GERBER EDGE 2

Owner's Guide

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FCC NOTICE

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

1284-1994 Compliant cables must be used with this unit to ensure compliance with the Class A FCC limits.

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la class A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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Chapter 1: Introduction

The GERBER EDGE 2

Congratulations on your purchase of the GERBER EDGE® 2. This successor to the revolutionary GERBER EDGE features:

- three times faster print speed of one inch per second at 300x300 dpi on most materials
- improved print quality in the form of a greater dynamic range of colors and 300x600 dpi at approximately ½ inch per second print speed

Additionally, all of the features and capabilities of the original printer are still present:

- thousands of colors
- airbrush fades
- halftones
- small text
- intricate graphics
- repeats
- enhanced fonts

Because a job can incorporate characters, shapes, scanned images, and clip art, the EDGE 2 opens up a wide array of possibilities for your customers and your business.

In this manual

This book is divided into the following chapters:

Introduction provides general information about the EDGE 2, how this book is organized, and how to get help if you have problems with your EDGE 2.

Connecting the EDGE 2 to your computer describes the physical connections that have to be made between the EDGE 2 and the computer that is driving it.

Installing the EDGE 2 into your software gives the procedures for installing the EDGE 2 into Gerber's GRAPHIX ADVANTAGE® software.

Material handling describes how to put a roll of vinyl onto the tensioner assembly, load the vinyl into the EDGE 2, and position it correctly. It also describes the procedure for loading and unloading a foil cartridge.

Operating the EDGE 2 describes the controls on the EDGE 2 keypad, how to print a job from GRAPHIX ADVANTAGE, and how to print old GA™ files that were created for the original EDGE or in a version of GA prior to 4.3.

Troubleshooting provides guidelines for responding to error messages that appear on the EDGE 2 display and how to correct typical printing problems.

Maintenance describes basic cleaning procedures that must be performed to provide the best print quality and keep the EDGE 2 in operating condition.

Getting Help

If you require assistance, please contact your Gerber distributor or contact the Gerber Field Service Department at:

800-828-5406 (USA and Canada)
860-643-1515 (International)
860-645-2448 (fax)

e-mail: gsptech@gspinc.com

www.gspinc.com

Conventions used in this manual

The following conventions are used in this manual:

Note: A note contains important information which could affect successful completion of a task.

A tip is a hint to help you do something more efficiently or quickly.

CAUTION: A caution statement contains information which, if not observed, could result in damage to the equipment.

WARNING: A warning statement contains information which, if not observed, could result in personal injury.

This typestyle portrays messages that appear on either the EDGE 2's LCD message display or your computer's monitor.

Safety

WARNING: Unplug the power cord before performing any maintenance. Voltage is present inside the system even after the power switch is turned off. All voltage is removed only when the power cord is unplugged.

CAUTION: Static electricity may damage electronic components. Ground yourself by touching any bare metal inside the EDGE chassis prior to handling electronic components.

Unpacking or repacking the EDGE 2

The EDGE 2 is shipped from the factory in reusable packaging materials. Save these packaging materials for future use in case you need to ship the EDGE 2. Provided separately with the EDGE 2 is the bulletin *Unpacking and Repacking to Prevent Damage.* Please refer to this bulletin for complete instructions on either unpacking your EDGE 2 or repacking it for shipment.

CAUTION: Failure to repackage the printer with the specified packaging materials may result in damage to the unit during shipping. Always repack the printer as described in the bulletin *Unpacking and Repacking to Prevent Damage*. Gerber is not liable for shipping damage due to improperly packed units. If you do not have the proper packaging materials, call the Gerber Field Service Department at 800-828-5406.

Contents of the shipping boxes

The GERBER EDGE 2 is shipped in two boxes: an EDGE 2 box and a system components box.

The EDGE 2 box contains cushioning material and an inner box. The GERBER EDGE 2 thermal printer is packaged in the inner box along with the following:

- An EDGE 2 power cable

- An EDGE 2 printer cable
- Thermal printhead cleaning kit
- An EDGE 2 accessory package consisting of:
  - Two 10 amp fuses
  - *GERBER EDGE 2 Owner's Guide*
  - *Getting Started with the EDGE 2*
  - Lint-free cloth
  - Cutter registration mark eyepiece (bombsight)
  - Two power cable clips
  - Shipping bracket wrench

Chapter 2:
Connecting and Installing the EDGE 2

Your computer system must meet certain requirements for the EDGE 2 to work correctly with it. Instructions for accomplishing steps 1 and 3 below are contained in the *Getting Started with the EDGE 2* bulletin.

1 If you or your distributor has not already ensured that your system has an ECP-capable printer port, use the GAProbe program to do so now. (See *Getting Started with the EDGE 2*.)

2 If your system does not have an ECP-capable printer port, you must acquire one and install it according to the instructions before proceeding.

3 The Sentinel System driver must be set up according to the instructions in *Getting Started with the EDGE 2.*

4 You must be using GRAPHIX ADVANTAGE version 6.21 with Service Pack 2 or later.

Connecting to a PC

Follow these guidelines when connecting the EDGE 2 to the computer:

- Use the GSP®-approved printer cable provided with the EDGE 2.
- The printer cable connectors and their receptacles are asymmetrical. Before you push the connector into its receptacle, be sure they are oriented correctly.
- Connect the printer cable to the computer LPT port that has ECP capability. Do not connect the EDGE 2 through the GRAPHIX ADVANTAGE security block.
- Do not connect any other printer, device, or switch box to the printer port you select. The EDGE 2 may not print or the print quality may be unacceptable.

The power switch and power cord receptacle are located on the right side of the EDGE 2 as shown below. The parallel printer connector is located on the back.

To connect the EDGE 2 to the computer

1 Align and plug the printer cable connector that has thumbscrews into the ECP computer port. Tighten the thumbscrews so the connector is firmly seated.

2 Align and plug the printer cable connector without thumbscrews into the receptacle on the back of the EDGE 2. Snap the wire bail locks up into their seats on the connector so they hold it firmly in place.

3 Plug the receptacle end of the power cord into the power cord plug on the right side of the EDGE 2. Connect it to an electrical outlet.

4 Turn on the computer. Turn on the EDGE 2 by pressing the rocker switch next to the power cord receptacle.

Installing the EDGE 2 into GRAPHIX ADVANTAGE

The GSP Setup program installs the EDGE 2, or makes it known to GRAPHIX ADVANTAGE that the EDGE 2 has been physically connected to your computer.

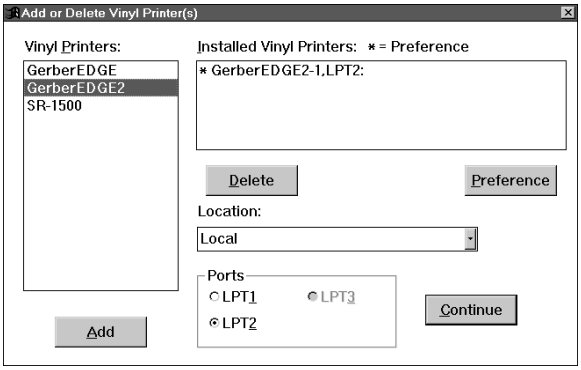
To install the EDGE 2

1 Open GSP Setup.

2 Click on the Setup menu.

3 Click on Vinyl Printer. The Add or Delete Vinyl Printer(s) dialog box appears.

4 In the Vinyl Printers list box, click on GERBER EDGE 2.



5 In the Ports box, click the option button for the correct port.

6 Click on Add. The EDGE 2 is added to the Installed Vinyl Printers list.

7 In the Installed Vinyl Printers list box, click on GERBER EDGE 2, then click on Preference. The Set Preference dialog box opens.

8 Click on OK. The EDGE 2 is shown as the default vinyl printer.

9 Click on Continue. The EDGE 2 is now the default printer.

Chapter 3:
Material Handling

The material

Gerber has created a material designation called Edge Ready™. Edge Ready materials are processed, prepared, and qualified by the material manufacturer for optimum image quality when printing with the EDGE 2. Edge Ready materials are the only materials recommended for use with the EDGE 2. They are identified by an Edge Ready sticker inside the roll and on the outside of the box.

To remove any surface dust or dirt, gently wipe the material with a clean, dry, lint-free cloth before printing and between foil colors.

Tip: An easy way to clean the material before printing is to slew as much as you are going to use through the EDGE 2 and back again. The vinyl squeegee will leave a line of accumulated dust and dirt on the material where the slewing stopped. Wipe it off with a dry, lint-free cloth.

When not using the material, store it in the plastic wrap it originally came in. Following this advice should keep print quality high and material loss low.

For the best color-to-color and print-to-cut registration, "normalize" the material by unrolling the amount you are going to use onto a clean, dry surface approximately 15 minutes before you print on it. This is particularly important when using heavy materials such as GerberMag™ and Gerber AutoMag™ or in hot, humid weather when using thin material such as 3M™ Scotchcal™ 225 premium, Scotchcal 230 translucent, Controltac™ 280, or other vinyls in the 2-3 mil range.

It is very important to designate the material you plan to print on when you set up the job for output in GAPlot32. Each job has specific print settings assigned according to the material to be printed on. **Failure to designate the correct material when you are setting up the output, or substituting a different material at the print stage will result in incorrect print settings for the material actually being used.**

The foil

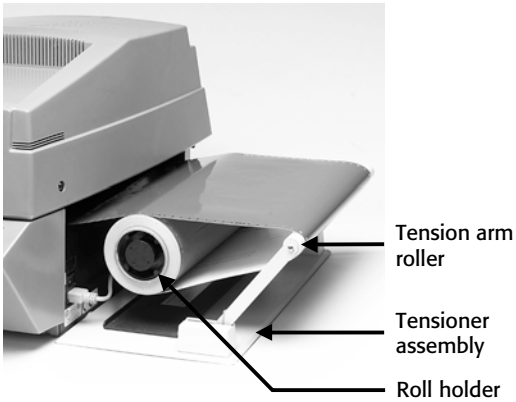
Keep the foil cartridge in its sleeve and store it in a clean and protected environment when it is not installed in the EDGE 2. Store the cartridge at 40 to 60 percent relative humidity in a temperature range of 40° to 90° F (4° to 32° C). Do not store the foil cartridge in direct sunlight.

The foil in the cartridge can get dirty in two ways: in storage (where dust is attracted to it because of static charges) and during use. You can clean the cartridge before loading it by using a compressed air, ultra-filtered, non-residue dust remover, such as Chemtronics® Ultrajet® 2000 or equivalent. Quickly spray the spool ends and both sides of the foil in the cartridge. Do not soak the foil—spray it just enough to blow the dust off. If the cartridge is in the EDGE 2, use FOIL SLEW to advance the foil several inches so that the dirt buildup is rolled beyond the printhead and onto the take-up spool.

Using the tensioner assembly

The tensioner assembly feeds the material into the EDGE 2 in a controlled, orderly fashion by applying equal tension across the entire width of the material.

1 Position the tensioner assembly next to the right (on/off switch) side of the EDGE 2 as shown in the photograph.



2 Slide the roll of material onto the roll holder and position it on the tensioner assembly as shown at right. Pull the end of the material away from the EDGE 2, around the tension arm roller and back toward the EDGE 2 so the material will enter the EDGE 2 with the vinyl surface facing up.

Loading material into the EDGE 2

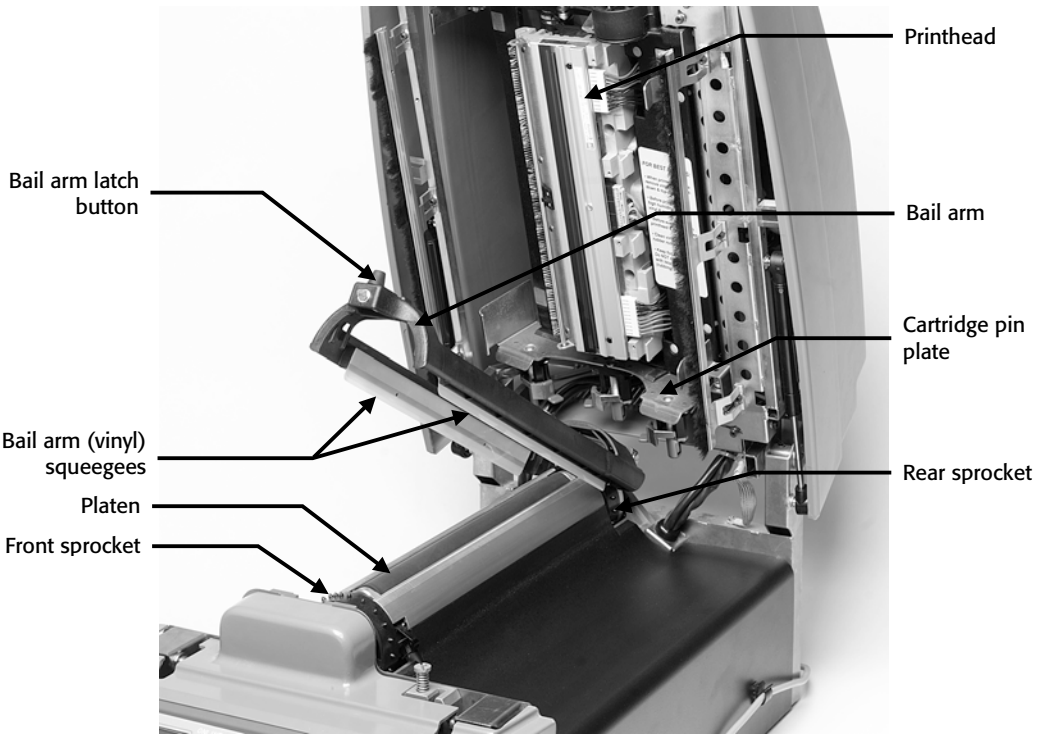
1 When a job is received, the display shows the material loading prompt which looks like the example below:

Vinyl: White 225

Note: Using a material type or foil color other than the one called for by the job may produce unpredictable results. Each material type and foil color has a unique print setting associated with it to produce the best results. Using a different material type or foil color will result in an incorrect print setting being applied to it.

2 Push in the cover latch and raise the cover.

3 Push the bail arm latch button toward the rear of the EDGE 2 and lift the bail arm to the raised position.

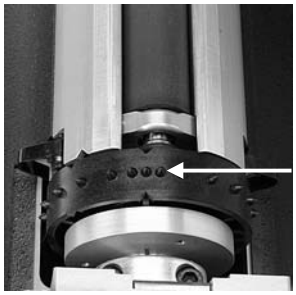


The EDGE 2 ready to load vinyl

4 Clean the bail arm squeegees and platen using a cleaning pad. Allow to air dry before loading material.

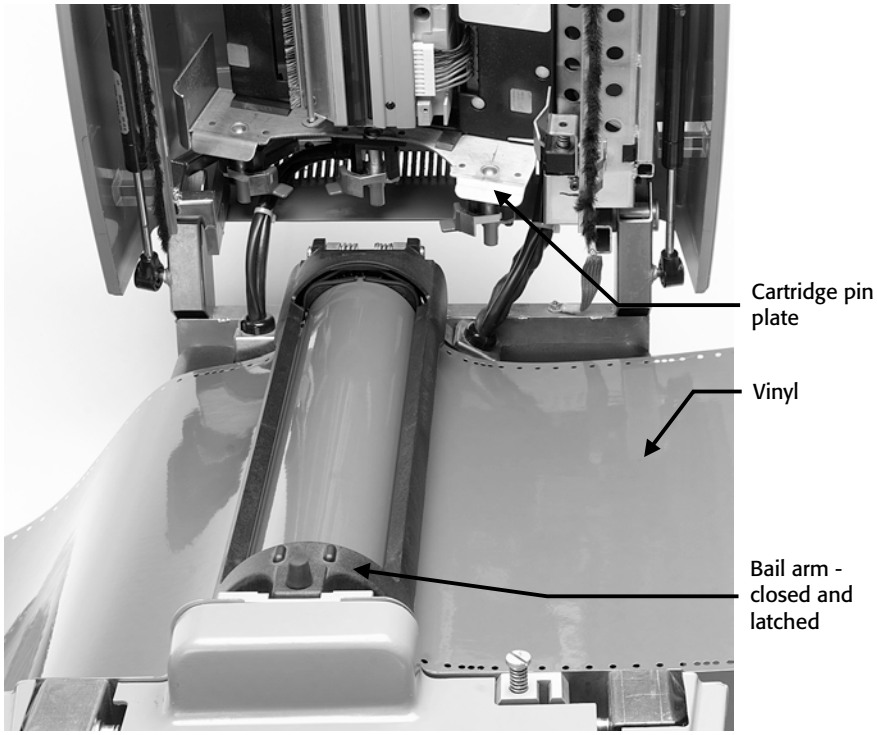
5 Press the HOME key once to rotate the drive sprockets to the home position. (The three closely-spaced teeth face up.)

6 With the print side of the material facing up, seat the three closely-spaced holes in the vinyl over the three closely-spaced teeth on the movable rear sprocket. Then do the same on the stationary front sprocket. The movable rear sprocket permits easy alignment of the holes in the vinyl with the front sprocket teeth.



7 Lower the bail arm and push the bail arm latch toward the rear of the EDGE 2 so the latch locks the bail arm down.

8 Slew the vinyl back and forth so that the squeegees clean the area to be printed. Leave a leader of at least 2" (5 cm) beyond the left squeegee.



Vinyl loaded in the EDGE 2

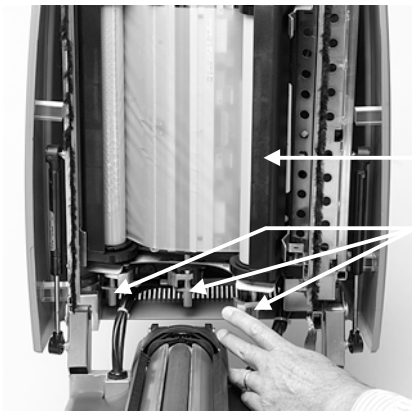
Loading a foil cartridge

1 The display shows what color foil to load as in the example below.

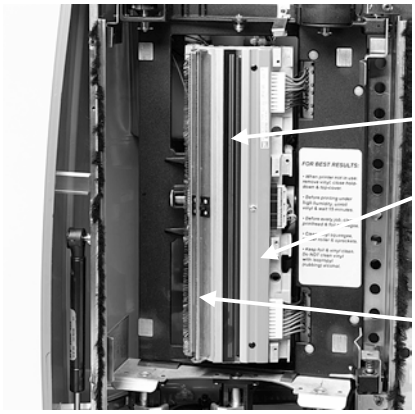
```
Foil:  Orange
GCS-014
```

Note: Using a material type or foil color other than the one called for by the job may produce unpredictable results. Each material type and foil color has a unique print setting associated with it to produce the best results. Substituting a material type or a foil color will result in an incorrect print setting being applied to it.

2 If there is a cartridge already mounted in the EDGE 2, dismount it by pushing the three cartridge pins down and rotating them slightly so they lock in the open position. The foil cartridge can now be rotated out of its mounting position.



3 Clean the printhead and the dancer bar. (See "Maintenance" on page 27.)

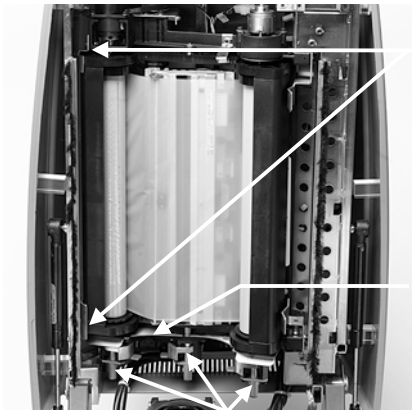


4 If you are loading a new foil cartridge, remove and discard the foam core locks from the cartridge.

5 Hold the cartridge vertically with the label facing to the left. Orient the cartridge so that the glossy side of the foil faces toward the print head.

6 Insert the cartridge toward the rear of the cover until the label end touches the support bracket.

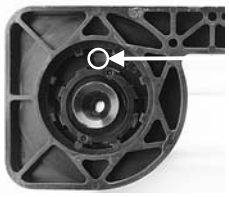
7 Rotate the cartridge to the right until it covers the cartridge pin plate and the left side of the cartridge is behind the curve of the support bracket.



8 Slightly rotate the three cartridge pins under the cartridge pin plate so that they release and secure the foil cartridge in the head support.

9 Press FOIL SLEW until the foil is tensioned across the printhead. You may hear the foil drive sprockets snap into place as you do this.

10 Close the cover.



Note: You can check the amount of foil remaining by looking through the viewing hole on the end of the roll that would be on the bottom when the cartridge is mounted in the EDGE 2.

Chapter 4:
Operating the EDGE 2

Overview of the printing process

The GERBER EDGE 2 prints jobs output by the GRAPHIX ADVANTAGE plot program (GAPlot32) and output program (Gerber Spooler).

GRAPHIX ADVANTAGE Composer provides the capability of assigning fill colors to shapes. These fill colors correspond to the GerberColor™ foil cartridges used by the EDGE 2. Composer also allows you to select the percent of tint, the size of halftone dots, and the color of vinyl. This information is stored in the job file and sent to the EDGE 2 through GAPlot32.

Using GAPlot32, open the job file and make your normal plot selections. These selections are for both the EDGE 2 and the plotter (if the job is to be cut). Send the job to the EDGE 2 for printing.

During printing, prompts appear on the EDGE 2 display telling you when to load the material and change the foil cartridge for each new color until the job is complete.

After a job is printed, it may be cut on a plotter. The only difference between cutting a printed job and cutting a vinyl job is that for a printed job, you must align the plotter knife with the cutter registration mark printed on the material by the EDGE 2. Use the eyepiece provided in the EDGE 2 accessory package to align the knife with the registration mark.

Designing jobs for the EDGE 2

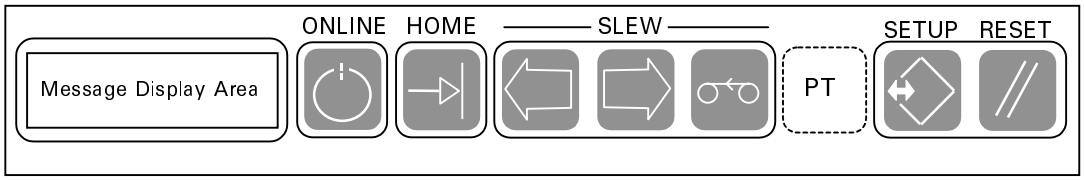
There are many factors that contribute to the successful completion of an EDGE 2 print job:

- Using the materials and foils called for in the job
- Substituting vinyls or foils in GAPlot32 when a change is required
- Choosing the appropriate color correction table (cct) when printing a process color bitmap
- Choosing the right print mode
- Adjusting darkness with settings

Because of the extremely tight tolerances on the EDGE 2, it is very important that all these factors are taken into account when printing an EDGE 2 job. Following the guidelines below will help you produce good output and cut down on wasted materials.

1. **Use the material and foils called for in the job**. Different material/foil combinations require different settings on the EDGE 2. If you print with a different material/foil combination than the job was designed for, the wrong settings will be used and you may get poor quality prints.
2. **Substitute vinyl or foils in GAPlot32 when a change is required**. The job will print with the correct settings and you will get the results you expect. These substitutions are not saved. If you want to reprint the job the same way, you'll need to make the substitutions again.
3. **Choose the appropriate cct when printing an image**. Letting GA choose the cct usually provides the best results. Turning off the Auto Select check box in the GAPlot32 Print Order dialog box allows you to choose the cct if you are trying to achieve a special effect or match an image printed with an earlier version of the software or EDGE.
4. **Choose the right print mode.** The Plotter/Edge Select dialog box in GAPlot32 offers the following print mode options:
   - 300x300 DPI is the normal EDGE 2 print mode.
   - 600x300 DPI is the high resolution print mode for the EDGE 2. Print speed is ½ inch per second. Use this mode for labels, screen prints, or wherever high resolution or a well defined edge is required.
   - EDGE 1 print mode emulates EDGE printing on the EDGE 2. Use it if you need to match a print that was done on an EDGE.
5. **Adjust darkness with settings**. After printing, if you feel that the color is too light or dark, you can change the printer settings from the Print Order dialog box in GAPlot32. Using the darkness settings is similar to adjusting darkness and lightness on a copy machine.

Understanding the control panel



The keypad and display, shown above, are used to change operation modes, enter operator responses and commands, and display instructions for the operator. There are eight keys on the keypad:

ONLINE sets the EDGE 2 online, acknowledges prompts, and starts printing. It is also used to interrupt printing and enter the Paused mode, and to restart printing from the Paused mode.

HOME rotates the drive sprockets to the home position (with the three closely-spaced teeth facing up). Press it once to home the drive sprockets when loading vinyl.

VINYL SLEW keys move the material forward and backward. Vinyl slewing stops when the key is released. The VINYL SLEW keys work when the EDGE 2 is offline, or online but waiting for you to load a new color cartridge. The keys are also used to make selections in the Setup menu.

FOIL SLEW advances the foil in the color cartridge. The FOIL SLEW key works when the EDGE 2 is offline, or online but waiting for you to load a new color cartridge. Foil slewing stops when the key is released.

PRINT TEST is a hidden key located between FOIL SLEW and SETUP. (A hidden key is an unlabeled area of the keypad.) Pressing PRINT TEST once while the EDGE is OFFLINE continuously prints the test pattern selected in the Setup menu. Pressing RESET stops printing.

SETUP opens the Setup menu, which allows you to change the print test pattern, the checksum, or the overlap setting. Pressing the RESET key exits the Setup menu.

RESET stops a job and sets the EDGE 2 offline. RESET also returns the EDGE 2 to Offline from the Setup menu and Print Test. When a job is interrupted with the RESET key, the display will read **CONFIRM RESET.** To restart the job, press ONLINE. To terminate it, press RESET again.

The message display area shows the mode (Offline, Online, or Paused) and the Setup menu status. It also shows operator prompts and error messages. Refer to "Troubleshooting" on page 23 for the response to operator prompts and error messages.

Printing a job

Printing starts after you send a job from the computer and press ONLINE. There may be a pause before printing starts or the keypad display may show **WARMING UP**. The printhead automatically warms to a preset temperature. Depending upon the room temperature, the warmup time may be instantaneous to approximately 2 minutes.

During multiple color printing, when the currently printing color finishes, the vinyl automatically slews back to the registration mark, and the display shows the **Foil: (color)** prompt for the next color. This sequence continues until all colors are printed.

When printing multiple color jobs, remember to:

- Wipe the material with a dry, lint-free cloth between each color.
- Clean the printhead, platen, foil squeegee, and bail arm squeegees between each job.
- Clean the printhead between each color if the job is longer than 10' (3 m).

Tip: When printing multiple jobs on the same material, wait until all jobs are printed before cutting them. This technique saves material and time.

To print the job

1 Send the job from the computer.

2 Press ONLINE. Load the material called for in the display. (See "Loading Material into the EDGE 2" on page 10.)

3 Press ONLINE. Load the foil cartridge called for in the display. (See "Loading a foil cartridge" on page 12.)

4 Press ONLINE. Printing starts. After the EDGE 2 prints the first color, it rewinds the vinyl and the display prompts for the next color. Change the color cartridge when prompted and press ONLINE to resume printing.

Note: There may be a pause after you press ONLINE before the printing starts.

5 When the printing of all colors is complete, press RESET on the keypad. The display shows:

Offline

6 When all jobs are done, slew the material out of the machine toward the roll. Wind the jobs on the roll. Take the roll to the plotter if the jobs are to be cut.

Pausing and restarting a job

Pressing ONLINE while printing pauses the EDGE 2. The job stops printing and you can:

- look at the job while it is still in the EDGE 2 and before printing is complete
- slew the foil

To restart printing at the same location where printing was interrupted, press ONLINE.

Note: To ensure correct registration when printing is resumed, the EDGE is set to overlap the foil (by 15 pixels) at the position where it was interrupted. You may reset this amount to any value between 5 and 25 pixels by following the instructions in "Changing the overlap setting" on page 21.

Running out of foil during a job

If you run out of foil while printing a job, the EDGE 2 stops printing and the display shows **CHECK FOIL**. Raise the cover and replace the cartridge, then press ONLINE. The EDGE 2 will automatically register itself to start printing where the original printing stopped. (See note on overlap above.)

Aborting a job

To abort the job, press RESET. Printing will pause and the display will ask you to **CONFIRM RESET**. If you press RESET again, the job aborts and the printer returns to offline. If you press ONLINE, the job resumes.

Cutting the printed job on a plotter

When the job is designed in the Composer program, the printed shapes and cut shapes are specified. When it is sent to GAPlot32, the vinyl printer and plotter are assigned. Once the job is printed, it may be cut on the designated plotter.

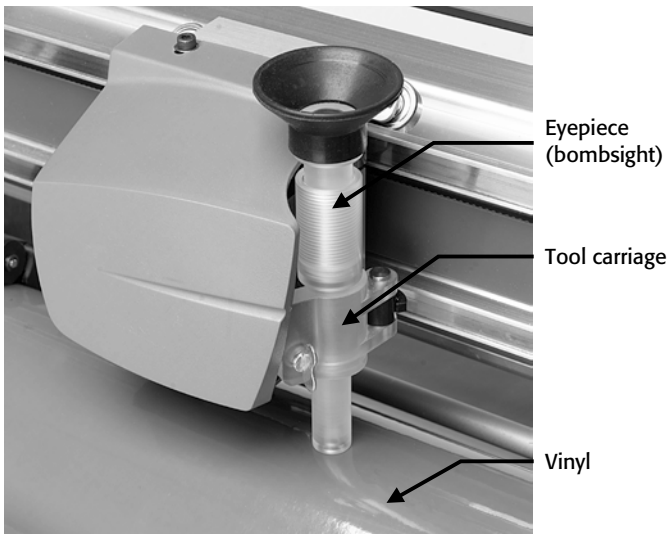
1 Take the tool out of the plotter tool carriage.

2 Load the material in the plotter according to your plotter or console instructions.

3 Slew the tool carriage and material so that the registration mark is visible through the barrel of the tool carriage.

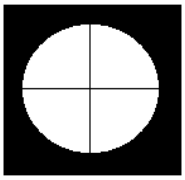
4 Insert the eyepiece into the tool carriage so that it touches the vinyl. If the barrel of the tool carriage has a key, align the groove in the eyepiece with it so that the eyepiece can seat all the way down and touch the vinyl.

Note: A Slow Slew mode is a feature of newer Gerber plotters. Slow Slew helps you align the knife with the print registration mark. Please check your owners guide or contact your Gerber distributor for details.



The eyepiece installed in a typical tool carriage.

5 Sight through the eyepiece and slow slew the material and the carriage so that the registration mark is exactly centered in the eyepiece as shown at right.



6 Once the registration mark is centered, do not slew again.

7 Remove the eyepiece and replace it with the knife.

8 Cut the job according to your plotter or console instructions.

Do not change basic parameters such as axis swap, repeats, or job order after printing and before cutting. If you change them, the printed jobs and the cut jobs will not match.

Using the setup menu

When you press the SETUP key from the Offline mode, the EDGE 2 enters the Setup menu. Many parameters are accessed through the Setup menu. The only three you should attempt to change without the help of Gerber Field Service are:

- the print test pattern
- the amount of overlap when restarting a job after a pause.
- the checksum

The Setup menu contains additional selections that are used for Gerber diagnostic purposes only. If you accidentally scroll beyond the menu selection you want, repeatedly press SETUP until that selection appears again in the display or press RESET and SETUP to return to the first menu selection. Do not change any settings except checksum, test pattern, or overlap without first consulting the Gerber Field Service Department.

Performing a print test

The GERBER EDGE 2 has several built-in test patterns that are used to diagnose printing problems. If you should ever find it necessary to call Field Service for help on solving a printing problem, they may ask you to print one or more of these test prints and tell them what you see.

1 Press the hidden key, PRINT TEST to start the test print. The pattern will print continuously.

2 To stop print test, press RESET.

Changing the print test pattern

1 Repeatedly press the SETUP key until the keypad display reads **TEST PATTERN** followed by the test pattern number.

2 Press either VINYL SLEW key to step through the test pattern choices.

3 When your choice is displayed, press RESET to return offline.

Changing the overlap setting

1 Repeatedly press the SETUP key until the display reads **OVERLAP** followed by the number of pixels. (The factory default is 15.)

2 Press either VINYL SLEW key to increase or decrease the amount of overlap to a value between 5 and 25.

3 When your choice is displayed, press RESET to return offline.

Changing the checksum

The checksum setting on the EDGE 2 must match the checksum on the file you are printing. For GA files from version 4.3 or later, the checksum setting is OFF which matches the default setting of the EDGE 2. However, spool (SPL) files from GA version 4.1 have a checksum setting of ON. Unless you reset the checksum on the EDGE 2 you will not be able to print these files. You will get a **DATA ERROR** message on the keypad display when you send a job.

To change the checksum

1 Repeatedly press the SETUP key until the display reads **Checksum** followed by **On** or **Off**.

2 Press either VINYL SLEW key to toggle the checksum between **On** and **Off**.

3 When your choice is displayed, press RESET to return offline.

Note: Once you have printed the old job, be sure to return the checksum setting to OFF so you can print newly rendered files.

Reestablishing factory settings

The EDGE 2 is set to certain settings at the factory—the ones you can change (overlap, checksum, and print test) plus many others. If you change these settings, or if corrupt data from a print job alters them, the EDGE 2 may not operate properly. If you suspect this may be the

problem, reset the EDGE 2 to the factory settings and try your job again. If you still have a problem, contact the Gerber Field Service Department.

To reset to factory settings

1 Turn off the EDGE 2.

2 Press and hold RESET.

3 Turn on the EDGE 2 and keep RESET pressed until you see:

```
OFFLINE
FACTORY DEFAULTS
```

4 Release RESET. The EDGE 2 is reset to factory settings.

5 Press any key to delete the "factory defaults" portion of the display.

Matching a print created on an older EDGE

If it is necessary to match a job printed on an older EDGE, use the spool file (SPL) created for the older print. The EDGE 2 will recognize it as an old file and use the same speed and print settings that were used on the older EDGE.

Note: It is important to print the SPL file. If you go all the way back to the PLT file and use it, the job will re-render as an EDGE 2 job.

Chapter 5: Troubleshooting

Responding to error messages

If an error occurs while printing, printing stops and an error message displays in the message display. A list of possible messages and your response to each is shown below.

After taking corrective action, press ONLINE to restart printing. If the error is non-recoverable, you must press RESET. The EDGE 2 returns to offline and you must resend the job from the computer.

Before pressing ONLINE to restart printing, you can:

- look at the job while it is still in the EDGE 2 and before printing is complete
- slew the foil

The following is a list of messages which may appear on the message display and your response to each message. If your response does not solve the problem, or if a message appears which is not listed here, contact your distributor or the Gerber Field Service Department. (Please see "Getting help" on page 2.)

Message	*Required Action*
CLOSE COVER	Close cover and press ONLINE.
INITIALIZING	Wait for **OFFLINE** message.
OFFLINE	None.
ONLINE	None.
PRINTING IMAGE	None.
PROCESSING IMAGE	Wait for printing to start.

Message	*Required Action*
PAUSED	This message appears when ONLINE is pressed while the EDGE 2 is printing. Press ONLINE again to resume printing. Press RESET to return to OFFLINE status.
CHECK FOIL	Make sure foil is correctly loaded and press ONLINE.
CHECK VINYL	Make sure vinyl is correctly loaded and press ONLINE.
DATA ERROR *n* (Where *n* is a number)	1 Check the cabling between the computer and the EDGE 2. 2 Make sure the EDGE 2 checksum setting is the same as the Gerber software checksum setting (refer to "Changing the checksum" on page 21). 3 Terminate all EDGE 2 jobs in Gerber Spooler. 4 Press RESET. The EDGE 2 is offline. 5 Press ONLINE. The EDGE 2 is online. 6 Retry the job. If the message continues, contact your distributor or the Gerber Field Service Department and tell them the data error number.
THERMISTOR ERROR	Wait for printhead to cool down. When printhead is sufficiently cool, the **Paused** message is displayed.
WARMING UP	Wait for machine to warm up and printing to start.
WARMUP ERROR	If warmup takes longer than 5 minutes, this non-recoverable error message appears. Press the Reset key and call the Gerber Field Service Department.
Z AXIS HOME ERROR	Call the Gerber Field Service Department.
HOST INIT ERROR	Call the Gerber Field Service Department.

Correcting typical problems

Occasionally a job may not print or cut perfectly. Here are some suggestions for correcting some typical print problems.

- **The cut lines of the job do not match the print job.** Check that proper cut registration was established when the knife was aligned with the registration mark. When properly centered, the knife cuts precisely on the cross hairs of the registration mark before cutting the job. If the cross hairs are not perfectly cut, the job will not be perfectly cut either.
- **A line through the length of a job.** First, clean the printhead and foils. If that doesn't work, change the print settings to Dark or Darker by clicking on the Print Order icon in the Plot program. Click on Settings in the Print Order dialog box, then choose a dark or darker setting. If the problem persists, please call your distributor or the Gerber Field Service Department.
- **Imperfections in the printing, such as voids, hair lines, or small unprinted areas.** Wipe the vinyl with a clean, lint-free cloth and clean the exposed foil. (See The foil on page 9.) If imperfections are present in the entire job, the printhead may be dirty.
- **Lines in the job that are not on the X or Y axis (wrinkling).** Usually this appearance is accompanied by a pulling or crinkling sound while printing. The foil is wrinkled. Make sure the dancer bar is free. Check to see that the **C** clips at each end of the dancer bar are not jammed in the slot of the dancer bar frame. (Refer to "Cleaning the printhead" on page 27 for the location of the dancer bar.) If the problem persists, try centering the print on the material.
- **Opacity problems, such as a light color (like yellow) not covering a dark vinyl (like purple).** Print a white or gray undercoat on the vinyl before printing the other colors in the job. Use the Primer feature in Composer as described in the *GRAPHIX ADVANTAGE Reference* manual to apply the undercoat.
- **The top or bottom of a job is consistently darker than the rest.** This may be a printhead pressure problem. Please call your distributor or the Gerber Field Service Department.
- **Light spots in a repeating pattern in the job.** Clean the platen. If the problem persists, please call your distributor or the Gerber Field Service Department.
- **Poor print registration.** Do not butt colors in a job. Use traps, bleeds, chokes, and spreads to improve registration as you prepare the job in your design program. Unroll the vinyl 15 minutes before printing to

allow it to normalize to the environment and be sure to use the tension arm roller.

- **Stretched sprocket holes in the vinyl.** Use materials that are Gerber-approved for the EDGE 2. Unroll the vinyl before printing and be sure to use the tension arm roller. Check that the movable rear sprocket moves freely. If the problem persists, please call your distributor or the Gerber Field Service Department.
- **Lifting printed images from the material or lifting material from the liner.** A job printed on vinyl, film, or sheeting can be sensitive to transfer tape pressure. Wait at least 15 minutes before applying transfer tape to the printed vinyl, film, or sheeting. Use only Gerber Standard Tack Application Tape.

Tip: Do not stack printed materials print-side to print-side. Stack the printed side contacting the liner side of another piece of material or use a paper interleaf between the layers.

Startup problem

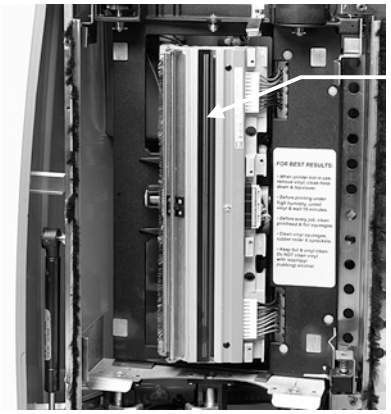
If your EDGE 2 is connected to the PC through an Iomega® ZipPLUS™ drive, Windows might fail to start if the EDGE 2 is already turned on while the computer is starting up. If you have this arrangement, turn **off** the EDGE 2 when starting the computer. Turn it on once Windows is up and running.

Chapter 6: Maintenance

Cleaning the printhead and dancer bar

There are two times to clean the printhead and dancer bar: normal cleaning and removing contamination buildup.

Normal cleaning refers to cleaning the printhead and dancer bar before each job. If a job is longer than 10' (3m), clean them before loading each color cartridge.



Use a GSP cleaning pad from the Thermal Printhead Cleaning Kit. These are impregnated with 98% isopropyl alcohol. Gently rub the entire length and width of the printing element and dancer bar. Dry them with a clean, lint-free cloth.

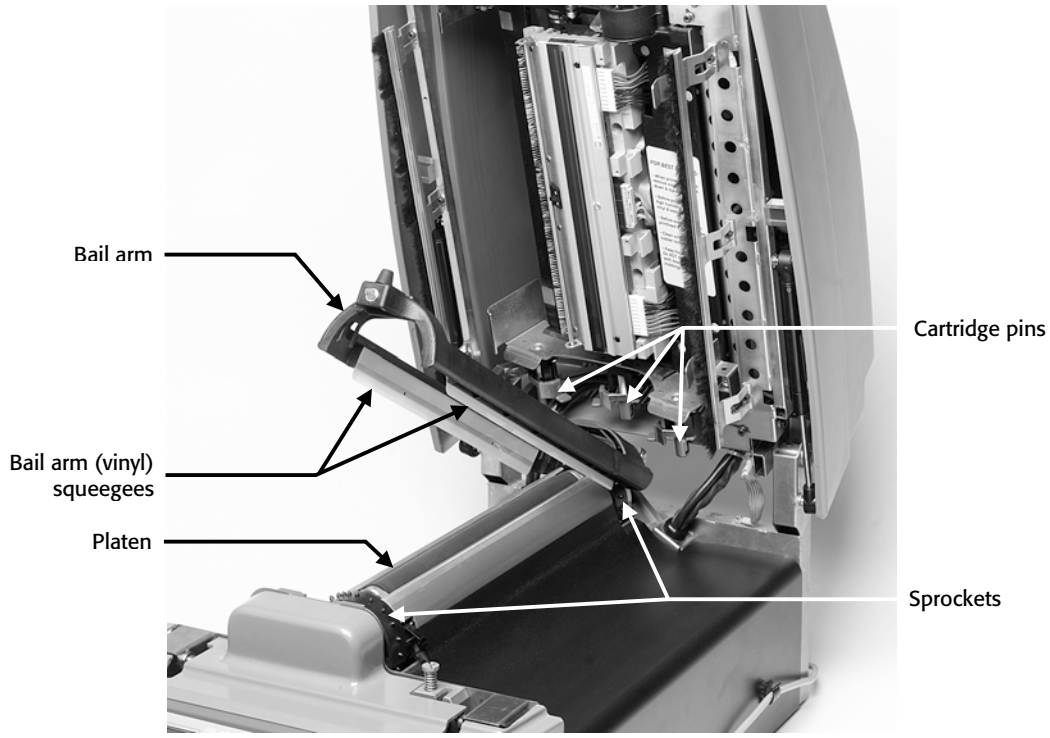
Contamination buildup occasionally occurs on the printhead element itself (the brown strip surrounded by the green mounting area in the printhead). When this happens, printing quality is degraded and a more thorough cleaning is necessary.

Use the Thermal Printhead Cleaning Kit provided with your EDGE 2. If you need additional cleaning kits, contact your Gerber distributor or the Gerber Field Service Department.

Cleaning the sprockets, bail arms, and squeegees

Wipe the bail arm squeegees and bail arm with a clean, lint-free cloth moistened with isopropyl alcohol. Use a small brush, such as a toothbrush, dipped in isopropyl alcohol to clean the sprockets (especially around the teeth) and cassette pins. Do not soak the brush in alcohol so

that excess alcohol drips into the EDGE 2. Allow the sprockets and pins to air dry before loading vinyl. Refer to the illustration to locate the areas to clean.



Areas to be cleaned

Note: Isopropyl alcohol may discolor the squeegees over time. Discoloring does not affect the operation of the squeegees.

Cleaning the platen

Wipe the platen with a clean, lint-free pad moistened with isopropyl alcohol to remove any debris. Allow to air dry before loading vinyl. Refer to the illustration to locate the areas to clean.

Replacing fuses

Two spare 10 amp fuses are provided with the EDGE 2. If you need to replace one, locate the fuse carrier immediately above the power switch on the right side of the machine. It is labeled “T10A 250V” and has a notch at the bottom of the plate.

To replace a fuse

1 Remove the power cord from the EDGE 2.

2 Insert a small flat screwdriver into the notch from below and gently pry the fuse carrier plate out.

3 Remove the blown out fuse(s) from the carrier and insert new fuse(s).

4 Insert the fuse carrier into the EDGE 2 with the notch down and snap into place.

5 Reconnect the power cord.

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Gerber EDGE 2 Owner's Guide
COMMENT CARD

Please take a moment to complete this questionnaire and mail it to Gerber Scientific Products or fax it to 860-290-5568 We are working hard to produce documentation that will meet your needs. We value your comments.

First Name: _____ Last Name: _____

Company: _____ Phone: _____

Street Address: _____ City: _____

State/Province: _____ Country: _____ Zip/Postal Code: _____

		0 1 2 3 4 5 6
1.	How many years of experience do you have with devices of this type?	**none** ( ) ( ) ( ) ( ) ( ) ( ) **over 5 yrs experience**
2.	How often do you refer to the manual?	**never** ( ) ( ) ( ) ( ) ( ) ( ) **frequently**
3.	How easy was it to use?	**difficult** ( ) ( ) ( ) ( ) ( ) ( ) **easy**
4.	Did you learn what you needed to know?	**no** ( ) ( ) ( ) ( ) ( ) ( ) **yes**
5.	Was the manual well organized?	**poorly organized** ( ) ( ) ( ) ( ) ( ) ( ) **very well organized**
6.	Was the manual clearly written?	**not clear** ( ) ( ) ( ) ( ) ( ) ( ) **very clear**
7.	Were there enough illustrations?	**not enough** ( ) ( ) ( ) ( ) ( ) ( ) **enough**
8.	Did the illustrations support the procedures?	**no** ( ) ( ) ( ) ( ) ( ) ( ) **yes**
9.	What is your overall rating of the manual?	**poor** ( ) ( ) ( ) ( ) ( ) ( ) **excellent**

10. How many people work in your shop? _____

Additional comments on the manual: _____

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