Standard Control Panel Parameters

Table 8 shows parameters in the order in which they are displayed when you press NEXT/SAVE after entering Setup mode. For parameters that do not appear in this table, see *Additional Control Panel Parameters* on page 113.

Note • Your label preparation software or the printer driver may override adjustments made through the control panel. Refer to the software or driver documentation for more information.

Table 8 • Printer Parameters (Sheet 1 of 22)

Language/Parameter	Action/Explanation
DARKNESS +4.0	**Adjust Print Darkness** Darkness (burn duration) settings depend on a variety of factors, including ribbon type, media type, and the condition of the printhead. You may adjust the darkness for consistent high-quality printing. **Important •** Set the darkness to the lowest setting that provides good print quality. If the darkness is set too high, the ink may smear, the ribbon may burn through, or the printhead may wear prematurely. If printing is too light or if there are voids in printed areas, increase the darkness. If printing is too dark or if there is spreading or bleeding of printed areas, decrease the darkness. The *FEED Self Test* on page 156 can be used to determine the best darkness setting. You may want to adjust darkness while performing the *PAUSE Self Test* on page 155. Because the darkness setting takes effect immediately, you can see the results on labels that are currently printing. Darkness settings also may be changed by the driver or software settings. *Default Value:* +4.0 *Range:* 0 to +30.0 **To change the value shown:** 1. Press PLUS (+) to increase darkness. 2. Press MINUS (-) to decrease darkness.
PRINT SPEED -2 IPS +	**Adjust Print Speed** Adjusts the speed for printing a label (given in inches per second). Slower print speeds typically yield better print quality. Print speed changes take effect upon exiting Setup mode. *Default Value:* 2 IPS *Range:* Varies by printer type (see *Print Specifications by Model* on page 167 for values by model) **To change the value shown:** 1. Press PLUS (+) to increase the value. 2. Press MINUS (-) to decrease the value.

FEED Self Test

Different types of media may require different darkness settings. This section contains a simple but effective method for determining the ideal darkness for printing bar codes that are within specifications.

During the FEED self test, labels are printed at different darkness settings at two different print speeds. The relative darkness and the print speed are printed on each label. The bar codes on these labels may be ANSI-graded to check print quality.

The darkness value starts at three settings lower than the printer's current darkness value (relative darkness of –3) and increase until the darkness is three settings higher than the current darkness value (relative darkness of +3).

Depending on the dot density of the printhead, seven labels are printed at each of the following speeds:

- 203 dpi printers: 2 ips, 6 ips, and 10 ips
- 300 dpi printers: 2 ips, 6 ips, 8 ips
- 600 dpi printers: 2 ips, 4 ips

To perform a FEED self test, complete these steps:

1. Print a configuration label to show the printer's current settings.

2. Turn off (**O**) the printer.

3. Press and hold FEED while turning on (**I**) the printer. Hold FEED until the first control panel light turns off.

   The printer prints a series of labels (Figure 25) at various speeds and at darkness settings higher and lower than the darkness value shown on the configuration label.

Figure 25 • FEED Test Label

4. See Figure 26 and Table 18. Inspect the test labels and determine which one has the best print quality for your application. If you have a bar code verifier, use it to measure bars/spaces and calculate the print contrast. If you do not have a bar code verifier, use your eyes or the system scanner to choose the optimal darkness setting based on the labels printed in this self test.

**Figure 26 • Bar Code Darkness Comparison**
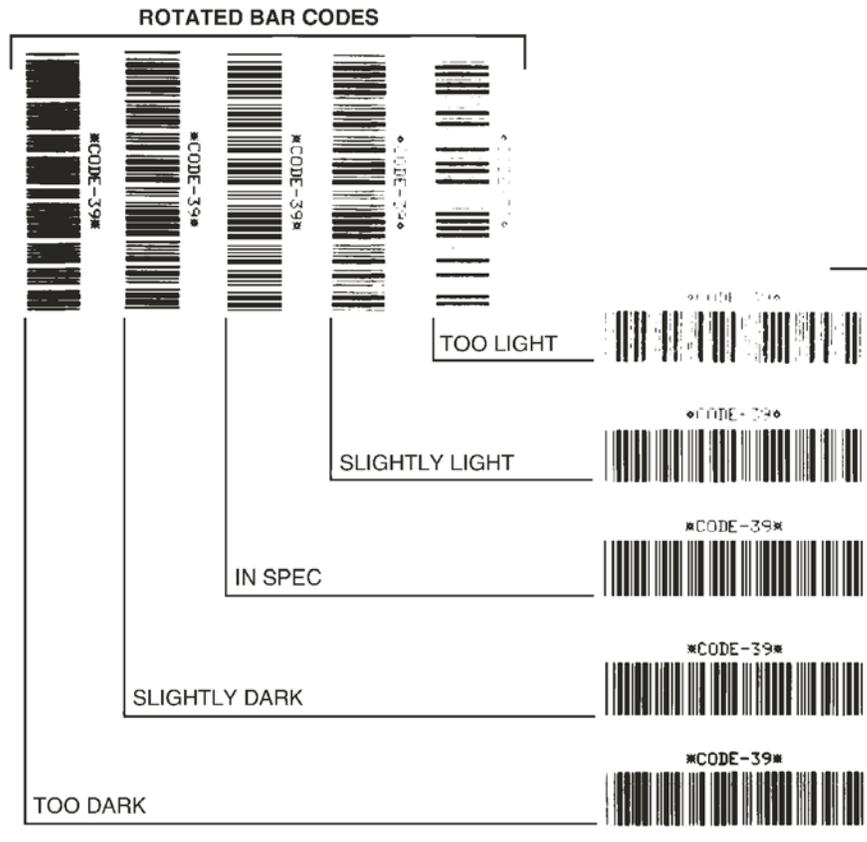
PAUSE Self Test

This self test can be used to provide the test labels required when making adjustments to the printer's mechanical assemblies or to determine if any printhead elements are not working. Figure 24 shows a sample printout.

To perform a PAUSE self test, complete these steps:

1. Turn off (**O**) the printer.

2. Press and hold PAUSE while turning on (**I**) the printer. Hold PAUSE until the first control panel light turns off.

   - The initial self test prints 15 labels at the printer's slowest speed, and then automatically pauses the printer. Each time PAUSE is pressed, an additional 15 labels print. Figure 24 shows a sample of the labels.

Figure 24 • PAUSE Test Label
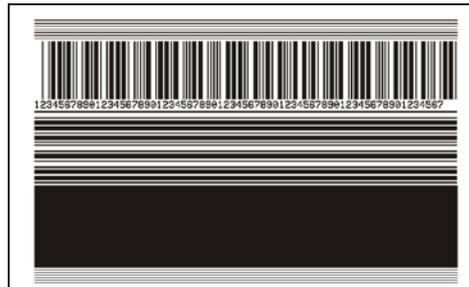
   - While the printer is paused, pressing CANCEL alters the self test. Each time PAUSE is pressed, 15 labels print at 6 in. (152 mm) per second.

   - While the printer is paused, pressing CANCEL again alters the self test a second time. Each time PAUSE is pressed, 50 labels print at the printer's slowest speed

   - While the printer is paused, pressing CANCEL again alters the self test a third time. Each time PAUSE is pressed, 50 labels print at 6 in. (152 mm) per second.

   - While the printer is paused, pressing CANCEL again alters the self test a fourth time. Each time PAUSE is pressed, 15 labels print at the printer's maximum speed.

   - To exit this self test at any time, press and hold CANCEL.