

Gerber P2C™ 600
User's Manual

GERBER P2C

IMPORTANT

Before you begin...

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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.

RS-232 shielded cables must be used with this unit to ensure compliance with the Class A FCC limits.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

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SECTION 1

GENERAL INFORMATION

1.1. INTRODUCTION

Gerber P2C™ 600 cutters have been designed to reproduce computer-generated graphic images on sheets or rolls of vinyl media. By replacing the knife with a fiber tip pen, the cutter can also be used to render previews of new designs on inexpensive paper.

This manual covers the Gerber P2C 600, which can accommodate media widths from 70mm up to 770mm (2.7" to 30.5").

1.1.1. PRODUCT FEATURES

The following are some of the main features of the Gerber P2C 600 cutters:

- The ability to accommodate various media widths
- An interchangeable pen for producing preview plots of designs on paper
- An interchangeable pouncing tool
- Adjustable knife pressure and offset settings that are microprocessor-controlled
- Communication with the host computer via Universal Serial Bus (USB) or standard serial RS-232-C
- Plug-and-play compatibility for Windows 95, Windows 98 and Windows NT
- An 8-key control panel
- A convenient 16-character liquid crystal display (LCD)
- Metric or English units of measurement
- Microprocessor-controlled menu mode that allows for the selection of a standard start-up configuration

- A wide variety of axial cutting speeds (in metric or English units)
- Up to four separate user configurations that are stored in the non-volatile memory
- Automatic pull from media roll
- A sensor that detects the end of the media
- The ability for the user to reposition the origin
- Concatenation and curve smoothing that result in better cuts
- A slitter knife for cutting the finished graphic off the media roll
- Knife depth and offset tests
- An adjustable overcut for easy weeding
- User-selected DM/PL™, HP-GL™, and HP-GL/2™ software protocols
- The ability to recut a graphic multiple times
- An optional stand

1.1.2. GERBER P2C 600 USER' S MANUAL

The Gerber P2C 600 User's Manual contains the following information:

- Complete technical specifications for the Gerber P2C 600 cutters and compatible media
- A complete description of the Gerber P2C 600's main components
- Step-by-step instructions for knife and pen installation and the loading of media
- Information about control panel operation and how to use it to set the cutter's parameters
- Information about the interface cables used to connect the cutter to IBM, IBM-compatible, Macintosh, and Macintosh-compatible host computers
- Maintenance and cleaning instructions

1.2. SPECIFICATIONS

1.2.1. CUTTER

	P2C 600	
	MM	INCH
HEIGHT	300	11.8
WIDTH	1000	39.4
DEPTH	350	13.8
WEIGHT	15 KG	33 LBS

TABLE 1-1:
Gerber P2C 600 SPECIFICATIONS

1.2.2. MEDIA

		Gerber P2C 600	
		mm	inch
Width	Roll	70 to 660	2.8 to 26
	Sheet	70 to 770	2.8 to 30.3
Tracking performance		8m/26 feet max. within guaranteed specifications*	-8 m/26 feet max. within guaranteed specifications* for media less than 750mm (30" wide). -4m/13 feet max. within guaranteed specifications** for media larger than 750 mm (30").
Thickness		0.05 to 0.25 0.8mm with optional sandblast knife	0.002 to 0.01 0.03 inch with optional sandblast knife
Max.Cutting/ Plotting area		600mm x 50m.	23.6" x 164 ft.
Minimum Margins**		25	1
Front margin		18	0.7
Rear margin	Sensor on	42	1.7
	Sensor off	25	1

* Media lengths larger than 8m (26 feet) can be accommodated, but adherence to specifications is not guaranteed. Rather, performance will depend on the type and size of the media used in addition to other parameters not mentioned here.

** For positioning of the pinch rollers (see section 1.7)

TABLE 1-2:
GERBER P2C MEDIA SPECIFICATIONS

Vinyl Types

Different types of vinyl have been evaluated and tested on Gerber P2C 600 cutters. When using duly certified media, operation in accordance with the functional specifications of the model is warranted. Contact Gerber before using uncertified media to ensure performance in compliance with specifications.

See Appendix A for a complete list of duly certified media suitable for friction drive operation.

Plotting Paper

Bond paper (120g/m² recommended)

1.2.3. KNIFE, PEN, AND POUNCING TOOL

Gerber P2C 600 cutters are shipped with two standard knife blades for vinyl media and a black fiber tip pen.

Knife	<i>Medium</i>	<i>Quantity</i>
Standard knife	Standard, reflective, & fluorescent vinyl types	2 included
Knife for masking stencil	Masking stencil & thick material	Optional

Pen	<i>Color</i>	<i>Quantity</i>
Fiber tip pen	Black	1 included
Pouncing tool	<i>Paper</i>	<i>Optional</i>

TABLE 1-3:
GERBER P2C KNIVES, PENS, AND POUNCING TOOLS

To order replacement knives, pens, and/or pouncing tools, contact your local dealer.

The Gerber P2C 600 cutters are only warranted to perform in accordance with specifications if a genuine Gerber knife, pen or pouncing tool is installed. Do not replace any of these tools with products from other manufacturers.

1.2.4. INTERFACE

Communication	Standard asynchronous RS-232-C and Universal Serial Bus (USB)
Serial : I/O Port connector	DB-9P
Mating connector	DB-9S
Byte format	8 data bits, 2 stop bits, no parity
Baud rate	38400, 19200, 9600, 4800, 2400 bps
USB : I/O Port connector	USB series "B" receptacle
Mating connector	USB series "B" plug

TABLE 1-4:
GERBER P2C 600 INTERFACE SPECIFICATIONS

1.2.5. FIRMWARE

Language	DM/PL, HP-GL (758x emulation), HP-GL/2
Supported character sets	Standard ASCII
Supported fonts	Sans serif (single stroke & medium)
ROM-based plots	Confidence plot, DIN plot

TABLE 1-5:
GERBER P2C 600 FIRMWARE

1.2.6. PERFORMANCE

Cutting specifications for 0.05mm (0.002") wax-backed vinyl where the total media thickness does not exceed 0.25mm (0.010")

Axial speed	50 to 800 mm/s	2 to 32 ips
Default speed	700 mm/s	28 ips
Acceleration	Up to 2 G	
Addressable resolution	0.025 mm, 0.1 mm	0.001", 0.005"
Default resolution	0.025 mm	0.001"
Mechanical resolution	0.0127 mm	0.0005"
Accuracy	0.2% of move or 0.25 mm, whichever is greater*	0.2% of move or 0.010", whichever is greater*
Knife pressure	0 to 400 gr.	
Pen pressure	0 to 400 gr.	
Pouncing pressure	0 to 250 gr.	

*Excludes differences due to media expansion, stretching, etc.

TABLE 1-6:
GERBER P2C 600 PERFORMANCE

1.2.7. CERTIFICATIONS

CE-Certification for electrical light industrial environment
 FCC Class A
 Comply with UL1950, CSA 950

1.2.8. ENVIRONMENTAL

(Cutter without media)

Operating Temperature	15 to 35° C	59 to 95° F
Storage temperature	-30 to 70° C	-22 to 158° F
Relative humidity	35 - 85%, non-condensing	35 - 85%, non-condensing

TABLE 1-7:
 GERBER P2C 600 ENVIRONMENTAL SPECIFICATIONS



IMPORTANT HINT

The use of dimensionally stable media is essential for obtaining high cut quality. Additionally, media expansion or contraction may occur as a result of temperature variations.

To improve the dimensional stability of media, allow it to acclimate to the environment in which it will be used for at least 24 hours prior to use.

1.2.9. ELECTRICAL

The power entry module detects the line voltage and alternates automatically between 110V and 230V.

Main Supply: 48-62 Hz, single phase.

Nominal line	Min./Max. line	Fuse
110 V AC	88 - 132 V AC	2.0 A, Slo-Blo
230 V AC	176 - 264 V AC	2.0 A, Slo-Blo

TABLE 1-8:
 GERBER P2C 600 ELECTRICAL SPECIFICATIONS

1.3. CUTTER ACCESSORIES AND CONSUMABLES

The following accessories and consumables are available for your Gerber P2C 600 cutter:

CD-ROM (manuels + drivers)
Power Supply Cables
Serial Interface Kit
Contents:
- 9 pin to 9 pin cable
- 9 pin to 8 pin DIN conv.
Standard knife
Standard knife holder
Sandblast knife
Sandblast knife holder
Fiber tip pen black
Razor blade & holder
Pouncing tool

TABLE 1-9:
GERBER P2C 600 ACCESSORIES AND CONSUMABLES

1.4. POSITIONING THE 600 CUTTER ON A TABLE

The cutter is equipped with a front media deflection flap. Do not damage this flap when placing the cutter on a surface. Figure 1-1 illustrates how the cutter should be positioned on a flat surface with its flap (1) hanging freely over the edge.

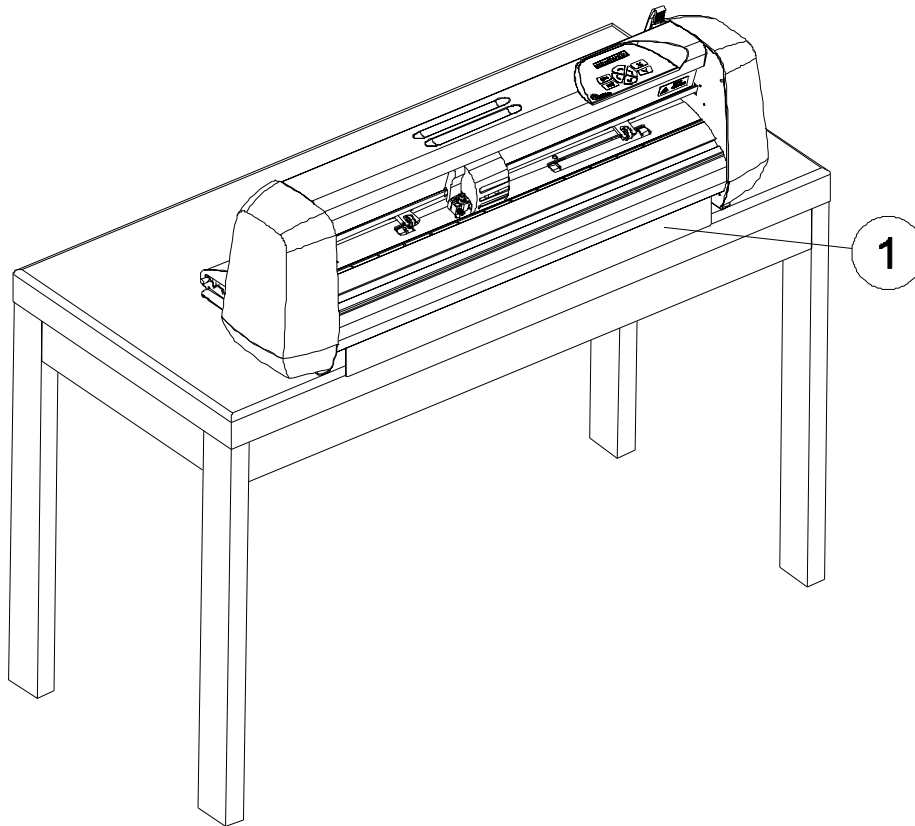


FIG 1-1
CORRECTLY POSITIONING THE CUTTER ON A FLAT SURFACE

1.5 CUTTER COMPONENTS

In order to get better acquainted with your Gerber P2C 600 cutter, examine the following illustrations and read the accompanying descriptions of its components.

1.5.1 REAR PANEL CONTROLS

Figure 1-2 shows the location of the main components.

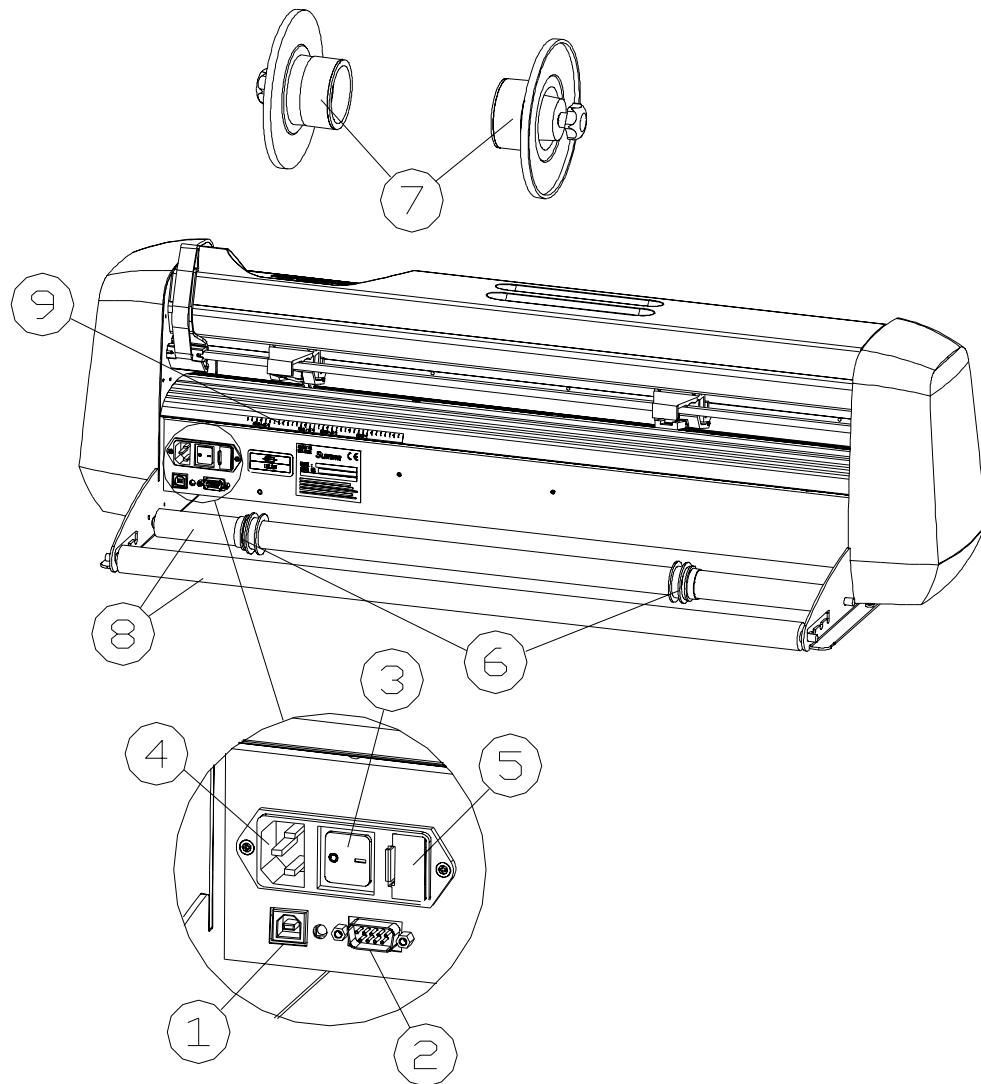


FIGURE 1-2:
GERBER P2C 600, REAR VIEW

1. *USB interface:* - This interface is based on the standards specified in Universal Serial Bus Specifications Revision 1.1. USB connectivity can be used to establish high-speed bi-directional communication serially between the host computer and the cutter. Use either the USB cable or the 9-pin serial cable, but not both simultaneously.
2. *RS-232-C Port:* - This DB-9P connector uses a 9-pin serial cable to establish bi-directional communication between the cutter and a host computer. Use either the 9-pin serial cable or the USB cable, but not both simultaneously.
3. *Power ON/OFF switch:* - This rocker switch sets the cutter's power to ON or OFF. To switch the power ON, press the "I" side of the rocker switch. To switch the power OFF, press the "O" side of the rocker switch.
4. *Power Entry Module:* - The fuse box and the AC power cord receptacle are located in the power entry module. The power-up procedure is explained in detail in Section 1.6.
5. *Fuse box:* - For information about changing the fuse, see Section 4.2.
6. *Roll Media Guides:* - The two guides keep the media roll in place as the cutter pulls media from the roll.
7. *Media Flanges:* - The media flanges ensure proper routing of the media as it is pulled from the roll.
8. *Media Support Roller:* - The rotating rollers support the media roll.
9. *Alignment Strip:* - The rear alignment strip facilitates proper media loading and should be used in conjunction with the front alignment strip.

1.5.2 FRONT PANEL CONTROLS

Figure 1-3 shows the location of the main components.

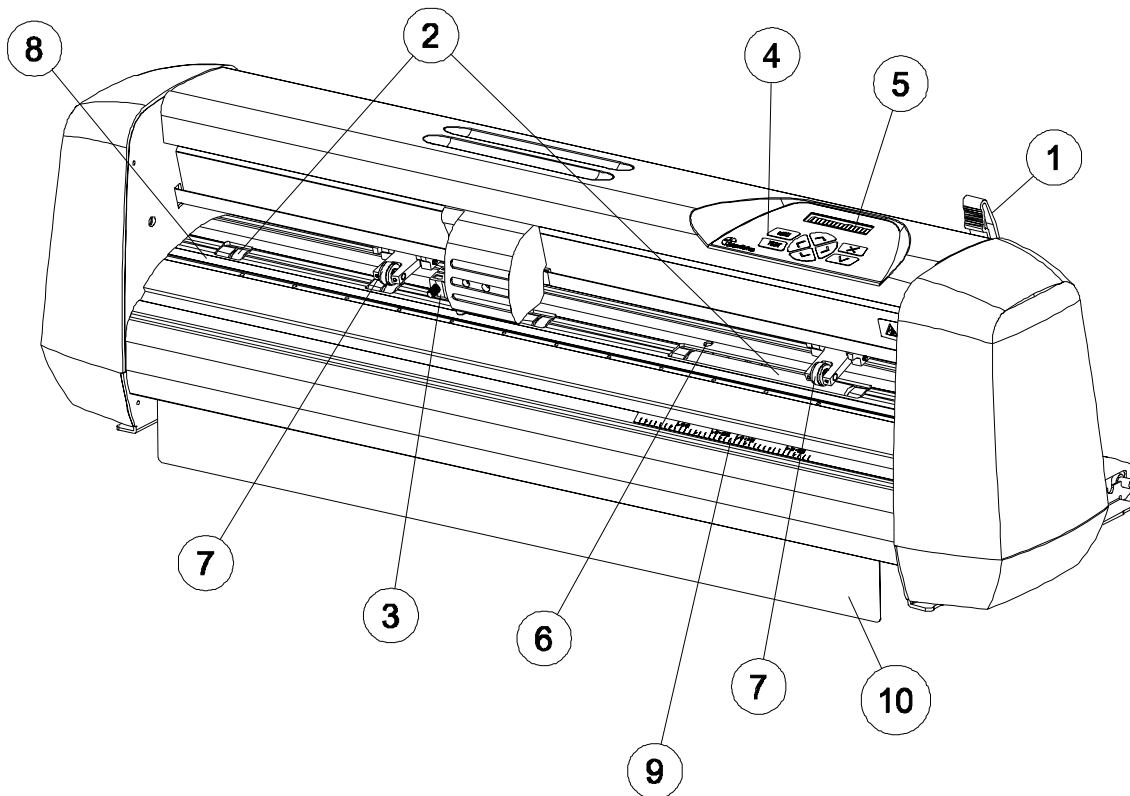


FIGURE 1-3:
GERBER P2C 600, FRONT VIEW

1. *Pinch roller lever:* - This lever is used to raise and lower the pinch rollers during media loading (media loading is discussed in Section 1.7).
2. *Media Drive Sleeves:* - The media drive sleeves move the media only when the pinch rollers are in the "down" position.
3. *Tool Carriage:* - The tool carriage holds the pen, the pouncing tool or the knife holder.
4. *Control Panel:* - The control panel consists of 8 keys and can be used to initiate all cutter activity. Each control panel function is explained in Section 2.1.
5. *Display:* - The 16-character display informs the user of the cutter's current status as well as any actions that need to be taken.

6. *Sensor:* - The sensor detects the end of the media to prevent the knife from damaging the cutting strip.
7. *Pinch rollers:* - The pinch rollers (one at each side) press the media onto the drive sleeves.
8. *Cutting strip:* - The cutting strip prevents damage to the knife tip when the cutter is turned on and no media has been loaded. Since cutting takes place on the cutting strip, it is essential that the cutting strip remain intact.
9. *Alignment strip:* - The front alignment strip facilitates proper media loading and should be used in conjunction with the rear alignment strip.
10. *Media deflection flap:* - An extra guide that prevents curled media from getting jammed underneath the cutter.

1.6. POWERING UP THE CUTTER

1.6.1. EARTHING (“GROUNDING”)



SAFETY WARNING

An insulated ground conductor must be installed as part of the branch circuit that supplies power to the wall outlet to which the cutter is connected. The ground conductor must have the same size, insulation material and thickness as the grounded and ungrounded branch-circuit supply conductors, but the insulating sheath should be green, or green with yellow striping.

The ground conductor described above must be grounded at the electrical distribution board, or, if power is supplied by a separate system, at the power supply transformer/motor generator set.

The wall sockets into which the cutter is plugged must be of the grounded type. The grounded conductors serving said wall sockets must be properly connected to ground.

For emergency access the machine should be installed near to the socket-outlet and easy accessible.

See Table 1-8 for the minimum and maximum operating voltage for the different voltage ratings.

For information about operating voltage and the exact fuse ratings, see Section 4.2.

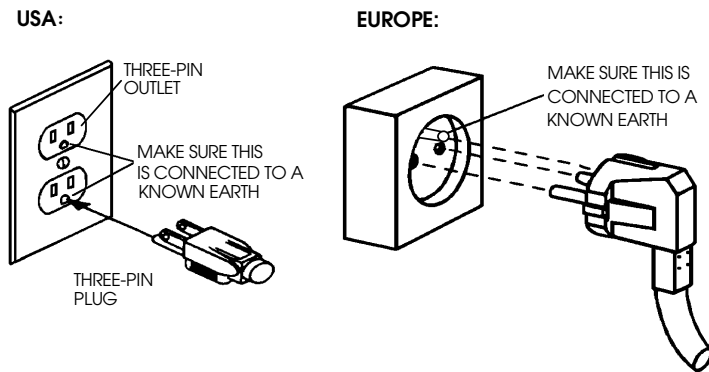


FIGURE 1-4:
GROUND CONNECTION



IMPORTANT OPERATIONAL TIP

This cutter must only be used with a power outlet that is properly grounded. Use of an ungrounded outlet exposes the operator to the risk of electric shock and will also lead to the malfunctioning of the cutter.

1.6.2. POWER-UP PROCEDURE

➔ To power up the cutter, proceed as follows:

1. Make sure the cutter is placed on a flat, level, and sturdy surface.
2. Plug one end of the AC power cord into the AC power cord receptacle on the cutter's rear panel.
3. Plug the other end of the AC power cord into the wall socket.
4. Turn the cutter on by pressing the "I" side of the ON/OFF rocker switch located next to the power inlet.
5. The LCD screen will activate. If media is loaded, the standard loading procedure will take place.

1.7. LOADING MEDIA

The following procedures were written mainly for the use of roll media. When using sheets, there are two possibilities: long sheets or short sheets. Long sheets can be rolled up so that they resemble and act like rolls of media. This technique facilitates the alignment of long sheets. Alignment is less critical when short sheets are being used. If a short sheet is cut off perpendicularly, its front edge can be aligned with the front of the cutter.

1.7.1. POSITIONING THE PINCH ROLLERS

When working with sheet or roll media, it is the traction which results from the pressure created between the pinch rollers and drive sleeves that moves the media in the direction of the X axis (forward/backward).

Proper movement of the media will only occur if the pinch rollers are correctly positioned over two separate drive sleeves.

The pinch rollers are raised and lowered in unison by means of the pinch roller lever located on the back of the cutter. The rollers must be in the raised position when media is being loaded. Load media by feeding it from the rear of the cutter to the front.

When raised, the pinch rollers can be moved manually left or right along the pinch roller shaft. The rollers must be positioned in a detent (clicked into position) and then lowered on top of the media to ensure optimal tracking.

When the pinch rollers are in the raised position, the message "INSERT MEDIA" will appear on the LCD.



CAUTION

Always make sure that the pinch rollers are fully raised before sliding them to the left or right.

The pinch rollers **MUST** be positioned correctly and then lowered onto the media before the automatic load sequence will begin. Make sure that the two pinch rollers are positioned above drive sleeves. The left pinch roller must be positioned in a detent (click position). The right pinch roller must be positioned somewhere on the wide drive sleeve and only has detents at its extreme left and right positions. The drive drum will advance and retract the media only when the pinch rollers are lowered and therefore pressing it onto the sleeves.

Make sure that the pinch rollers are positioned over drive sleeves before being lowered. When the pinch rollers are DOWN, they must run on top of the sleeves in order to ensure proper media traction. It is very important that the edges of the media always rest on the sleeves so that the two pinch rollers can be positioned 3 to 15 mm (0.1" to 0.6") in from the edges of the media.

1.7.2. FEEDING AND POSITIONING MEDIA

The following load procedure has been found to be very reliable. Adhere to these step-by-step instructions when loading media.

➔ To load media, proceed as follows:

1. Raise the pinch rollers by lowering the pinch roller lever located at the back of the cutter.

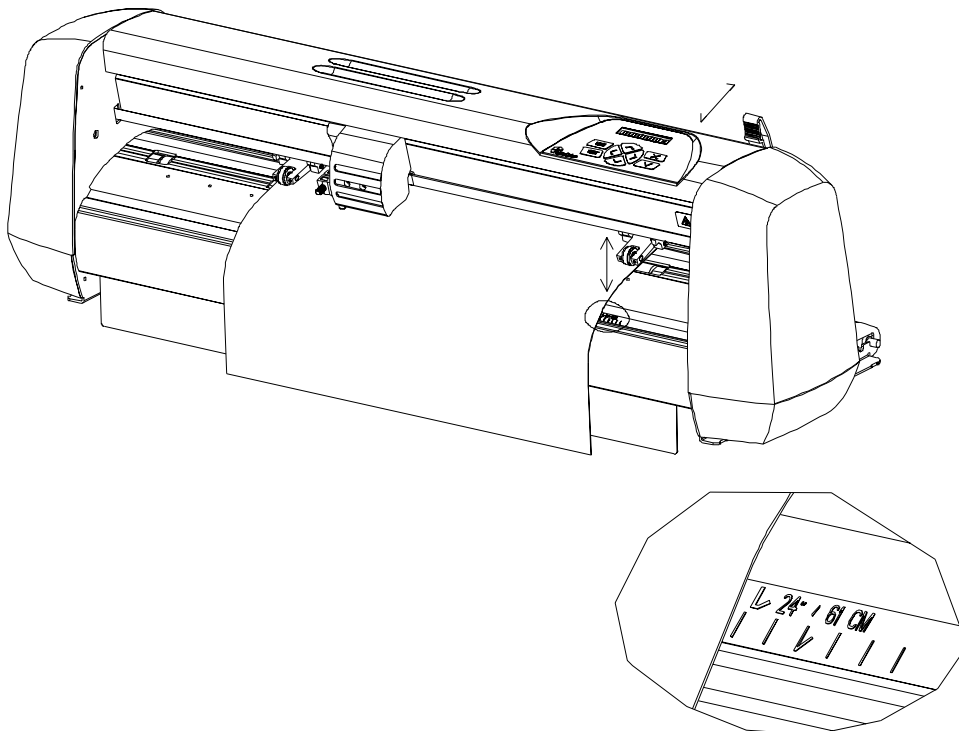


FIGURE 1-5:
MEDIA POSITIONING

2. When working with roll media, proceed by inserting a media flange at each end of the roll and then tighten the thumbscrews until the media roll is firmly gripped between the flanges. Make sure the flanges are firmly pressed against the roll. Place the flanges on the media support rollers at the rear of the machine.
3. Position the flanges on the support rollers at the rear of the cutter.

Slide the two media guides under the media roll so that each flange rests in the groove in the guide. In this position, the media roll and guides can be shifted left and right.

Feed the media from the rear of the cutter.

Position the left edge of the media on the leftmost drive sleeve and then check to see whether the right edge of the media is positioned over the wide drive sleeve. If it is, the left pinch roller can be positioned in the detent above the leftmost sleeve. Then, the right pinch roller can be positioned somewhere over the wide drive sleeve according to the media width. The right pinch roller can be located anywhere between the two outer detent positions above the long drive sleeve. This flexibility allows the Gerber P2C 600 cutters to accommodate various media widths.

The alignment strips on the front and back of the cutter can be used for quick reference if the vinyl has a standard width. Marks are provided to aid in media alignment: 50cm, 15"/38CM, 16"/41CM, and 24"/61CM.

If this does not work because the media is too narrow to reach the long drive sleeve, try positioning the left edge of the media over the second narrow drive sleeve. Then, reposition the right edge of the media somewhere on the wide drive sleeve. If the media is still too narrow, position the left edge of the media over the drive sleeve that is closest to the wide sleeve, and reposition the right edge of the media somewhere on the wide drive sleeve.

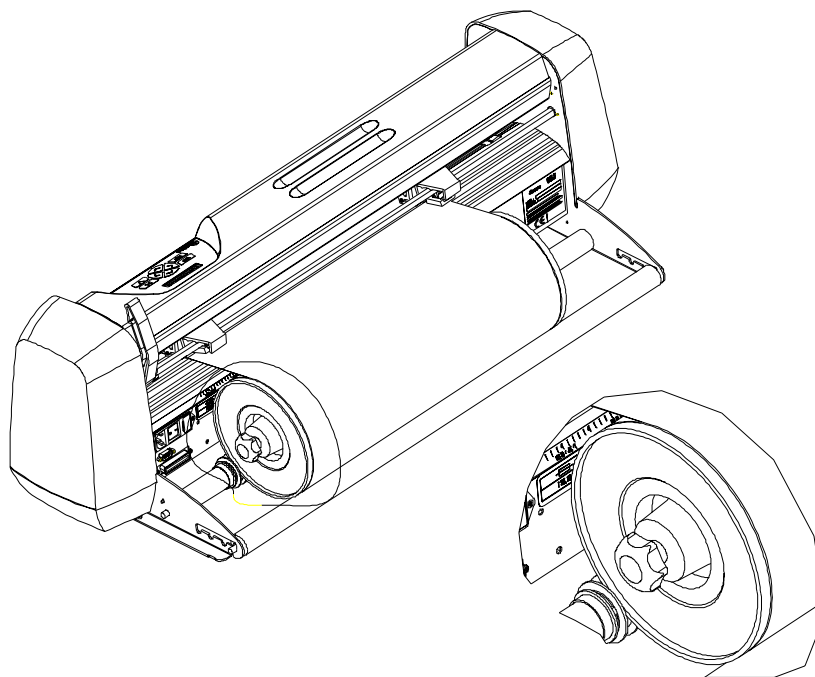


FIGURE 1-6:
FEEDING ROLL MEDIA USING MEDIA FLANGES

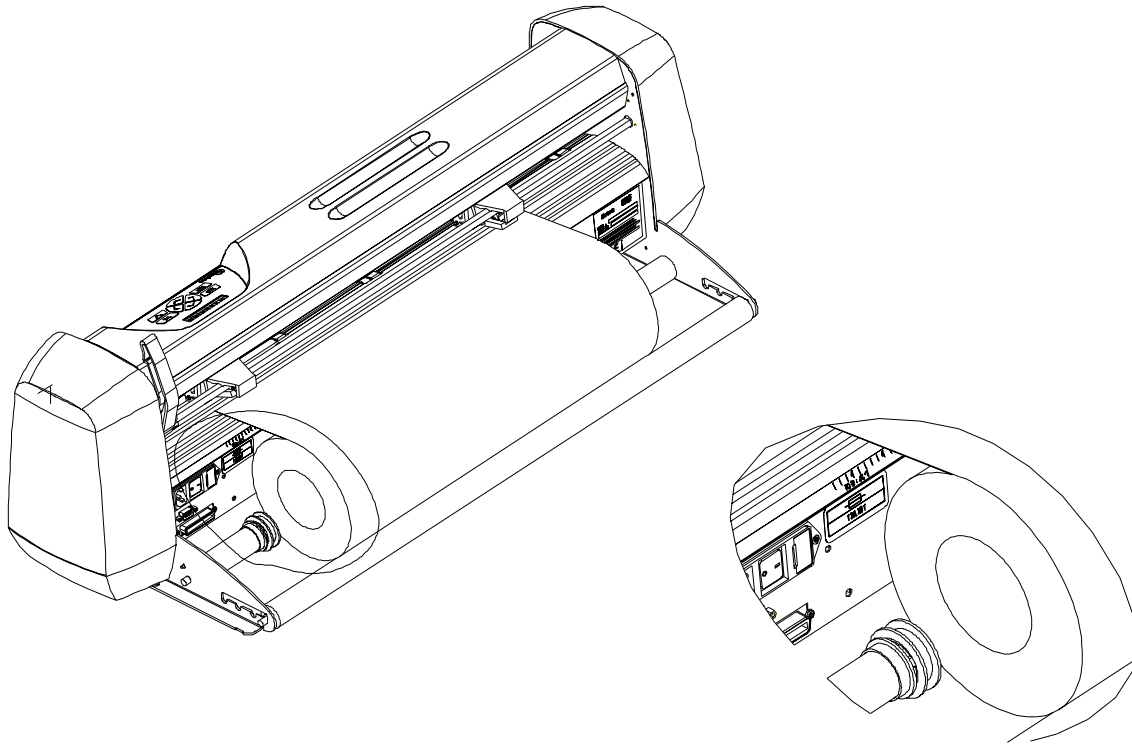


FIGURE 1-7:
FEEDING ROLL MEDIA WITHOUT USING MEDIA FLANGES

4. Make sure that the media follows a straight path from the roll to the cutting area. This can be accomplished by sliding the media guides left and right as needed along the media support rollers.
5. The pinch rollers should be positioned over the drive sleeves and about 3 to 15 mm (0.1" to 0.6") in from the edges of the media.

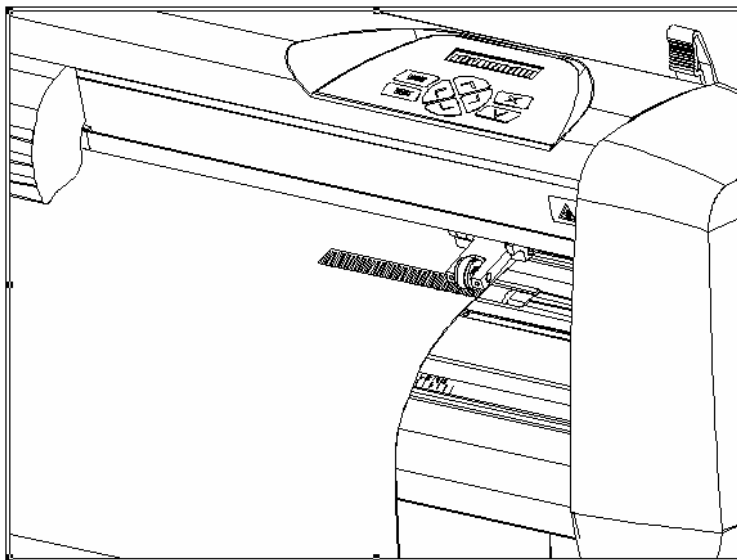


FIGURE 1-8
PINCH ROLLER POSITIONING

- The cutter is now ready for the actual load procedure that starts once the pinch rollers are closed. Raise the pinch roller lever to lower the rollers onto the media and drive sleeves. The tool carriage will automatically begin moving left and right to sense the usable media width.

NOTE

It is not necessary to pull the media manually from the roll. The cutter will unroll the media automatically during the load sequence.

- The positioning and routing of sheet media is identical to that of roll media. With sheet media, the front and back alignment strips must be used to be sure that the media lays straight.

8.

**SAFE OPERATION**

Do not place any objects in front of, or behind, the cutter that could interfere with cutter operation. Make sure the media is free to move forward and back. Keep hands, hair, clothing, and jewelry away from moving parts.

If the cutter is not already turned on, flip the power switch located next to the power entry module at the rear of the machine. The following message will appear on the LCD screen:

PLEASE WAIT

If there is media loaded in the cutter and the pinch rollers are down, the cutter will automatically start executing a minimal loading procedure consisting of:

- A media width measurement
- A 45° test
- Media is unwound equal to the width measured between the pinch rollers

When the next display appears, the cutter is ready to receive a file:

700mm/s 80 g

For a manual loading procedure, refer to paragraph 2.2.10

When receiving a cut file, the cutter will automatically pull from the roll a length of media equal to the width of the pinch rollers. Media is then pulled successively from the roll in increments equal to the width of the rollers.

1.8. INSTALLATION OF A KNIFE, PEN OR POUNCING TOOL

1.8.1. KNIFE INSTALLATION



SAFETY WARNING

Your cutter uses razor-sharp knives. The knife blades may cause serious personal injuries if handled without proper care. Exercise caution when operating the cutter and when installing, removing or handling the knife!

➔ To set up your cutter for knife operation, proceed as follows.

1. As shown in Figure 1-9, insert the knife blade into the knife holder using a pair of tweezers.

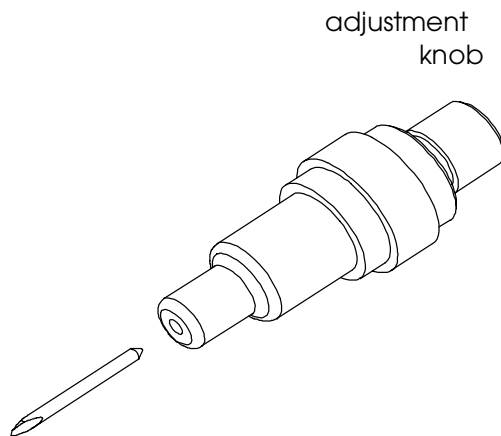


FIGURE 1-9
BLADE INSERTION

2. Set the knife blade length to zero by aligning the blade tip with the tip of the holder. An easy way of performing this is by holding the knife holder against your fingertip and gradually increasing the blade length by turning the adjustment knob until you feel the knife tip touching your fingertip.

3. Extend the tip of the blade by the distance required for the desired cutting media (t), as shown in Figure 1-10. The blade should extend beyond the end of the knife holder only so far as is necessary to completely cut through the film layer without penetrating the backing. Cutting too deeply may result in damage to the cutting strip.

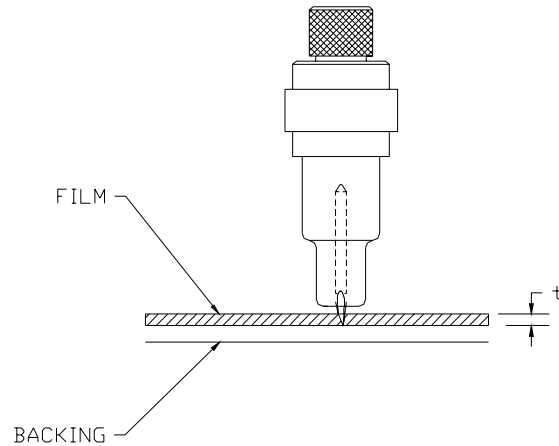


FIGURE 1-10
BLADE LENGTH ADJUSTMENT

4. Turn the cutting depth adjustment screw (1) clockwise to increase the cutting depth. Turning the cutting depth adjustment screw counterclockwise will decrease the cutting depth.

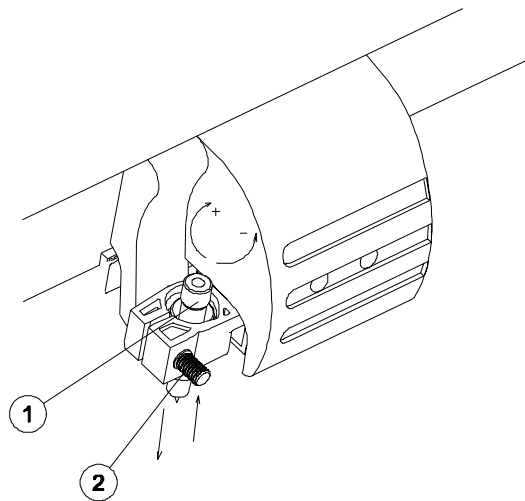


FIGURE 1-11
SETTING KNIFE DEPTH

5. To install the knife into the tool carriage:
 - Loosen the clamp screw and load the knife holder. Make sure that the holder is completely seated in the clamp.

- Tighten the clamp screw.
6. Set the knife pressure as follows:
- Power up the cutter and load a piece of media (See 1.7).
 - Press the **Menu** key twice.
 - Press the **Enter** key.
 - The knife pressure parameter is displayed. The pressure can be set anywhere from 0 to 400gr.
 - Press the **Test** key to perform a knife depth test as illustrated below.

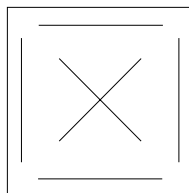


FIGURE 1-12
KNIFE DEPTH TEST PATTERN

The knife depth is set correctly when the test pattern is visible on the front side of the media backing but not on the back.

If the cut pattern is not visible on the front side of the media backing, increase the knife pressure by pressing the **>** key. Decrease the knife pressure by pressing the **<** key when the cut pattern is visible on the back side of the media backing. Press the **Test** key or the **Enter** key to save the changed setting.

In general, the knife depth and pressure should be increased when using thicker vinyl.

NOTE

As the ideal knife pressure setting depends upon the type and thickness of the media to be cut, adjusting the pressure will require some practice. Generally, the pressure should be increased when thicker types of vinyl are being cut. Thinner types of vinyl usually require lower knife pressure settings.

**CAUTION**

After setting the cutting depth and/or knife pressure, perform a thorough visual check of the knife blade where it protrudes from the knife holder. Test the new settings by performing a knife depth test on a scrap of vinyl media.

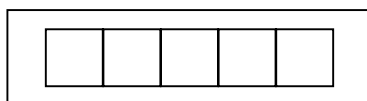
DO NOT OPERATE THE CUTTER if the knife blade cuts through the media backing, as this will seriously damage the knife and rubber cutting strip.

**CAUTION**





For most vinyl cutting activities, the tip of the blade should be barely visible at the bottom of the knife tool. If you can clearly see the blade tip, you will probably need to readjust the cutting depth.

To prevent damage to the cutter, check the depth of the knife tip and the quality of the cut whenever loading a different type of vinyl into the cutter.

7. To change the knife offset, proceed as follows:
- Power up the cutter and load a piece of media (See 1.7).
 - Press the **Menu** key three times.
 - Press the **Enter** key.
 - The knife offset parameter is displayed. The offset can be set anywhere from 0.00 to 1.00mm.
 - Click the **Test** key to perform a knife offset test as illustrated below.











If the offset value is set too low, the rectangles will not close.
If the offset value is set too high, the rectangles will be distorted.

Increase the knife offset with the  key if the squares appear to have rounded corners. Decrease the knife offset with the  key if the squares seem to have little spikes on them. Press the  key or the  key to save the changed setting.

1.8.2. PEN INSTALLATION

The Gerber P2C 600 cutters can also be used with a pen. Replacing the knife with a pen allows the cutter to be used as a plotter for drawing draft plots of new or existing designs on paper.









➔ To install the pen, proceed as follows:

- Power up the cutter and load a piece of media (See 1.7).
- Press the  key until "SYSTEM TEST" is displayed on the LCD.
- Press the  key.
- Press the  key until "TOOL" is displayed on the LCD.
- Press the  key. The current tool is now displayed.
- Press the  or  key until "PEN" is displayed on the LCD.
- Press the  key to confirm the tool change.
- Press the  key twice to return to normal mode.
- The cutter will now ask for the pen to be inserted into the holder. Place the pen in the holder and then press any key to confirm the selection.
- Like the knife pressure, the pen pressure can also be changed. To change the pen pressure, follow the procedure for changing the knife pressure as provided in the preceding section.

1.8.3. INSTALLATION OF A POUNCING TOOL

The Gerber P2C 600 cutters can also be used to pounce. First, replace the knife with a pouncing tool and then place the special strip on top of the cutting strip.

➔ To install the pouncing tool, proceed as follows:

- Power up the cutter and load a piece of media (See 1.7).
- Press the  key until "SYSTEM SETUP" is displayed on the LCD.
- Press the  key.
- Press the  key until "TOOL" is displayed on the LCD.
- Press the  key. The current tool is now displayed.
- Press the  or  key until "POUNCER" is displayed on the LCD.
- Press the  key to confirm the tool change.
- Press the  key twice to return to normal mode.
- The cutter will now ask for the pouncing tool to be inserted into the holder. Place the pouncing tool in the holder and then press any key to confirm the selection.
- Like the knife and pen pressure, the pounce pressure can also be changed. To change the pounce pressure, follow the procedure for changing the knife pressure as provided in section 1.8.1.

SECTION 2

OPERATION

2.1. THE CONTROL PANEL

Figure 2-1 shows the Gerber P2C 600 control panel. The main functions of the liquid crystal display (LCD) and the control panel keys are explained in the following paragraphs.

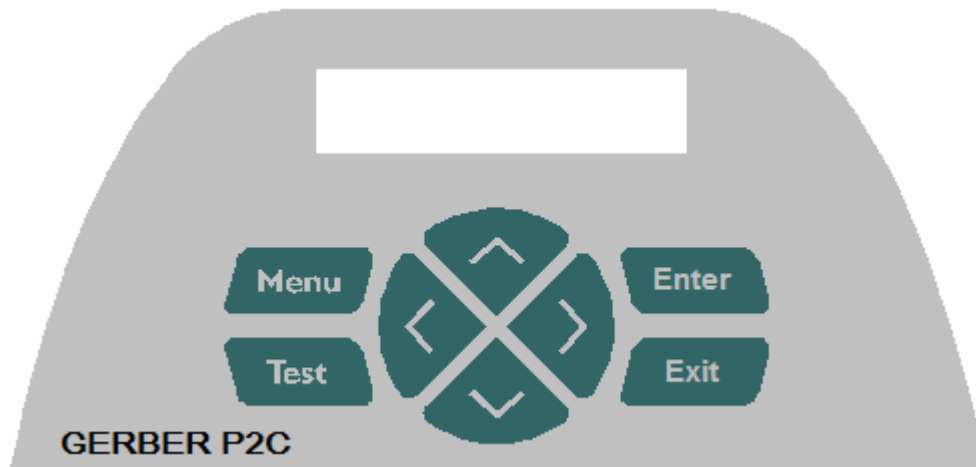


FIGURE 2-1:
CONTROL PANEL GERBER P2C 600 CUTTERS

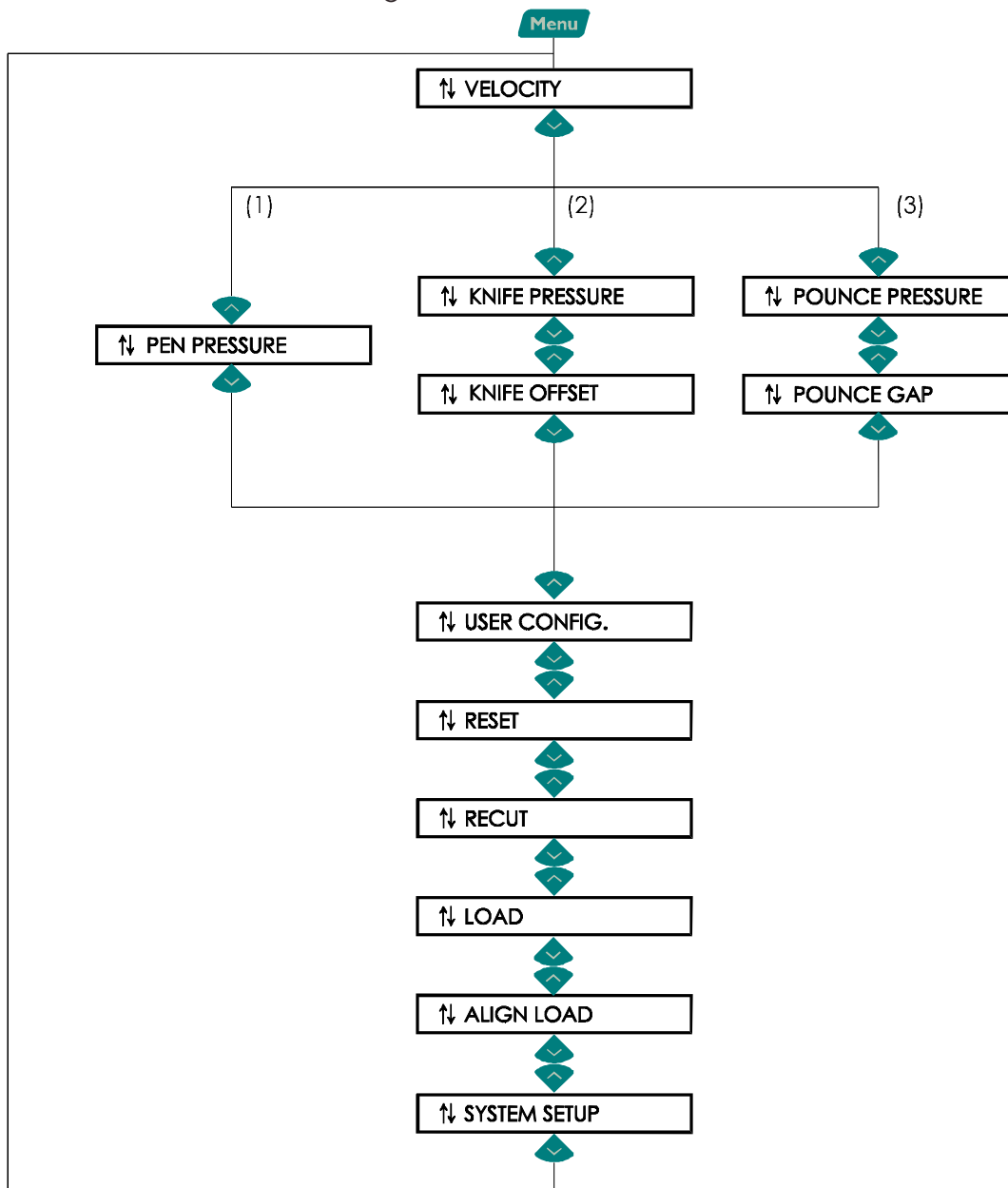
2.1.1. THE LIQUID CRYSTAL DISPLAY

The liquid crystal display (LCD) contains one line consisting of 16 characters. The LCD provides information about the cutter's status during operations and also displays menu options for cutter configuration.

The various menu and submenu items are always arranged in a loop, which means that when the last item in a menu or submenu is displayed, pressing the appropriate jogging key will automatically take you back to the first item of the same menu or submenu.

2.1.2 THE MENU KEY

The **Menu** key is used to quickly return to the cutter's most common menu items. The last menu item in each row provides access to a submenu through which all other cutter functions may be reached (see section 2.3). The various menu items are illustrated in Figure 2.2.



The menu differs according to the selected tool

- (1) If the PEN is the default tool
- (2) If the KNIFE is the default tool
- (3) If the POUNCER is the default tool

FIG 2.2
MAIN MENU GERBER P2C 600 CUTTERS

2.1.3 THE EXIT KEY

The Exit key (cancel key) cancels the current operation

Pressing this key when the cutter is cutting stops the current job.

2.1.4 THE V KEY

The V key (confirm key) confirms a selected or changed menu item. The V key must be pressed whenever a parameter is changed or the parameter will revert to its previous setting.





2.1.5 THE TEST KEY

TEST initiates the test procedure wherever such a procedure is available.



2.1.6 THE JOGGING KEYS

Jogging key functionality varies according to the operation in progress.

For example, when working with different submenus, the  key is used to select the previous submenu, whereas the  key is used to select the next submenu. Submenu values can be changed by pressing  or . Pressing any of the four jogging keys will alter the origin when the cutter is in normal operation.


2.2. COMMON MENU ITEMS

The following paragraphs explain the different submenus. Refer to the flowchart in Fig 2.2.

2.2.1 VELOCITY

The VELOCITY submenu is used to set or modify tool velocity. The default velocity is 700 mm/s (20 ips).




After pressing the  key, press the  or  jogging key until the desired velocity is displayed on the LCD. The velocity can be set between 50 mm/s (2 ips) and 800 mm/s (40 ips).


Press  to confirm the new setting. An asterisk (*) will appear to indicate that the new velocity has been set.

2.2.2 PEN PRESSURE

The PEN PRESSURE parameter is used to set or modify the cutting pressure of the pen.

The default pen pressure value is 80 grams.

After pressing the  key, press the  or  jogging key until the desired pressure is displayed on the LCD. The pen pressure can be set between 0 and 400 grams in 5-gram increments.

Press  to confirm the new setting. An asterisk (*) will appear to indicate that the new pen pressure has been set.


Pen pressure set-up is explained in detail in section 1.8.1.

2.2.3 KNIFE PRESSURE

The KNIFE PRESSURE parameter is used to set or modify the knife's cutting pressure.

The default knife pressure value is 120 grams.

After pressing the  key, press the  or  jogging key until the desired pressure is displayed on the LCD. The knife pressure can be set between 0 and 400 grams in 5-gram increments.

Press  to confirm the new setting. An asterisk (*) will appear to indicate that the new knife pressure has been set.

Knife pressure set-up is explained in detail in section 1.8.1.

2.2.4 KNIFE OFFSET

The KNIFE OFFSET parameter is used to set or modify the distance between the knife blade tip and the center axis.

The knife offset value can be set between 0 and 1 mm.

The default knife offset value is .45 mm.

After pressing the **Enter** key, press the  or  jogging key until the desired knife offset is displayed on the LCD. Press **Enter** to confirm the new setting. An asterisk (*) will appear to indicate that the new knife offset has been set.

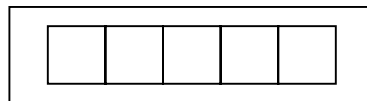
Make sure that the selected knife offset value matches that of the knife. Some fine-tuning may be necessary because of the knife's mechanical tolerances.

A knife offset test can be performed by pressing the **Test** key. A series of rectangles will be cut.

If the offset value is set too low, the rectangles will not close.

When the offset value is set too high, the rectangles will be distorted.

The offset test is illustrated below.





2.2.5 POUNCING PRESSURE

The POUNCING PRESSURE submenu is used to set or modify the pouncing pressure of the pouncing tool.

The pouncing pressure can be set between 0 and 250 grams in 5-gram increments.

The default pouncing pressure value is 120 grams.

After pressing the **Enter** key press the  or  jogging key until the desired pressure is displayed on the LCD. Press **Enter** to confirm the new setting. An asterisk (*) will appear to indicate that the new pouncing pressure has been set.

Pouncing pressure set-up is explained in detail in section 1.8.1.

2.2.6 POUNCING GAP

The POUNCING GAP submenu is used to set or modify the distance between the pounced holes. This routine applies only when pouncing.

The value can be set between 1 mm and 50 mm.

The default pouncing gap value is 1 mm.

After pressing the **Enter** key, press the  or  jogging key until the desired pouncing gap is displayed on the LCD. Press **Enter** to confirm the new setting.






An asterisk (*) will appear to indicate that the new pouncing pressure has been set.

2.2.7 USER CONFIGURATION (“USER CONFIG”)

Each of the four user configurations represents a series of submenus that allow the user to configure the cutter's operating parameters. NOTE: Access to some of the submenus will be determined by the plotting language being used.

The four user configuration (“USER CONFIG 1”, “USER CONFIG 2”, etc.) menus are maintained independently.

➔ To select a different user configuration, proceed as follows:


1. Power on the cutter.
2. Press the  key.
3. Press the  key until USER CONFIG is displayed.
4. After pressing , press the  or  jogging key until the desired user configuration number is displayed.

NOTE


Before altering any of the items in the USER CONFIG menu, make sure that you have previously selected the right configuration number in the USER CONFIG (1-4) menu.

Figures 2-2 and 2-3 show the USER CONFIG menu parameters.















2.2.8 RESET

The RESET option performs a complete reset of the cutter. Press the  key to reset the cutter.


2.2.9 RECUT

The RECUT option recuts the last file sent to the cutter (provided that it fit in the buffer). Press the  key to recut the last file.

2.2.10 LOAD

The LOAD option is used to initiate a load sequence. Press the  key to initiate a load. The origin can be changed first if necessary. Press the  or  jogging key to change the origin in the Y-direction. Press the  or  jogging key to change the origin in the x-direction. Press the  key to confirm the new setting. Next, the media window can be changed. Press the  or  jogging key to change the length of the window, or press the  key to change the value of the length of the media window. The  and  jogging keys change the value in 100mm increments; the  and  jogging keys change the value in 10mm increments. When the cutter is configured to use English units, the increments are 2.5" and 0.5". Press the  key to finish the load procedure.

2.2.11 ALIGN LOAD

The ALIGN LOAD submenu is used when contour cutting. Refer to section 3 for a complete explanation of contour cutting. Section 2.3.12 explains how to change the align method. Press the  key to execute align load.

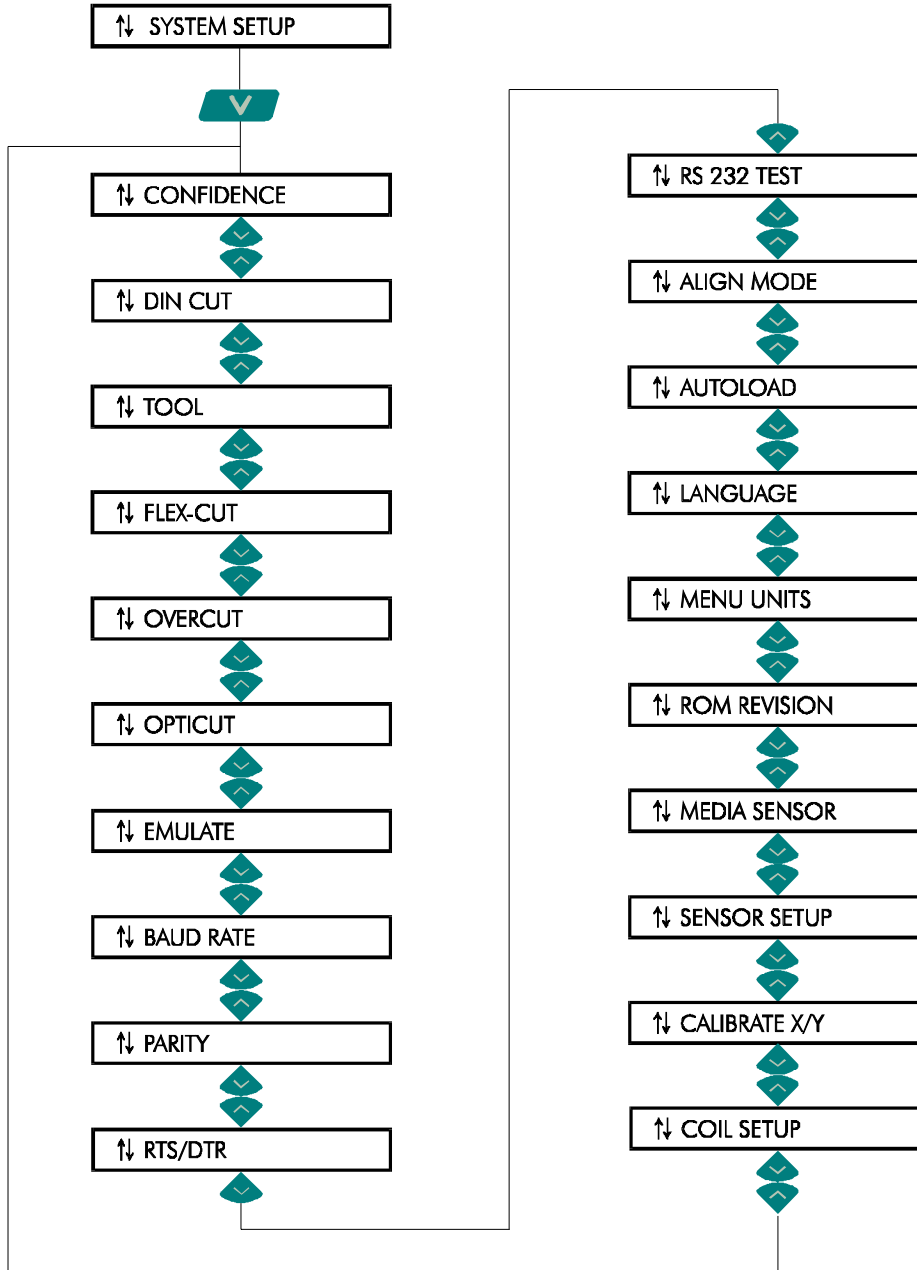
2.2.12 SYSTEM SETUP

The SYSTEM SETUP submenu presents those menu items normally configured during the initial set-up, such as when installing the cutter in conjunction with the cutting software.

Press the confirmation key to access the different submenu items which are explained in section 2.3.

2.3 SYSTEM SETUP

This submenu contains parameters that are normally set when the cutter is first installed, or when certain problems occur. Figure 2-3 shows the options in this submenu.



(*) Only available when the tool is set to drag knife

FIG 2-3
GERBER P2C 600 SYSTEM SETUP

2.3.1. CONFIDENCE

The CONFIDENCE cut performs an electrical and mechanical test of the cutter to make sure that the cutter is fully operational. A media sheet of at least A3/A-size should be used for this cut.

Press the  key to execute the confidence cut.

2.3.2. DIN CUT

The DIN CUT also performs an electrical and mechanical test of the cutter that checks the cut quality and provides the user with feedback about knife setting, pressure, offset, and cutting depth.

This cut is always run as a DIN A4 portrait/A-size image, regardless of the actual size of the media loaded. If the media loaded is smaller than DIN A4/A-size, part of the outer box will be cropped (not cut). This cut is always executed in the sequence prescribed by the ISO DIN standard.

Press the  key to execute the DIN cut.

2.3.3. TOOL

The TOOL submenu is used to select the cutter's default tool. The default tool is the tool that is activated when the cutter is turned on.

After pressing the  key, press the  or  jogging key until the desired tool is displayed on the LCD. Press  to confirm the new setting.

Select PEN to configure the cutter for plotting operations.

Select DRAG KNIFE to configure the cutter for cutting operations.

Select POUNCING TOOL to configure the cutter for pouncing operations.

The active tool setting is marked with an asterisk (*) on the LCD.




2.3.4. FLEX-CUT

FLEX-CUT can be set to OFF, Mode 1 or Mode 2. When set to Modes 1 or 2, the cutter will alternately cut one length with full pressure and one length with reduced pressure (length is later referred to as "HALF"). FLEX-CUT offers the advantage of cutting completely through the material while, at the same time, allowing the material to stay together by means of small media bridges.




MODE 1 is the quickest mode, but is less precise because the pressure changes during the cutting. MODE 2 is slower than MODE 1, but at the same time it offers greater precision because the cutter stops at every change of pressure.

After pressing the  key, press the  or  jogging key until the desired mode is displayed on the LCD. Press  to confirm the new setting.




The active FLEX-CUT setting is marked with an asterisk (*) on the LCD.

Press the  key to display the configuration menu. The different configuration submenus can be accessed by pressing the  or  jogging key. All the values are displayed in metric regardless of the "MENU UNITS" setting.

1. CUT

The CUT parameter determines the length that is cut with full pressure. Press the  or  jogging key to change the value. Press the  key to start the test cut.

2. HALF

The HALF parameter determines the length that will be cut with reduced pressure or without pressure. Press the  or  jogging key to change the value. Press the  key to start the test cut.

3. PRES

The PRES parameter sets the pressure for "HALF". Press the  or  jogging key to change the value. Press the  key to start the test cut.

2.3.5. OVERCUT

The OVERCUT submenu enables you to generate an overcut in order to facilitate weeding. Press the  or  jogging key to change the value.



The default value is 1.

The overcut setting can be disabled (=0) or set to any value between 0 (=off) and 10. One unit is about 0.1 mm or 0.004".

The active overcut setting is marked with an asterisk (*) on the LCD.

2.3.6. OPTICUT

The OPTICUT submenu enables you to generate an enhanced overcut in order to facilitate weeding. This feature, however, leaves little scratches on your graphic and may not be appropriate for some media.

Press the  or  jogging key to change the value.

The default value is OFF.

The active opticut setting is marked with an asterisk (*) on the LCD.

2.3.7 EMULATE

The EMULATE submenu is used to select the cutter's active cutting/plotting language.

After pressing the  key, press the  or  jogging key until the desired language is displayed on the LCD. Press  to confirm the new setting.

The Gerber P2C 600 supports DM/PL, HP-GL and HP-GL/2.

The active emulation setting is marked with an asterisk (*) on the LCD.

NOTE

The active cutting/plotting language MUST match the language set in the cutting software.

Always select a language that is supported by the host computer's cutting software.

Set the active cutting/plotting language to Houston Instrument Digital Microprocessor/Plotting Language (DM/PL) whenever possible. This will allow the cutter to operate with DM/PL-based cutting/plotting software which, having special command extensions for cutting, normally gives superior cutting performance.

2.3.8. BAUD RATE

The BAUD RATE submenu is used to set or modify the operating baud rate for RS-232-C serial communications between the cutter and the host computer. The baud rate can be set to any of the following values: 2400 bps, 4800 bps, 9600 bps, 19200 and 38400 bps. The default baud rate is 9600 bps.

After pressing the **Enter** key, press the  or  jogging key until the desired baud rate is displayed on the LCD. Press **Enter** to confirm the new setting. The active baud rate setting is marked with an asterisk (*) on the LCD.

NOTE

Your cutter's active baud rate setting **MUST** match the host computer's baud rate setting.

2.3.9. PARITY

The PARITY submenu is used to set or modify the byte format and parity type for RS-232-C serial communications between the cutter and the host computer. The parity can be set to any of the following values:

LCD information	Parity setting	Remarks
BIT 8 = 0	8 data bits, no parity	bit 8 = low (0)
BIT 8 = 1	8 data bits, no parity	bit 8 = high (1)
EVEN	7 data bits, 1 parity bit	parity bit = even
ODD	7 data bits, 1 parity bit	parity bit = odd

The default parity setting is bit 8 = 0 (8 data bits, no parity, the 8th bit being a

low bit). After pressing the **Enter** key, press the  or  jogging key until the desired setting is displayed on the LCD. Press **Enter** to confirm the new setting. RTS/DTR can be set to TOGGLE (hardware handshaking) or HIGH (software handshaking).

The active parity setting is marked with an asterisk (*) on the LCD.

NOTE

The parity setting of your cutter **MUST** match the host computer's parity setting.

2.3.10. RTS/DTR

The RTS/DTR submenu controls the Request To Send (RTS) and Data Terminal Ready (DTR) signals of the cutter's RS-232-C serial communications interface for hardware handshaking.

The RTS/DTR default value is TOGGLE.

After pressing the **Enter** key, press the  or  jogging key until the desired setting is displayed on the LCD. Press **Enter** to confirm the new setting.

RTS/DTR can be set to TOGGLE (hardware handshaking) or HIGH (software handshaking).

The active handshake setting is marked with an asterisk (*) on the LCD.

2.3.11. RS 232 TEST

The RS 232 TEST routine verifies the cutter's RS-232-C serial communications (transmit data, receive data, and hardware handshaking) circuits. This test does not require that a pen, knife or media be loaded.

→ To run the RS-232-C test, proceed as follows:

1. Unplug the RS-232-C data cable from the rear panel of the cutter.
2. Use a loopback test cable to connect pin 2 of the cutter's data connector to pin 3; connect pin 7 to pin 8.
3. With RS 232 TEST displayed, press the **Enter** key. The cutter will start transmitting and receiving data at all available baud rates and parity settings. The length of the transmissions will vary because of the different baud rates used. The unit then checks the hardware handshake lines.

The cutter will return an error message if the RS 232 port is not working correctly.

2.3.12. ALIGN MODE

The ALIGN MODE parameter determines which alignment method is used. (See section 3 for a complete explanation).





After pressing the **Enter** key, press the  or  jogging key until the desired setting is displayed on the LCD. Press **Enter** to confirm the new setting.

The active align mode setting is marked with an asterisk (*) on the LCD.





2.3.13. AUTOLOAD

The AUTOLOAD parameter determines the manner by which vinyl is pulled from its roll. When AUTOLOAD is ON, the cutter will automatically unroll vinyl as needed. When the AUTOLOAD option is OFF, the user should unroll sufficient media before starting to cut.

The default setting is ON which ensures the best results and performance.

After pressing the  key, press the  or  jogging key until the desired setting is displayed on the LCD. Press  to confirm the new setting. The active autoload setting is marked with an asterisk (*) on the LCD.

2.3.14. LANGUAGE

The MENU LANGUAGE submenu is used to set or modify the dialogue language on the LCD. After pressing the  key, press the  or  jogging key until the desired language is displayed on the LCD. Press  to confirm the new setting.

The information on the LCD can be displayed in English, French, German, Spanish, Italian or Dutch.


The active language setting is marked with an asterisk (*) on the LCD.

2.3.15. MENU UNITS

The MENU UNITS submenu is used to select English or metric menu units.

After pressing the  key, press the  or  jogging key until the desired menu unit is displayed on the LCD. Press  to confirm the new setting. The active menu unit setting is marked with an asterisk (*) on the LCD.

2.3.16. ROM REVISION



ROM REVISION provides details about the cutter's firmware. Press the  key to view the revision number. This information is often helpful to technicians when diagnosing problems over the telephone.

2.3.17. MEDIA SENSOR







The MEDIA SENSOR submenu is used to activate or deactivate the media sensor. The sensor detects the end of the media thereby preventing damage to the cutting strip and knife tip.

After pressing the  key, press the  or  jogging key until the desired setting is displayed on the LCD. Press  to confirm the new setting. The active media sensor setting is marked with an asterisk (*) on the LCD.

2.3.18. SENSOR SETUP

The SENSOR SETUP submenu is used to activate or deactivate the media. After pressing the  key, follow the instructions on the LCD. Put a piece of media halfway on the sensor and then press the  key. The LCD will indicate whether or not the sensor is working.

2.3.19. CALIBRATE X/Y

To calibrate is to bring the length of the cut lines to within specifications. For example, if a cut line should measure exactly 100 mm, the cutter can be adjusted to correct for any discrepancies. First, make sure the media is loaded, and then press the  key to perform a calibration test. Measure the lines and enter the measured x-value by pressing the jogging keys. The  and  jogging keys change the value in large increments, while the  and  jogging keys change the value in small increments. After pressing the  key, the y-value can be changed in the same way.

Do not perform this test when the machine is working properly.

2.3.20. COIL SETUP

This procedure is used to calibrate the knife and pen pressures, and to set the knife and pen “landings.”

After calibration, the values are saved in the system’s non-volatile RAM.

A tension gauge of ± 100 gr. and ± 500 gr. is required to execute this test.

The desired pressure appears in the upper line of the display. The bottom line of the display indicates the value that has to be sent to the head in order to reach the desired pressure (this value is between 0 and 127). Press the **Enter** key to begin the test and then follow the instructions on the LCD screen.



CAUTION

Do not perform the coil test when the machine is working properly. Changing the parameters to incorrect values may seriously affect cut quality and even damage the cutter.

SECTION 3

GENERAL INFORMATION



3.1. MAINTENANCE & CLEANING

The Gerber P2C 600 cutter has a number of sliding surfaces made of smooth metals and plastics. They are virtually friction-free and require no lubrication. They will, however, collect dust and lint, which may affect the performance of the cutter. Keep the cutter as clean as possible by using a dust cover. When necessary, clean the unit with a soft cloth dampened with isopropyl alcohol or mild detergent. Do not use abrasives.

3.1.1. CLEANING THE DRIVE SYSTEM

With time, the sleeves of the drive drum may become clogged with accumulated residue from the media. This may affect traction, as the media will tend to slip between the pinch rollers and the drive sleeves.

➔ To clean the drive sleeves, proceed as follows:

1. First, disable the sensors through the cutter's control panel or by simply covering them up.
2. Raise the pinch rollers by lowering the pinch roller lever. Remove the backing from a piece of vinyl. Place the vinyl with the tacky side down between one of the pinch rollers and a drive sleeve. Raise the pinch roller lever.
3. Use the  and  jogging keys to move the piece of vinyl back and forth several times until all residue is removed from the drive sleeves.
4. Lower the pinch roller lever and remove the piece of vinyl.
5. Repeat steps 2 through 4 for the remaining drive sleeves.
6. Set the cutter's power switch to OFF.

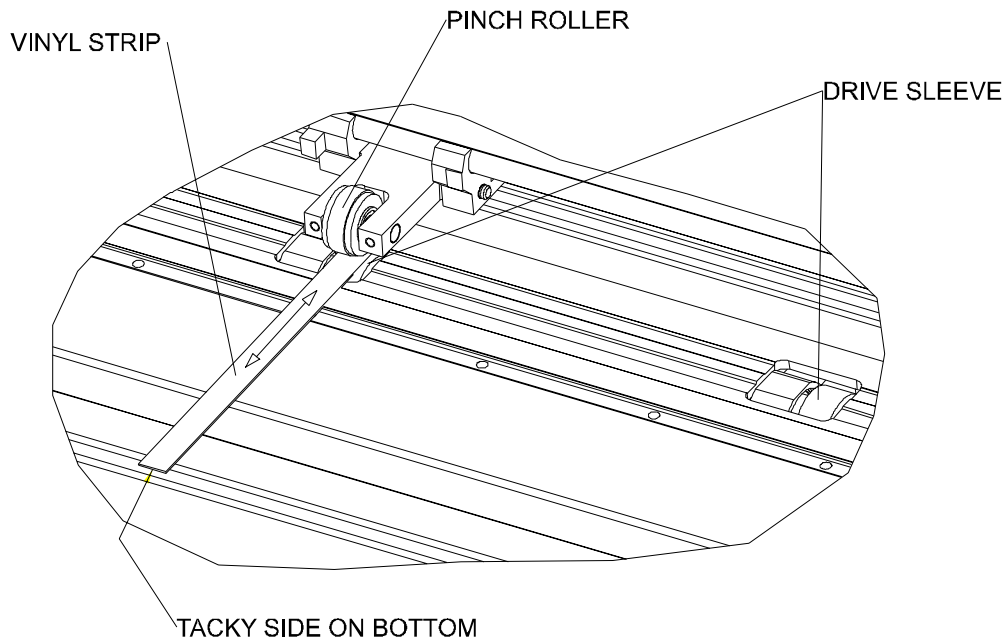


FIGURE 4-1:
CLEANING THE DRIVE SLEEVES

3.1.2. CLEANING THE SENSOR

After a while, the sensor may become dirty with accumulated residue from the media. This may cause the cutter to malfunction.

➔ To clean the sensor area, proceed as follows:

1. The sensor is located on the right side of the cutter just behind the widest of the three sleeves (refer to fig 1-2).
2. Keep the sensor clean by simply wiping it out now and then with a cotton swab.

3.2. OPERATING VOLTAGE

The power entry module detects the line voltage and switches automatically between 110V and 230V.

The fuse is at the back of the cutter next to the power inlet (refer to fig 1-2).

The fuse rate is 2.0A Slo-Blo for all voltage ratings.



SAFETY WARNING

Before changing the fuse, be sure to disconnect the cutter completely.

NOTE

Always be sure to use the correct fuse rate.

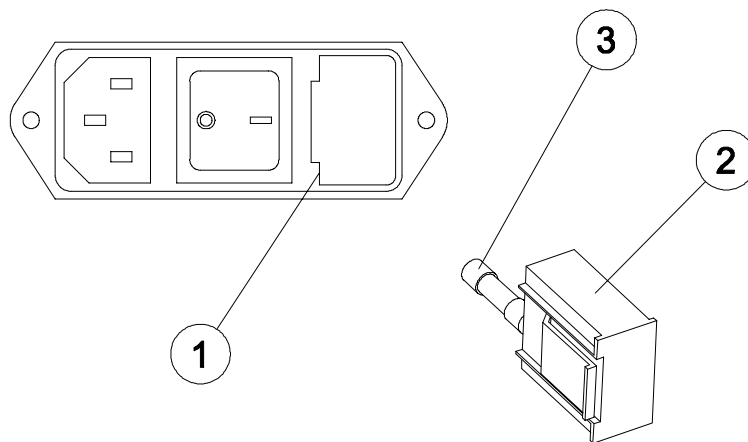


FIGURE 4-2
POWER ENTRY MODULE

1. Power entry module
2. Fuse holder
3. Fuse

SECTION 4

INTERFACE

4.1. INTRODUCTION

This section describes the signal connections for communication between your cutter and the host computer. When connecting the cutter to the host computer, always proceed as follows:

1. Refer to the documentation provided with your cutting/plotting software, and check the recommended cabling specifications.

If your cutter is not specifically listed in the documentation, use the cabling specified for the Houston Instrument DMP-60C cutter.

2. If the documentation does not contain specific cabling instructions, use the Gerber cable specifications recommended for your computer.

Gerber P2C 600 cutters come with either Serial and Parallel connectors, or Serial and USB connectors. In either case, if both ports are connected at the same time, that port which receives data first will stay active and the other will be deactivated. The deactivated port can only be reactivated by restarting the cutter.

Connecting more than one of the communication cables to the cutter at a time can result in communication errors.

4.2. RS232 INTERFACE NOTES

4.2.1. SYSTEM SETUP

This section explains the process of configuring the serial port on your computer so that it will communicate with the cutter. This method applies only if serial (not USB or Parallel) is the chosen means of communication and requires that the computer is using the WIN95 or newer operating system.

➔ To set up your serial port, proceed as follows:

1. Press the "Start" button and select "Settings", continued by "Control Panel". Click the "System" icon and select the "Device Manager" tab. Right-click the port that is connected to the cutter and click "Properties." Select the "Port Settings" tab to set the port settings.

2. The cutter's default settings are as follows:
 - Baudrate : 9600 (see 2.3.8.)
 - Data Bits : 8
 - Parity : None (see 2.3.9.)
 - Stop Bits: 2
 - Flow Control : Hardware

4.2.2. SERIAL INTERFACE CONNECTOR ON THE CUTTER

RS-232C Serial Interface Connector		
<i>Pin n°</i>	<i>Signal</i>	<i>Description</i>
1	NC	Not Connected
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	Signal ground
6	NC	Not connected
7	RTS	Request To Send
8	CTS	Clear To Send
9	NC	Not Connected

4.2.3. AVAILABLE SERIAL SIGNALS

If you are making your own cable, only a few of the cutter's pins will actually need to be connected to the host computer. To ensure optimal results, the cable length should not exceed 4.8 m (16 feet). It should be taken into account that your computer or cutting software may also require additional loopback connections at the host computer's end of the data cable.

- Connect the computer's Transmit Data (TXD) pin to pin # 2 on the cutter.
- Connect the computer's Receive Data (RXD) pin to pin # 3 on the cutter.
- For hardware handshaking, connect the computer's Clear To Send (CTS) pin to pin # 4 or pin # 7 on the cutter. Connect the computer's Request To Send (RTS) pin to pin # 8 on the cutter.
- Connect the computer's ground (GND) pin to pin # 5 on the cutter.

4.3 USB INTERFACE NOTES

4.3.1 USB SPECIFICATIONS

The cutter's built-in USB interface is based on the standards specified in Universal Serial Bus Specifications Revision 1.1.

The cable length should be 5 meters or less.

The adaptable connector type is USB Series "B".

The cable specifications are USB Series A 4-pin for the computer side and USB Series B 4-pin for the cutter side.

4.3.2 INSTALLING THE USB SOFTWARE ON A WINDOWS OPERATING SYSTEM

1. Verify that your software will support a USB driver.
The computer should be using either the WIN98 or WIN2000 operating system.
2. Plug the cable connector securely into the cutter's USB interface connector.
Plug the other end of the cable into the computer's USB interface connector.
3. For Windows XP, the computer should find the new USB device and ask for the driver. Insert the "Gerber P2C Driver Disk" CD ROM in your CD ROM drive and follow the instructions on the screen. For instructions on loading the drivers for older operating systems see the instructions "Installing the USB Driver and P2C Plotter.pdf" on the driver disk.
4. The device driver will be installed.
5. Restart the computer. Next to the cutter's USB connector is a small light emitting diode (LED) that will either be on, blinking or off. If the LED is off then the cutter and the computer are not communicating and all connections must be re-examined.

4.3.3 INSTALLING THE USB SOFTWARE ON A MACINTOSH COMPUTER

Minimum requirements:

- Macintosh OS 8.5 or higher
- Macintosh with USB connection

Plug the cable connector securely into the cutter's USB interface connector. Plug the other end of the cable into the Mac's USB interface connector.

Insert the "Gerber P2C 600 Cutter CD: Manuals and Drivers" CD-ROM into your Mac's CD-ROM drive. Double-click the "USB Install Driver" icon. This will automatically install the driver and the Gerber PortMapper utility. Restart the computer once installation is complete.

Next to the cutter's USB connector is a small light emitting diode (LED) that will either be on, blinking or off. If the LED is off then the cutter and the computer are not communicating and all connections must be re-examined.

If your software only supports modem or printer port connectivity (e.g. MacCut), use the USB Gerber PortMapper utility to create an emulation of the printer or modem port. Select USB Gerber P2C port from within the list of available serial ports. Then select "Create Modem" or "Create Printer Port". Close the USB Gerber PortRemapper and save the settings.

APPENDIX A

MEDIA CERTIFICATION

Types of media

A wide range of vinyl types has been evaluated and extensively tested on the Gerber P2C 600 cutters. Only duly certified media should be used to ensure operation in compliance with the functional specifications of the Gerber P2C 600 cutters as listed in Section 1 of the User's Manual.

Following is a list of available materials designed for use with GERBER EDGE® printers or Gerber P2C cutters. These materials have been developed to help you serve you better and gain new customers with additional market opportunities. Please consult your local Gerber representative before using non-certified media.

Gerber High Performance Series 220 Premium Film	Gerber High Performance Series 220 Premium Film
Gerber High Performance Series 220 Clear Enamel Receptive	Gerber High Performance Series 220 Metallic Film
Gerber High Performance Series 225 Premium Film	3M Controltac™ Series 180 Plus Repositionable Film
3M Controltac Plus Series 250C with Comply™	3M Scotchcal Series 230 Translucent Film
3M Scotchlite™ Series 280 Reflective Sheeting	3M Scotchlite Series 280i White Reflective Sheeting
3M Scotchcal Series 210 Deluxe Silver and Deluxe Gold Vinyl	3M Scotchcal Series 210 Fluorescent Specialty Film
GerberMag™	GerberGlow™
Gerber HoloGraphix™	Gerber InstaChange™
Gerber InstaChange Reflective	3M Scotchcal Series 210 Dusted and Frosted Crystal
3M Scotchcal Luminous Film from Gerber	Gerber AutoMag™
3M FloorMinders From Gerber	Gerber ImageCal™ "P"
Gerber ImageCal "R" White	Gerber ImageCal "R" Clear
Gerber ImageCast™	Gerber Label Stock Brushed Gold & Brushed Silver Polyester Material
Gerber Label Stock White, Clear & Matte Silver	Gerber Security Label Stock
Gerber PlastiGraphix™ LexEdge™ II	Gerber PermaGrip™
Gerber PlastiGraphix LexEdge Clear	Gerber PlastiGraphix Outdoor LexEdge

EDGE Positive™	Gerber PlastiGraphix PVC-10HG
Gerber Stardust™ Gold and Stardust Silver ultrametallic films	Gerber Vision™ Perforated Window Film
Static Cling	Heat Transfer Paper
Gerber QUANTUM™ Series 2000	Gerber QUANTUM™ Series 4000
Gerber QUANTUM™ Series 1000	

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