

What is a head strike?

A head strike is when the print head contacts, or strikes, a garment or platen

Results of a head strike:

If a head strike occurs, the print head may be damaged. If the head strike is on a pretreated garment it will likely clog and may permanently damage the print head.

How to avoid it:

Properly positioning the platen and mounting the garment so the head can clear them.

What to do if you get a head strike:

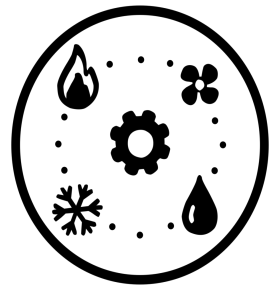
Immediately lower the platen ('Down' button), abort the print job (tap 'Feeding' button), prime all ink lines for a full pump cycle (monitor the waste ink bottle and interrupt priming to empty it, if needed), run two head cleans, then print a nozzle check. If the nozzle check is good continue printing, but if not, wet cap in Super Nozzle Cleaner and contact tech support for further assistance to see if permanent damage can be avoided.

*See pages 11-12 of your FreeJet User Manual for details about positioning the platen and setting its height.
See pages 14-15 of your FreeJet User Manual for details about mounting garments onto the platen.*

Environment and Shelf Life

It is important to maintain a temperature range of 60° to 80° Fahrenheit and a Relative Humidity range of 45% to 65% to avoid negatively impacting:

- Print quality
- Proper flow and consistency of ink
- Service life of print head



How does the environment impact print quality?

If the humidity is too high, fabric can retain moisture causing ink to bleed.

How does the environment impact ink?

The shelf life of our inks and pretreat material is one year, but temperatures exceeding 80° Fahrenheit can cause the consistency inks and pretreatment to permanently change, whether in the equipment or still in their original containers. If this happens the ink or pretreatment should be replaced.

How does the environment impact the service life of the print head?

If the humidity is too low, atomized ink can dry on the print head plate and cause clogging.

Control Pad Quick Reference

Function	Button Action
Automatic Height Set	'Function' + 'Rear'
Undock print head carriage for maintenance <i>(Tap 'Function' to dock)</i>	'Function' + 'Up'
Run a head clean	Press 'Feeding' for 5 seconds
Enter Layer Setting mode <i>(Tap 'Function' to save setting and exit Layer Setting mode)</i>	Press 'Function' for 5 seconds
Start priming pump <i>(Tap 'Power' to stop pump)</i>	'Power' + 'Down'
Move gantry to front <i>Print Ready</i> position <i>(Toggles between rear/home position and front)</i>	'Stand-by'
Manual Ink Chip Reset	'Function' + 'Stand by', wait 5 seconds, repeat

See page 4 of your FreeJet User Manual for more details about control pad operations.

Freejet 330TX Plus Startup Routine

Printer Startup: Ensure that your printer is ready to deliver a high-quality print at the beginning of a printing session, before loading a shirt onto the platen and printing.

1. Shake the white ink in the ink bottles if idle more than 2 days, then let ink settle 20 minutes for bubbles & foam to dissipate
2. Circulate the white ink for 30-seconds (if the printer wasn't set to automatically circulate the white ink while it was idle)
3. Prime the white ink, followed by all colors
4. Run two head cleans
5. Confirm the platen is properly positioned
6. Set the platen height
7. Print a nozzle check

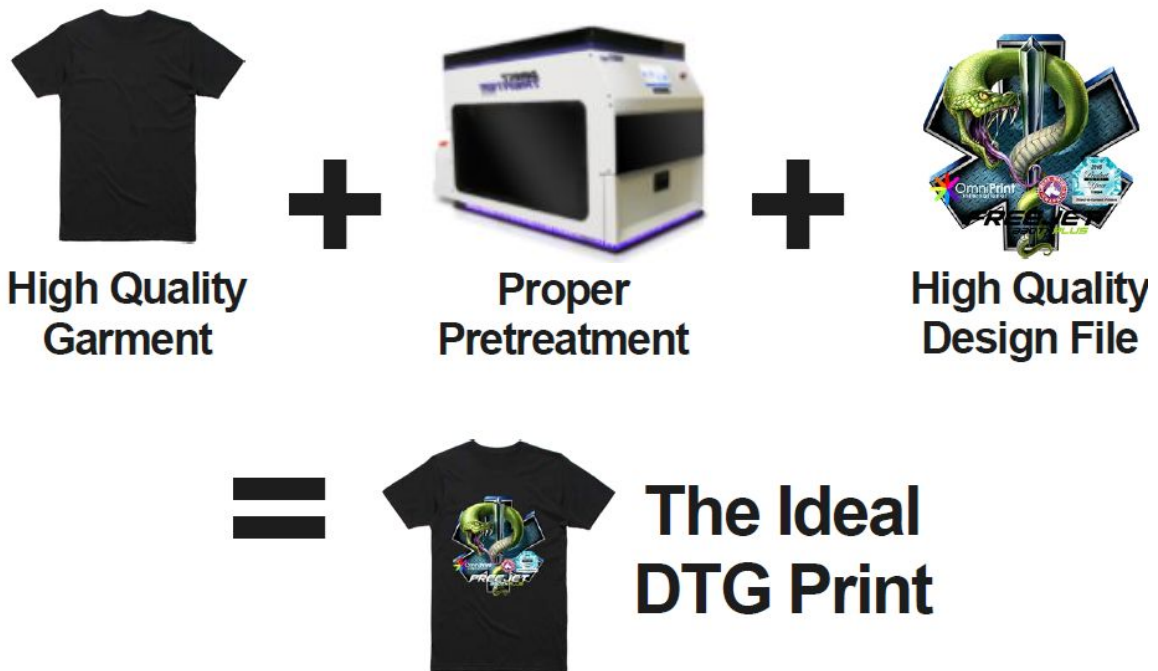
If the nozzle check isn't good, you won't get a good print.

If each square of the nozzle check pattern is 90%+ complete, proceed with printing. If not, run another head clean. If the nozzle check is still not good, repeat steps 2 & 3.

Contact technical support if repeating these steps doesn't result in a good nozzle check.

DTG Success Formula

The ideal DTG print can be broken down to a simple formula that illustrates the major elements needed to achieve high-quality prints with vibrancy, and excellent washability.



Garment Selection

Choosing the right garment is the first step to achieving high quality prints.

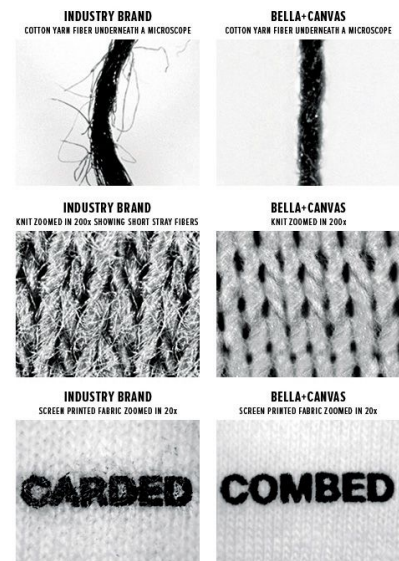
Qualities to look for in your garments:

- Tight weave
- Ringspun or Combed & Ringspun (for cotton)
- Pre-shrunk

Qualities to avoid in your garments:

- Loose weave
- Moisture wicking
- Anti-stain treatments
- High levels of Spandex or Rayon
- Colors/Dyes that stain when pretreated

CARDED OPEN END VS 100% COMBED AND RING-SPUN



bellaCanvas.com

This information is intended as a reference only. We recommend testing various garment brands and materials to discover what works best for you.

Pretreatment & Print Quality

Whether using a spray gun for manual pretreatment or a pretreatment machine, properly pretreating garments is crucial for getting high quality prints.

Many print quality issues are caused by one of the following pretreatment issues:

Pretreatment Issue	Print Quality Result
Not enough pretreatment	Grey whites and dull colors, fuzzy edges in design, poor washability
Too much pretreatment	Very stiff feel after drying, ink peeling or sticking to folded fabric after laundering
Uneven pretreatment application	Spotchy, inconsistent print with both good looking areas and bad looking areas

Remember that the amount of pretreatment referenced in the User Manual is a guideline and use the above info to direct your pretreatment amount adjustments when troubleshooting print quality issues.

See pages 5-8 of your FreeJet User Manual for details about the pretreating process.

See pages 40-41 of your FreeJet User Manual for details about troubleshooting pretreatment issues

Artwork Design for DTG

All good quality prints begin with good quality artwork, and the best quality shirts and perfect pretreat application cannot correct problems with the image being printed.

Aesthetic qualities aside, there are four important considerations when creating or sourcing any artwork for DTG printing.

- **Transparent background:** Unless you want your print to be rectangular, be sure to make the background transparent. This will both make the subject of your artwork pop visually and save all the ink that would have been used to print the background.
- **300 DPI resolution:** The higher the resolution of your artwork, the better your print can look. We recommend using 300 DPI to avoid jagged edges on any curves.



- **Size artwork to desired print size:** Expanding or zooming in on artwork causes jaggedness, so create your designs at the size you'll be printing.
- **PNG:** Our recommended file format is .png for storage efficiency and transparency support.
- **24-bit RGB:** To best match your printer's color gamut.

Setting Up a Print in DirectRIP

1. Load the image to be printed
2. Select the appropriate Environment for your garment
3. Set the desired size of your print
4. Set the position of your print (typically top-center)
5. Select the port that your printer is on
6. Set a margin, if desired
7. Set the white underbase choke (unless printing on a white shirt)

Remember that the total size of your print design *plus* any margins must be within your platen's dimensions or an error will occur (12.5" x 18" on the standard adult platen).

Heat Press Settings for Cotton

It's important to use proper heat press settings whenever drying pretreatment or curing the ink of a print. The tables below show the recommended temperatures, pressure, and press duration settings to use for drying pretreatment and for curing ink after printing.

All temperatures are in Fahrenheit.

Drying Pretreatment

Shirt Color	Temp	Pressure	Duration
Black & Colors	320	Medium - 40-60 lbs / square inch (4-6 on Stahl's heat presses).	20 seconds per press until dry to the touch.
White	300	Medium - 40-60 lbs / square inch (4-6 on Stahl's heat presses).	20 seconds per press until dry to the touch.

Curing Ink

Shirt Color	Temp	Pressure	Duration
Black & Colors	320	Low - 10-20 lbs / square inch (1-2 on Stahl's heat presses).	Two presses of 90 seconds each.
White	300	Low - 10-20 lbs / square inch (1-2 on Stahl's heat presses).	Two presses of 45 seconds each.

Heat Press Settings for Polyester

It's important to use proper heat press settings whenever drying pretreatment or curing the ink of a print. The tables below show the recommended temperatures, pressure, and press duration settings to use for drying pretreatment and for curing ink after printing.

All temperatures are in Fahrenheit.

Drying Pretreatment

Temp	Pressure	Duration
220	Medium - 40-60 lbs / square inch (4-6 on Stahl's heat presses).	20 seconds per press until dry to the touch.

Curing Ink

Temp	Pressure	Duration
240	Low - 10-20 lbs / square inch (1-2 on Stahl's heat presses).	90 seconds per press. One press for white shirts, two presses for other colors (when white underbase is printed).

Maintenance: Daily Shutdown

Performing the recommended maintenance is the most important factor in maximizing your printer's life and consistently getting high-quality prints.

Printer Shutdown: Maximize the service life of your print head and pump by following these shutdown maintenance procedures anytime the printer will be idle for more than a few hours.

1. Clean the print head plate brackets and the undercarriage
2. Clean the capping station seal and wiper blade
3. Thoroughly flush residual ink out of the capping station
4. Wet cap the printer
5. Empty the waste ink bottle, as needed, or loosen the cap to release any vacuum and then tighten it back up
6. Reposition the 8 ink clips, then clamp them shut
7. Confirm that the cleaning solution line's clip is clamped
8. Shut off power from the rear switch

See page 26 of your FreeJet User Manual for more details on Maintenance.

Maintenance: Periodic

Other Periodic Maintenance: The following maintenance needs to be done periodically. How often it is needed will depend on how much you're printing, but use the following time-based guidelines to avoid potentially scrapping a print due to a maintenance-related symptom occurring.

Maintenance Task	Suggested Frequency	Related Symptom
Empty Waste Ink Bottle	Daily or when $\frac{2}{3}$ full	Waste ink clogging the cleaning system
Clean Encoder Strip	Weekly	Horizontal registration off
Clean & Lube Carriage Bar	Monthly	Horizontal registration off
Reset Waste Ink Pad Counter	Monthly	'Ink' & 'Error' lights flash in alternating pattern
Replace Dampers	Bi-annually	Vertical registration off
Clean White Ink Bottles	Annually	Excessive pigment sediment buildup clogging ink line

See page 26 of your FreeJet User Manual for more details about Maintenance.

Consumable Parts

What are consumable parts?

Parts through which ink travels will need to be replaced from time to time as part of normal printer maintenance, not due to any flaw but because of normal wear and tear.

Are consumable parts covered by the warranty?

The replacement of consumable parts is required as part of normal routine maintenance for optimal performance and reliable operation, and is not part of the warranty. Think of this as the normal car maintenance of replacing tires and brake pads.

Are there any exceptions to consumable parts not being covered by the warranty?

Yes, if a consumable part is deemed by OmniPrint staff to have been defective on a brand new printer it will be covered by the warranty. We also provide a 1-year warranty on the print head against spontaneous clogging, which other manufacturers typically do not cover. (This does not cover damage or clogging due to head strikes or lack of maintenance.)

See page 60 of your FreeJet User Manual for more details about consumable parts.

Consumable Parts

How often do consumable parts need to be replaced?

The life expectancy of consumable parts can vary significantly, depending on the amount of printing done and the diligence and thoroughness of performing routine maintenance.

Here are some rough guidelines for how to expect consumable parts to last.

Consumable Part	Typical Service Life
Pump	9 - 12 months
Damper	6 - 9 months
Short Ink Tube (damper to main ink line)	1 - 2 years
FreeJet Clip	2 - 3 years

We recommend keeping spare consumable parts on hand to avoid potential downtime or expedited shipping costs in the event of a damper or pump requiring replacement.

Consider keeping a Support Kit on hand to eliminate downtime while ordering and awaiting delivery of routinely needed consumable parts. See more details and an ordering link at:

<http://kb.omniprintonline.com/kb/installing-consumable-parts>

See page 60 of your FreeJet User Manual for more details about consumable parts.

Notes

FreeJet 330TX PLUS Daily Maintenance Log

Serial Number: _____

Week of: _____

Task	Mon	Tue	Wed	Thu	Fri	Sat	Sun
FreeJet 330TX PLUS Daily Startup							
Shake white ink bottles if idle more than 2 days							
Turn ON from the rear Power switch							
Circulate white ink for 2 minutes							
Open white ink clips and massage the lines							
If white ink separated, prime for 5 seconds							
Open color ink clips and massage the lines							
Run two head cleans							
Set platen height							
Print and evaluate Nozzle Check test print							
<i>If any of 8 nozzle check patterns is less than 90% complete, run another head clean</i>							
<i>If an additional head clean was needed, run another nozzle check and repeat as needed</i>							
Operator Initials:							
FreeJet 330TX PLUS Daily Shutdown							
Clean the print head plate brackets							
Clean the black plastic undercarriage							
Clean the capping station seal and wiper blade							
Flush all residual ink out of the capping station							
Wet cap the printer with Super Cleaner							
Empty the waste ink bottle							
Reposition and clamp the 8 ink clips							
Confirm that the cleaning fluid clamp is shut							
Shut off power from the rear switch							
Shake each white ink bottle for 15 seconds							
Wipe down outer FreeJet surfaces							
Operator Initials:							

Please write the date maintenance was completed. If no maintenance was performed, leave the space blank.

Note: The above frequencies are suggestions only. Actual maintenance requirements may vary based on usage and upkeep of your machine. For assistance on determining an appropriate schedule, please contact Tech Support.

FreeJet 330-Series Weekly Maintenance Log

Serial number: _____

January	Task	Week 1	Week 2	Week 3	Week 4	Week 5
	Clean Encoder Strip*					
	Refill Super Cleaner					

March	Task	Week 1	Week 2	Week 3	Week 4	Week 5
	Clean Encoder Strip					
	Refill Super Cleaner					

May	Task	Week 1	Week 2	Week 3	Week 4	Week 5
	Clean Encoder Strip					
	Refill Super Cleaner					

July	Task	Week 1	Week 2	Week 3	Week 4	Week 5
	Clean Encoder Strip					
	Refill Super Cleaner					

Sept	Task	Week 1	Week 2	Week 3	Week 4	Week 5
	Clean Encoder Strip					
	Refill Super Cleaner					

Nov	Task	Week 1	Week 2	Week 3	Week 4	Week 5
	Clean Encoder Strip					
	Refill Super Cleaner					

February	Week 1	Week 2	Week 3	Week 4	Week 5

April	Week 1	Week 2	Week 3	Week 4	Week 5

June	Week 1	Week 2	Week 3	Week 4	Week 5

August	Week 1	Week 2	Week 3	Week 4	Week 5

October	Week 1	Week 2	Week 3	Week 4	Week 5

Dec	Week 1	Week 2	Week 3	Week 4	Week 5

* Use only 70% Isopropyl Alcohol to clean the Encoder strip

FreeJet 330-Series Periodic Maintenance Log

Serial number: _____

Task	Frequency	January	February	March	April	May	June	July	August	September	October	November	December
Lubricate Carriage Bar	Monthly												
Empty Spit Tray	Monthly												
Reset Waste Ink Pad Counter	Monthly												
Replace Dampers	6-9m												
Replace Pump	9-12m												
Replace Ink Tubes	As needed												
Replace Printhead	As needed												

Please write the date maintenance was completed. If no maintenance was performed, leave the space blank.

Note: The above frequencies are suggestions only. Actual maintenance requirements may vary based on usage and upkeep of your machine. For assistance on determining an appropriate schedule, please contact Tech Support.