

SUPER BLUE 2

Featuring STRIPENET® anti-marking, anti-static nets



INSTALLATION

instructions

INSTRUCTIONS FOR TRIMMING AND INSTALLING ORIGINAL NETS WITH STRIPES

INSTALLATION

1. Measure the cylinder surface dimension, operator to gear side velcro fasteners, measure to the outside edges of the Velcro fasteners.
2. It is necessary to add 1" (25mm) to the measurement taken in the previous step to account for the proper net tension or looseness.
3. On a flat surface, make two marks to indicate the distance measured in step 1 including the additional 1" from step 2.
4. Lay the net flat and fold it in half, twice, matching sewn edge to sewn edge. Then center the net between the two marks from step 3.
5. Trim both sides of the net straight and even according to the measurement marks.
6. After trimming the net to the proper width size, unfold the net and shake it several times to remove any loose fibers or lint.
7. Rotate the cylinder to the gripper edge fastener. Beginning at the operator side, firmly press one corner of the net into the gripper edge fastener. The corner of the net should extend at least $\frac{1}{8}$ " (9.5mm) past the operator side edge fastener.
8. Using the stripes in the net as a guide, continue to press the net into the gripper edge fastener all the way across to the gear side of the cylinder. The net should overlap the gear side fastener by approximately $\frac{1}{8}$ " (9.5mm) or more. The overlap of the fasteners on each side is for any adjustment purposes.
9. Firmly press the net into the gripper edge fastener, the feeder brush from the feed table generally works best to attach the net into the Velcro. Gently with pressure roll the brush through the net into the Velcro.
10. While holding the tail edge of the net, slowly jog the press forward until the tail edge fastener is accessible. Pull the net taught and release the tension slowly until the net lays naturally on the cylinder surface. Firmly press the net into the tail edge fastener.

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11. Check to be sure that the stripes are straight and even across the cylinder surface. If the stripes are not parallel to the fastener, release the net from the fastener and re-attach so that the net is straight and even. Firmly press the net into the tail edge fastener. Apply the blue locking Velcro (if supplied) to lock the net into the tail edge fastener.
12. Rotate the cylinder to the gripper edge. Working from the operator side, firmly press the net into the side edge fastener. Working several inches at a time, continue this process from the gripper to the tail edge.
13. Repeat step 12 on the gear side of the cylinder. Be sure that the net lays naturally on the cylinder surface by pulling the net taught and then releasing slowly. Firmly press the net into the side edge fastener. Working several inches at a time, continue this process from the gripper to the tail edge.

When installing the *Super Blue Original Net with Stripes*, it must be distributed evenly across the circumference of the base cover or cylinder surface. The stripes should be straight and parallel to the gripper and tail edges. The net should move freely and evenly with the printed sheet over the entire cylinder surface. *All Super Blue Nets perform most effectively when the nets are allowed to move freely with the printed sheet.*

Applying Correct Tension

After completing the installation of the *Super Blue Original Net with Stripes*, follow the steps outlined below to check for the proper tension and complete the installation process. The *Super Blue Original Net with Stripes* must be installed loose enough to move with the printed sheet. It is suggested that the net movement be between 1/8" and 3".

1. Rotate the cylinder to the center of the surface. Pinch the net between two fingers and pull it gently away from the cylinder surface. The net should be able to be pulled away from the cylinder surface according to the following specifications:

Presses up to 26" (66cm) 1/8" to 1" (12mm to 25mm)
 Presses between 28" (72cm) – 44" (112cm) 1/8" to 2" (12mm to 50mm)
 Presses larger than 50" (127cm) 1/8" to 3" (12mm to 75mm)

When the net is released, it should return to it's original position on the cylinder surface. If the net cannot be pulled to the above recommendations or exceeds them, the net may be to tight or loose.

2. Once the net is properly installed and the proper tension is applied, trim any excess net from the tail or side edges leaving approximately 1/8" (9.5mm) beyond the net fastener. This excess is for any adjustment purposes that may be necessary.

Important Notes

If the net does not return to it's original position, it may be too loose. Run some sheets and check for any marking. If the net is too loose, it may double over itself leaving a mark that appears like a smashed blanket. Tighten the net slightly at the tail edge. Run some additional sheets to check for marking. Continue to tighten the net until the marking is no longer visible.

If you cannot pull the net from the cylinder surface to the recommended looseness it may be too tight. Run some sheets to check for any marking. If the net is too tight, it may cause scratches or show the appearance of the net pattern. Loosen the net slightly at the tail edge. Run some additional sheets to check for marking. Continue to loosen the net, alternating between the tail and side edges until the marking is no longer visible.

Tightening the Super Blue Original Nets with Stripes

1. Rotate the cylinder so that the tail edge fastener is accessible.
2. Loosen the net from the fastener at the tail edge.
3. Working from the left side to the right side, pull the net away from the gripper edge of the cylinder until the net lays naturally on the cylinder surface.
4. Re-lock the net into the tail edge fastener and trim any excess leaving $\frac{1}{8}$ " (9.5mm) for adjustment purposes. The nets can also be tightened on the operator or gear side using the similar procedure.

Loosening the Super Blue Original Nets with Stripes

1. Rotate the cylinder so that the tail edge fastener is accessible.
2. Loosen the net from the fastener at the tail edge.
3. Working from the left side to the right side, push the net towards the gripper edge of the cylinder approximately $\frac{1}{8}$ " (6mm).
4. Re-lock the net into the tail edge fastener. The nets can also be loosened on the operator or gear side using the similar procedure.

Double-sided Tape Fasteners

Be sure the surface area where the double-sided tape is to be applied is clean of any oil, grease, ink or power buildup. The operator's hands should be clean and have as little contact as possible with the adhesive sides to the tape.

Velcro Fasteners

Be sure to push the net firmly into the Velcro using a brush, i.e. the round feeder brush from the feed table generally works best. Gently with pressure roll the brush through the net into the Velcro.

MAINTENANCE

The *Super Blue Original Net with Stripes* will begin to stretch after a short period of time (1 to 3 weeks) and will need to be adjusted (tightened) periodically. Refer to the "Installation" section for instructions to apply correct tension to the net.

In some cases the *Super Blue Original Net with Stripes* may need to be adjusted tighter or looser than suggested; i.e. $\frac{1}{8}$ " or up to 5" of movement. This depends largely on the type of press model, and positions as well as the type of work being printed.

Cleaning the Cylinder Base Covers or Coated Cylinder Surfaces

Remove the net before cleaning any foreign substance from the cylinder base cover or coated surfaces. Using a half-and-half mixture of alcohol and water (or an alcohol substitute) clean the surface lightly until the substance is removed and the surface is clean. Using a dry clean cloth, wipe the surface until it is completely dry and free from any chemical residue. Replace the net, in most cases you will need to install a new net to obtain the best results.

Cleaning the Super Blue Original Net with Stripes

If grease, oil or solvent have contaminated the net, it is sometimes possible to dry and clean the net using a clean dry cloth. Apply the cloth directly to the area of contamination and apply pressure to absorb the substance. Repeat as needed until the net is dry and free of the oil, grease or solvent. If the marking is still present after cleaning the net surface, the substance may have damaged the chemical treatment and the net may need to be replaced.

If dried ink or varnish has accumulated on the net surface it may be cleaned by rotating the cylinder to the gripper edge and working towards the tail brushing any accumulation off the net surface. This may be done by holding the area of the net with the build up tightly against the cylinder surface with one hand. Brush the ink off with the palm of your other hand or use a soft bristle brush,; i.e. soft bristle paintbrush. After cleaning the net surface of the dried ink or varnish accumulation, run the press for several minutes at high speed so the loose particles will fall into the cylinder pan under the press.

To prevent accumulation of dried ink or varnish build up on the surface of the net, at the end of each job, run the press off impression at high speed using one to two hundred sheets of make-ready stock. The make-ready sheets should absorb most of the wet ink or varnish from the net surface and reduce the amount of ink or varnish accumulation and increase the life of the net.

TROUBLESHOOTING

Net Tension

Marking can occur if the net is not adjusted properly. The net tension may be too tight or too loose.

If the net is adjusted too tight it may cause scratches in or above solid inked areas or the text and line work. A tight net may also cause marking that appears to look similar to the net pattern in solid inked areas; i.e. checkerboard pattern. It may also transfer wet ink to the non-image areas of the sheet and develop a rapid build up of ink on the net surface.

If the net is adjusted too loose it may cause scratches below the solid inked areas or smearing of the text or line work. A loose net may also cause a mark or slapping at the tail end of the sheet. It may also fold over itself and give the appearance of a smashed blanket in the image area.

Cylinder Clearances

In most situations the *Super Blue Original Net with Stripes* tension can be adjusted to solve a marking problem. In some cases, to achieve optimal performance clearances may sometimes need to be altered.

If clearances are too tight the sheet will usually show a pattern similar to the net; i.e. checker-board pattern. This problem usually occurs on the front third of the sheet, but can also appear on the entire sheet.

If clearances are too great, the sheet will mark similar to a loose net, (scratches in the direction from the gripper to the tail edge). The difference is that the marking will usually occur in only one section of the sheet from the gear to the operator sides; i.e. first third of the sheet, middle of the sheet, tail end of the sheet. If you experience these types of problems, packing may need to be added under the Super Blue base cover kit or the cylinder diameter may need to be altered.

Please Note: Recommended clearances vary with each press model, as well as each position. These modifications may not be possible on some press models. If you are having a problem and believe that clearances may be involved, please contact your local dealer or PRI for the proper recommended clearances for your press model.

Cylinder/Base Cover Coating

If the *Super Blue Original Nets with Stripes* have the proper tension and the clearances between the transfer and impression cylinder are correct and a marking problem still exists, the cylinder base cover and surface should be checked:

- Is there a Super Blue cylinder base cover or coating on the cylinder surface under the net?
- Is the Super Blue base cover or coating damaged in any way?
- Are there any wrinkles or bubbles in the base cover surface?
- Are there any rips, tears or deep scratches in the base cover or cylinder coating surface?
- Is the surface of the base cover or coating smooth?
- Is the base cover or cylinder surface worn out?
- Are there any smashes in the base cover surface?
- Are any fasteners loose or missing?

If any these problems are observed, it may be necessary to replace the cylinder base cover or coated surface; or re-adhere loose, missing or worn out fasteners.

Foreign Substance Build-up

Build up of foreign substances on the cylinder or base cover surface and/or on the net can also cause marking problems. Check for:

- Grease, oil or solvent on the net, cylinder or base cover surface?
- Dried ink or varnish build up on the net, cylinder base cover or coated surface?

If any of these problems are observed, it may be necessary to clean or replace the *Super Blue Original Net with Stripes*, cylinder base cover or coated surface.

Cylinder Positioning

When a cylinder (manufactured by Printing Research, Inc.) is positioned too far back from the gripper or carriage bars, a lead edge mark can occur. Repositioning the cylinder in relationship to the gripper or carriage bar should solve the marking problem. Normally, it is best to have as little clearance as possible between the gripper edge of the Super Blue manufactured cylinder and the gripper or carriage bars.

Marking on the Operator or Gear sides of Delivery Cylinder Positions

Loosen the net from the side edge fastener at the area the marking is occurring. Push the net towards the center of the cylinder surface approximately $\frac{1}{8}$ " (6mm) and refasten into the side edge fastener. If this procedure does not completely solve the marking problem, it may be necessary to run the net free (or un-attached) from the side edge fastener. This may require trimming the net so that it does not get caught in the delivery chains or sprockets.

HELPFUL HINTS

Velcro Fasteners

Be sure that the fasteners are the proper type and in the proper location. Incorrect fasteners inside the sheet or image area can cause a marking problem. Fasteners incorrectly installed may also cause marking problems. Fasteners that have become loose, should be reattached properly or replaced.

Base Cover Surfaces

The Super Blue base cover should be smooth and free from any ink or varnish build up. Dried ink or varnish build up on the surface will restrict the *Super Blue Original Net with Stripes* from moving freely with the printed sheet. Tears, rips, surface wear or bubbles and wrinkles in the base cover surface will also restrict a net from moving freely with the printed sheet. Base covers that show these symptoms should be replaced for optimum performance. Adhesive base covers, which have become loose from the cylinder surface, should be re-adhered to the cylinder surface. With proper care, the average life of the original "blue" base cover is up to 5 years. The average life of the Super Blue 2 "black" base cover is up to 10 years.

Cylinder Coating Surfaces

The Super Blue cylinder coating should be smooth and free from any ink or varnish build up. Dried ink or varnish build up on the surface will restrict the net from moving freely with the printed sheet. Worn out cylinder surface coating will also restrict a net from moving freely with the printed sheet. Cylinder coatings that appear worn should be replaced for optimum performance. With proper care the average life of the Super Blue cylinder coating is up to 5 years. PRI offers affordable upgrade kits for these cylinders. These kits adapt directly to the existing Super Blue cylinder using a quick, unique method of attachment.

Varnish

Varnish or coatings on *Super Blue Original Net with Stripes* surface can also cause a marking problem. These applications can clog the net and restrict its movement or deposit debris on the freshly printed sheet. If these problems occur it may be necessary to replace or remove the net.

Ultraviolet Inks or Coatings

UV applications require a specialized curing system to cure or dry the inks or coatings. It is sometimes necessary to replace the net as it builds up an accumulation of ink or coating on its surface. It is sometimes possible to run make-ready stock through the press at high speed, off impression to reduce the amount of build up and extend the life of the net. In most cases, the net has a reduced life during this application. This reduction in net life is caused by accumulation on the net or from the UV rays drying out the chemical treatment in the *Super Blue Original Net with Stripes*.

Missing Sheet De-curler or Slow Down Wheels

If the net is too loose, it is possible that the printed sheet will cling to the net for an extended period and raise the sheet path, missing the de-curler or slow down wheels. It may be necessary to adjust the net taught towards the tail edge of the cylinder on the operator and gear sides. This should break the bond between the net and printed sheet allowing it to follow its normal path. Adjusting these devices so that they are closer to the cylinder itself (if possible) may resolve the problem.

Using Weather Stripping

If persistent marking problems occur that cannot be resolved by all the methods mentioned, the job being printed may be one of the few that Super Blue cannot support. The use of weather stripping can sometimes be time consuming and laborious, but may be the only solution to the problem. Weather stripping can be used in conjunction with or without the net. The basis of using weather stripping is to support the printed sheet in non-image areas to keep it from coming in contact with the net or cylinder base cover surface. When using weather stripping on a net or base cover surface it will sometimes leave an adhesive residue on the surface that must be cleaned once the application is completed. PRI offers a wide variety of weather stripping special-ly for your press model and position for these near impossible jobs.

In some cases it may be necessary to use just the base cover alone without the use of the net or weather-stripping. If this process is used, it is best to clean the base cover surface to remove any ink build up from the base cover surfaces once the application is completed.

Using Stretch Bands

Stretch bands are another way of supporting the sheet when there are persistent marking problems that cannot be solved by the methods mentioned in this guide. Stretch bands can be used in conjunction with or without the net. Please see the guide included with the stretch bands for detailed instructions.

Printing Applications

Every press and job requires different techniques affected by ink density, ink tack, blankets, ink film thickness, type of ink, PH values, ink and water balance, pressroom humidity and stock grain. If one value changes, its possible that all other values would also change. Remember when making changes, it is best to change only one value at a time and monitor what effect that change has before making another change.

CONTACTING YOUR LOCAL DEALER OR PRINTING RESEARCH, INC.

If you encounter a marking problem you cannot resolve, prior to contacting your local dealer or Printing Research, Inc., please be prepared to answer the following:

Your Pressroom Specifications

- Color SequenceThe order in which inks are applied to the press sheet
- Ink TackThe amount of cohesion in the inks
- Ink Film ThicknessThe measurement of ink on the form rollers
- Optical DensityColor strength which is measured by the amount of light that is reflected
- TrapThe acceptance of a second down ink by a first down ink

Press Run

- | | |
|-----------------------|------------------|
| Type of Stock | Type of Ink |
| Stock Thickness | Ink Manufacturer |
| Stock Size | Ink Additives |
| Stock Grain Direction | Ink Dryers |

Press Information

- | | |
|---|-----------------------------|
| Model | Amount of Printing Units |
| Series | Amount of Perfector Unit(s) |
| Other Equipment, IR Dryers, Spray Power Units, Etc. | |

Super Blue System Information

- Type of Base Covers: Blue or Black? Age of Base Covers
- Type of Super Blue Nets: Original Nets, Original with Stripes or StripeNets?
- Amount of Impression on Nets