

The following items are revisions and new technical data and updates to the printed T-Jet manuals. Most of these items apply to the red Standard T-Jet and the chrome T-Jet2. Some items pertain to the Jumbo T-Jet, too. For more details on these items or for quick answers to questions go to the *New and Improved* online *T-Jet Support* page screenprinters.net/supporttjet.php, or simply go to www.ScreenPrinters.Net and click on the Support link at the top of the page. For the latest information and lots of short videos on how to use your T-Jet please bookmark the support page and visit it often.

We have made great improvements over the last 12 months and are Moving at the Speed of White!™

New High Speed White Print Mode.

If you have the White Ink upgrade kit, there is now a new *Print Mode* called **1440dpi**. This new mode allows you to print white ink in ONE PASS! It is **EXCELLENT**. This has not yet been updated in the manual. You can also print with the 1440dpi print mode in high speed (HS) but you might get slight over spray if your heads are not in perfect alignment. Download this new Print Mode from the *T-Jet Support* page online. You will first need to check that you have the latest version of FastRIP for it to work properly. Go to the **HELP** menu on your computer and click on *About FastARTIST*. If the production date is earlier than December 5th you need to contact Support and they will send you a CD with the latest FastRIP version. You will need to give your dongle number as it has to be tuned to your specific dongle.

Note: The CMYK Color Print Modes do NOT have the 1440dpi option. You will be able to print one CMYK ink pass at 720dpi or 360dpi on the new 1440dpi White Print Mode.

As of this writing, you can't preview your 1440dpi White Print Mode in the **View Raw Data** section of FastRIP if you use a different resolution for the top colors. Simply don't worry about this for now. Use the 1440 HS Print Mode for white and 720HS Print Mode for the CMYK colors. You will be amazed at the quality and speed.

Problem with Underbase and Colors lining up.

If you print the 1440dpi HS Print Mode for the white and the colors at 360dpi, there is a chance you might see white peeking around the colors. Due to the nature of eliminating banding using a technique called Micro-Weave, it is almost impossible to have the underbase and top colors line up perfectly in register when mixing Printing Mode resolutions. For the best results keep the printing resolution either the same, or at least use 720dpi Print Mode for the colors on top of the 1440dpi white one-pass Print Mode.

Keep your Encoder Strip clean.

One of the main support issues is the printer getting confused on how to print an image. The magic that tells an inkjet printer printing head where to print is a thin strip called the *Encoder Strip*. A dirty encoder strip can cause everything from images printing in the wrong location, to large blocks of ink spraying on the shirt, to double-images, to dark bands across the print, to thin horizontal lines and much more. The printing head reads this strip (it has data on it) when the head is moving. If the strip gets dirty with lint from shirts, or ink over spray it can confuse the printer. **Please keep the lid closed on the printer when printing** and do daily and weekly maintenance on the unit as spelled out in the manual. If your printer starts to act in unusual ways, clean the encoder strip with glass cleaner.

You can find two helpful videos on cleaning the encoder strip on our T-Jet support page at screenprinters.net/supporttjet.php.

If you do not print long runs or only print a few shirts a day, then daily cleaning may not be necessary. When doing long print runs it is very important to occasionally clean the encoder strip to prevent from having mis-prints during the run. **Only use FOAM TIP cleaning swabs when doing any maintenance or cleaning inside your T-Jet.**

Turn your T-Jet OFF at night!

Some users want to leave their printer ON at night to conserve on ink (the machine does a head cleaning when you start it up). BUT, the head does not cap fully when the machine is in the ON position. When you turn the machine OFF the head seats completely and you eliminate many head clogs. Do NOT turn it off at a Power Strip. Turn it OFF on the machine control panel.

Dear Customer;
Since the introduction of the very popular Fast T-Jet direct-to-garment printer, our users have had great success with their machines. But, in this fast-paced and quickly changing industry segment, we have learned a lot from user feedback. This **Technical Bulletin** is designed to highlight and clarify new items and ones that have changed over the printed T-Jet manual.

We have also gone through a fast growth spurt here at U.S. Screen Print & Inkjet Technology and have had to ramp up our customer service and support department to meet the needs of our customers.

We welcome input, suggestions and ideas and hope this **Technical Bulletin** will keep you up and running and making a lot of money with your Fast T-Jet!

Thanks!
Scott Fresener, CEO



Keeps the heads moist at night.

Even with the heads capping tightly when the printer is OFF, one way to keep the heads moist at night is to put a few drops of glass cleaner on the foam pad on top of the capping station EVERY NIGHT. Then turn the printer OFF. This will help dissolve any residue of pigment in the head and get it ready to print shirts the next day. Don't soak it. The easiest way to do this is use a straw or small tube. Just a few drops.



Humidity and Environmental Control is a MUST.

During the cold winter months dry heat is often pumped into the room. Inkjet printers like humidity levels of 40% to 70%. If your room is dry, place a humidifier in the room and buy an inexpensive hygrometer from Radio Shack to measure the humidity level. In the summer months if the humidity is too high, use a dehumidifier in the room. You should try very hard to NOT place this machine in a dirty, dusty or non-controlled environment (like a screen printing shop). For best results place it in a dust free room with air-conditioning control. But, you do not want fans blowing across the heads of the machine.

Keep your Breather Caps open.

Your bulk ink system is an "open" system. The system that currently ships with the printer is slightly different than the system shown in the manual. It is VERY IMPORTANT to put the small "breather caps" in the back holes of your bulk system. And, it is VERY IMPORTANT that these breather caps do not become clogged with ink. If there is no open airflow into the system, the ink will stop flowing into the cartridge and colors will not print. When in doubt, check to make sure the breather caps let air through them.



Don't top off the ink containers.

When refilling the ink containers in the bulk system DO NOT fill them to the top. Stop at about $\frac{3}{4}$ of the way full. This will prevent excess pressure which can cause it to drip out of the bottom of the print head.

Use Cleaning Fluid if the machine sets unused.

As of March 15, 2006 your system shipped with a spare bulk system and extra cleaning fluid (*Prior owners can purchase a kit online*). If you have to leave the T-Jet set for a few days unused you may want to replace the ink cartridges and ink bulk system with a bulk system that contains cleaning fluid. Run a few head cleanings (hold down the ink button for three seconds) after you swap out the cartridges. **MAKE SURE THAT YOUR BULK SYSTEM IS STORED PROPERLY. DO NOT LET THE INK CARTRIDGES SET LOWER THAN THE INK HOLDING TANKS OR THE INK WILL RUN OUT OF THE CARTRIDGES** (turn them upside down with the nozzle up after you remove them). Make sure to place tape over the holes in the bottom of the cartridges because air will cause the screen filters to clog with dry ink. Some customers swap out the bulk system with ink to the bulk system with cleaning fluid each night to prevent head clogs.

If you are not going to use your T-Jet for a few days and if you don't want to swap out the ink for cleaning fluid, simply turn your machine on each day and do a number of head cleanings (from the Ink button if you are in a hurry or from the Epson Utility for better results).

Create a Simple Underbase for Dark Shirts.

If you have the **White Ink upgrade**, you received a version of *FastARTIST*. *FastARTIST* is used to build artwork and to create the underbase and highlight white printing files when printing white ink on dark shirts. The *FastARTIST* manual does not clearly tell you the recommended settings in the Underbase Wizard. For best results when printing white ink, you should have two versions of the artwork to start with. One version has a white background and one version has a black background. You can make these two files in Photoshop, Adobe Illustrator, Corel Draw or even in *FastARTIST*. If you create them in other programs, simply save or export them as a JPG file at 150dpi resolution at the final print size. Import these files into *FastARTIST*.

You will find the **Underbase Wizard** at the bottom of the left toolbar. It looks like a Wizard's hat. Click on it to open. To use the **Underbase Wizard**, hold the control key down on your keyboard and press **A**. This will select both images. Run the underbase wizard on the image and use these settings for most jobs:

Underbase: white
Underbase strength: 100
Light areas: 80-90
Dark Areas: 5 at the most - but more often 0

NO Clipping Path (if using two versions of artwork). Check Overlap Highlight

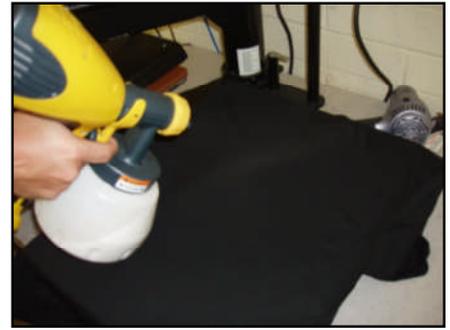
Highlight: white
Strength: 0
Regions: 100 most of the time (drop to around 80 for bold white text with a black outline)
Light Areas: 0
Dark Areas: 0

There is an excellent video tutorial on Underbasing With Two Versions of the Artwork on the T-Jet Support page.

Proper Pretreatment critical to white ink success.

Proper application of the pretreatment is critical to great white prints. As of March 15, 2006, new T-Jet2 printers include a Wagner Control Spray gun. You can purchase these from Home Depot or directly from U.S. Screen. This gun gives a very uniform mist of spray. It does not take much testing to get a uniform spray of pretreatment. An important note is that TOO MUCH pretreatment can reduce the washability of the print.

After applying the pretreatment, you should press the item for 10 to 15 seconds on a heat press set to 350 degrees. This is to flatten down any fibers that may have risen from the pretreatment application. The item should be covered with butcher paper or single use Quilon treated baking pan liner before pressing. If the butcher paper sticks to the shirt after pressing then you have not applied a sufficient amount of pretreatment.

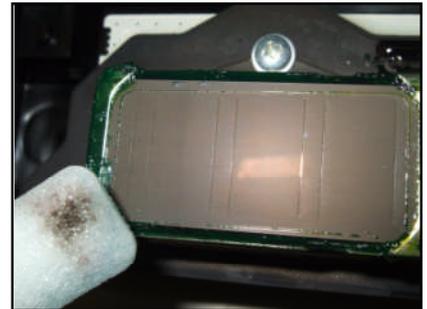


Print with lid closed and use Pretreatment VERY FAR AWAY.

Due to the nature of the white ink pretreatment becoming airborne, and the fact that it is somewhat sticky, **you MUST keep the lid to the printer closed**, AND, you should try to pretreat your shirts in a different room or far away from the machine. You can even take a large box and make an enclosed area to pretreat in. Just keep it away from the machine so you don't get the encoder strip dirty with pretreatment.

Eliminate ink drops on shirts by wiping the area around the head.

When you perform a head cleaning, the head itself is cleaned and wiped by the printer. But, this may not clean away small pieces of shirt lint that collect around the bottom of the head. These will build up ink and ink can start to drip off of them onto the garment. The easiest way to see this debris is to remove the shirt holder bed and shine a flashlight onto the chrome base so you can actually see the bottom of the head's reflection in the base. (It is much easier than trying to look up into the machine!). Clean any lint and ink residue off with a Foam tip swap and cleaning fluid or glass cleaner. BE CAREFUL to not rub the bottom of the head too hard where the actual nozzles are.

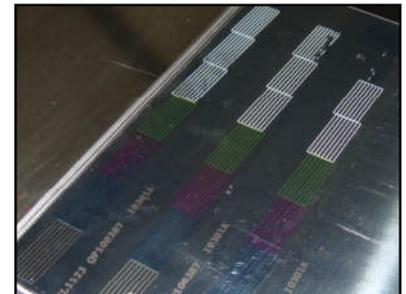


How to use Cleaning Cartridges.

Your new T-Jet 2 ships with a set of cleaning cartridges inside. Before setting up the bulk system on the T-Jet remove the tabs from the cleaning cartridges and run 3-4 head cleanings with them, then run a nozzle check with them also. This will ensure that the print head is properly primed and ready to print. After getting a clean nozzle check with the cleaning cartridges repeat the process with the bulk system. This double priming method will greatly reduce the chances of having a clogged print head. As always you must follow the maintenance procedures specified in this manual exactly for a smooth running T-Jet.

Perform a Nozzle Check with white ink on clear film.

It is hard to see the white ink when doing a standard nozzle check on a light shirt or piece of paper. Conversely it is hard to see the colors on a dark background. Raise the printing bed all the way to the top position and use a piece of clear overhead transparency film or our FastPOSITIVE Waterproof inkjet film (used to make screens in the screen printing process) to do nozzle checks.



How to use the Print Pass Counter.

The T-Jet2 has a **Print Pass Counter** to make it easier to double print an image when printing on black shirts. Without the counter you would need to stay by the machine and press the **Load** button each time a print pass is completed. With the counter you can set it for the number of passes and walk away.

There are two display windows on the face of the counter. The top display window shows the total number of passes the printer has made. The bottom display window shows how many passes you've selected for that print job.

Press the **RST** (Reset) button to zero everything out.

Press only the "1" button on the counter until it indicates the number of passes you need.

You will then need to hit the **Load** button to start the job. If you are doing a quantity of shirts with the same design, set the number of copies you will need in FastRIP. Set the counter to the number of passes you are doing in the design. Put the first shirt in. Hit the Load button. The shirt will complete itself. Take out the first shirt and put in the next shirt. Hit the Load button again. The next shirt will complete itself. Continue this way until your order is finished. You can then hit "Reset" on the counter to zero out the number of passes (top number).

With a single pass, since you do not need the bed to go in again, you can leave the counter set at zero.

If you trip the laser sensor during printing (by having something sticking up in the print path) the counter will become confused because once you adjust the bed height or remove the object that is tripping the laser sensor, you need to press the Load button which will reset the counter.



NEW more powerful Cleaning Fluid.

Our original pink cleaning fluid works well but we discovered that we really needed a more powerful **Heavy Duty** cleaning fluid. Newer machines (shipping after April 20, 2006) have a more powerful “cream color” cleaning fluid. This will be available for sale after April 20, 2006 in liter bottles and May 1, 2006 in Cleaning Cartridges. Call our sales office for more details.

Better USB connection.

When printing to your T-Jet through a USB cable, it is much better if your computer has USB 2.0 port. And, we have found that you get much better data transmission if you use a Gold Tip USB cable. Remember to keep the cable length short and do NOT use a switch box. Also, since USB gets a limited amount of power from the computer, the more items you have plugged into USB ports the less power there is for the others. **Limit the number of USB items you have plugged into your computer- especially a laptop where there is less power to a USB.**

For powerful head cleaning use the Epson Utility and not the ink button.

You can push the ink button three seconds on the printer for a head cleaning. But, the Epson Head Cleaning Utility is much better (see manual for how to use). And, if you do a normal routine of Cleaning and Nozzle check over and over, each additional cleaning is more powerful than the previous. Using the Epson Utility for Head Cleaning is a much more preferred and better method. To get the benefit of the more powerful cleaning, you MUST alternate between Head Cleaning and then Nozzle Checks with the Utility.

Do NOT use the SSC Utility.

The original manual recommended using the SSC Utility (free download) to do Power Cleanings and other maintenance items. We have found that this utility can actually cause printing issues, partial prints and erratic behavior.



Check ink Hose Clip and placement. Very important!

Between early December 2005 and mid-January 2006, we shipped T-Jet2 printers with a metal ink tube clip that only used double-stick tape to hold the tubes in place (the clip that goes in the middle of the housing). The double-stick tape did not hold the tubes well enough and they would flop around and splash ink on the encoder. If your metal clip does not have a plastic retainer clip on it, call our support department for a replacement. Make SURE this clip is in the center of the top of the machine and that the ink tubes do not hit the shirt during the printing process.



Clean Bulk System computer chips.

The small computer chips on the back of the ink cartridge can get dirty and not make good contact. If you get erratic red lights on certain colors, clean the chips with a sponged tipped Q-tip and isopropyl rubbing alcohol. A pencil eraser also works well for this.

Have a lot of RAM for your computer.

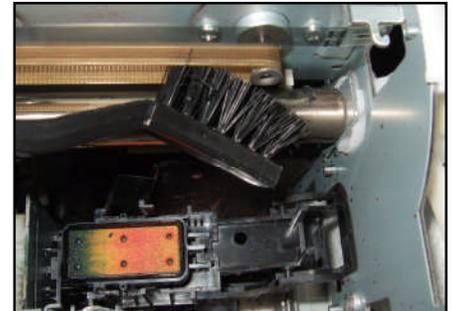
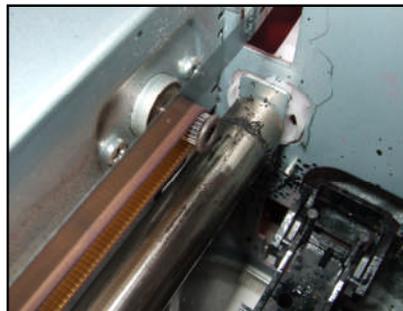
RAM is the temporary memory that your computer uses when processing complex data. Ram is NOT expensive. Most computers ship with 256mb of RAM. This is not enough – especially when using FastARTIST and FastRIP. Your computer should have a minimum of 512mb and preferably 1 to 2 gb of RAM.

When in doubt – unplug everything!

Sometimes inkjet printers get confused. Especially if you stop them in the middle of a print run. If your T-Jet is all of a sudden doing abnormal things, turn everything off AND unplug the power to your T-Jet. Make sure to unplug the USB cable between your T-Jet and the computer. There is often data still being send that might be corrupt. Leave everything unplugged for a few minutes and then plug items in and start over.

Clean Drive Roller and Belt if doing high volume

If you print a lot with the machine and are using dark shirts with pretreatment, lint that is coated with pretreatment can get in the **Print Head Belt Gear** in the right rear inside of the machine. This lint will start to clog the belt gears and the belt will slip causing the bed to jerk and not complete print jobs. Periodically check this gear and if necessary, clean it with a brush or computer vacuum. Make sure to avoid any contact with the encoder strip. It is fragile and could get damaged. Care also needs to be taken to not contaminate the encoder strip.



Eliminate Rulers on Printing Bed

We discovered that the guide rulers on the Printing Bed were coming loose with age and high-volume use. When they come lose they can get in the way of the print head and in some cases they can scratch the head. If your rules are lose, you should remove them. T-Jets shipping after April 1, 2006 DO NOT have rules installed on them.

New directions for purge of print head

To do a powerful purge of the printing head (severe clog), we use to suggest using a syringe and push cleaning fluid through the head WHILE THE HEAD WAS ON THE PRINTER. **We found that in some cases, excess fluid would spill out and actually leak onto the printed circuit boards. And, if the head was left on the printer, the ribbon cable going into the head could short out with excess fluid. We now recommend removing the head from the machine.** *There is a step-by-step video on this procedure at the Fast T-Jet support page.*



Call U.S. Screen Print & Inkjet Technology for Support.

If you bought the printer from a dealer in the US, you DO NOT have to go back to the dealer for support. Simply call or email our support lines. If you bought the printer from a dealer outside the US, you need to contact your dealer for support and then if necessary, contact us. Remember, we have dozens of short videos online about many of the items covered in this sheet.

We now have WebCAM video support!

You can purchase an inexpensive webcam for your computer and talk LIVE to one of our support technicians. More information about how to use this amazing support technology is on the *T-Jet Support* page at www.ScreenPrinters.Net.

We are here when you need us. New Support Hours

7:00 a.m. to 8:00 p.m. Monday through Friday Mountain Standard Time USA
9:00 a.m. to 3:00 p.m. Saturday

Note: During daylight savings summer months, Arizona is THE SAME time as Pacific Time and is three hours earlier than the east coast of the US.

Support Phone: 480-929-2937 Support email: support@usscreen.com
Internet support: screenprinters.net/supporttjet.php or www.ScreenPrinters.Net and click on Support



Coming soon – FastARTIST for Dummies!

OK, don't take that the wrong way. We realize that FastARTIST is a complex program and many users would rather print from Corel or Photoshop. (Yes, you can still print from those programs if you are not printing white ink.) We have added a few new "dummies" features in FastARTIST – including "one click underbase." This will make it much easier to create the underbase. Plus we have simplified a few other features. **This will be a FREE upgrade around May 15.**

For those users who really don't want to use FastARTIST, simply think of it as a *bridge* program. Create everything in Corel or Photoshop and simply import them into FastARTIST and print. Don't worry about all the bells and whistles in FastARTIST.

Coming soon – T-Jet Tune-up.

With many of our machines over a year old, we are working up a Tune-Up special. You will simply need to bring or send your machine to Arizona or Equipment Zone in New Jersey for a once over and Tune-Up. More to come on this by April 15.

Training Classes for the T-Jet in Arizona and New Jersey.

We now offer one-day hands-on training classes for the T-Jet in our Tempe (Phoenix) location and at Equipment Zone in New Jersey. We get rave reviews about how these classes really give students confidence on how to use and maintain their T-Jets. For more details check out the Fast T-Jet website at www.ScreenPrinters.Net.

Show off your work

If you want to brag about the things you printed on your T-Jet, we have a new [ScreenPrinters.Net Gallery](http://www.ScreenPrinters.Net) where you can upload pictures of jobs you have done. Check it out at www.ScreenPrinters.Net.

Five Minute Daily Maintenance

We have been selling T-Jets for 1-1/2 years and have seen everything in the way of problems. One thing that we see over and over when "repairing" machines is the lack of maintenance. In the early months we did not emphasize daily maintenance as much as we should and now that we have white ink for dark shirts and are spraying a lot of pretreatment around the shop, daily maintenance is critical. Remember, if you do not print too many shirts each day, then the cleaning procedure is less critical on a daily basis.

Turn the machine off at night.

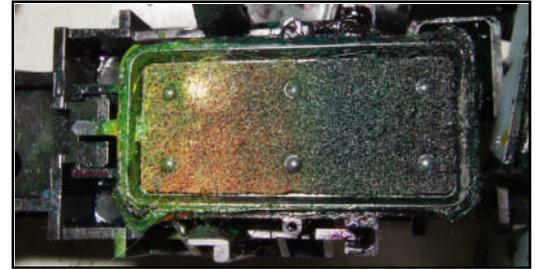
Turn OFF the machine at night to make sure the print head is capped properly on the capping station.

Perform head cleanings every morning.

After turning on the machine at the start of the day perform several head cleanings. Press the Ink button for three seconds as a fast way. The more preferred method is to use the Epson Cleaning Utility in the Epson driver.

Clean Capping Station and Wiper.

The capping station is the rectangular piece that the inkjet head sets in. There is a sponge in the capping station and a wiper (small squeegee) next to it. Make sure both are free of dried ink and garment fibers. Use a foam swab and distilled water, glass cleaner or isopropyl alcohol. This picture shows a very dirty capping station from a warranty repair printer. This is NOT how it should look.



Clean Drive Roller and Belt.

Clean carriage motor drive roller and belt with a small computer vacuum or a small brush.

Over time small fibers get caught in the drive roller and the belt with skip. Make sure to avoid any contact with the encoder strip. It is fragile and could get damaged. Care also needs to be taken to not contaminate the encoder strip.

Clean Print Head.

Clean any accumulated ink or garment fibers from around the sides on the bottom side of the print head with a swab and glass cleaner.

Clean Encoder Strip.

During printing and head cleanings the clear plastic Encoder Strip that the head "reads" as it is printing can get inky and dirty. This is really the "brains" of the printer and if the head can't properly read the data on the strip the head will get confused and print in the wrong location and dump ink where it should not be. Clean encoder strip with a swab and glass cleaner.

Shake up the ink.

Gently shake the bulk ink system to avoid separation of white ink pigment. Do not shake too hard or it is possible to clog the breather caps. Shake it in the morning and at night.

Check ink levels.

Visually check the ink levels on the bulk ink system. If the bulk system ink levels are topped off, ink might start to drip from the print head. If the level is too low, the ink tubes will run dry. If the white ink containers do not have an equal level it means one of the white heads is partially clogged.

Weekly or Monthly Maintenance (depending on amount of production)

Clean Encoder Strip.

Remove encoder strip and clean thoroughly with a clean lint free cloth and glass cleaner or isopropyl alcohol.

Clean print head guide rails.

The long round guide rails that the printing head moves back and forth on can get dirty and in some cases dry. Wipe this weekly if you see it dirty, and use the machine oil supplied with your printer (sewing machine oil) and give it a few drops every few weeks.

Remove and Clean Belt and Drive Gear.

Remove drive belt and clean with clean cloth and glass cleaner or isopropyl alcohol. You may have to use a sharp object such as a needle or small wire brush to "pick" the garment fibers from the drive gear.

Don't forget to read the entire Maintenance Procedure section of the T-Jet Manual.