

Digital Electronic Counter

for CF8 and CF9

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The Digital Electronic Counter will detect even the smallest glass component unerringly. The counter operates in either a totalizing or a pre-determining batch counting mode and can be used on either the GPD Global CF8 or CF9 Component Former. The counter counts components and displays the total count as the components pass beyond the counter sensor mounted on the forming machine.

The counter may be preset. When in predetermining mode, the counter shuts off the machine when the preset count is reached. The counter prevents the machine from running unless the count value is greater than zero.

Contents

	page
Installation Guide	1
Identify Counter Parts	2
Setup Guide	3
Adjustments	4
Troubleshooting Hints	4
Suggested Spare Parts	4
Appendices	4
Warranty	7
Electrical Schematic	8

Installation Guide

Counter Sensor Brackets must be installed on the forming machine in order to use the component counter; the brackets hold the component counter sensor in position.

Care must be taken when handling and installing the sensor brackets. Bracket deformation will result in malfunction. Proper alignment is indicated by the LED (located on the counter front panel); it lights when alignment is correct.

To install counter brackets on:

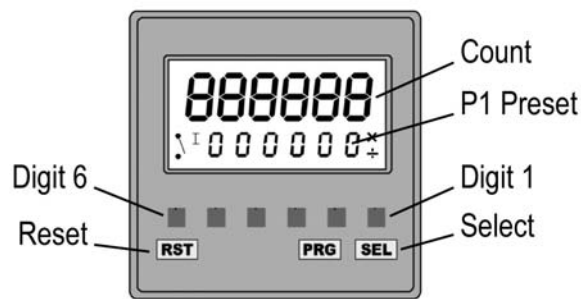
- CF8 - refer to *Counter Bracket Installation on CF8*, page 5.
- CF9 - refer to *Counter Bracket Installation on CF9*, page 6.

Identify Counter Parts



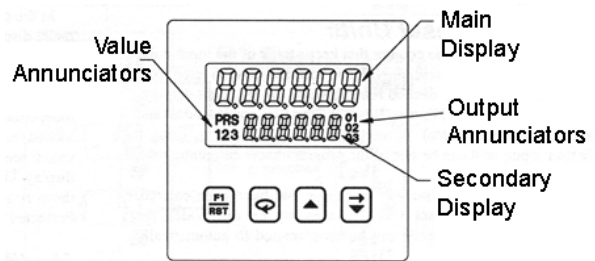
Either of the following types of counter may be used by your digital electronic counter unit:

Count Model A



- Count** Displays the number of components processed through the machine.
- Digit buttons** Use digit buttons 1 through 6 to set the P1 Preset value.
- P1 Preset** The number of components you want to process (minimum value possible is 000001). When the Count value matches the value preset in P1 Preset, the machine stops.
The P1 Preset value can be set at any time. To set a P1 Preset value, first press Select, use the Digit buttons to set a preset value, and then press Select **twice**.
- Reset** Resets the Count to zero.
- Select** Select must be pressed at the beginning and end of the value setting and reset processes.

Counter Model B



- Value Annunciators** Indicate which value is being viewed or modified.
- Main Display** Displays count value.
- Secondary Display** Displays the prescaler, preset, output time, or batch/total count values.
- F1 RST** Resets the count value to zero.
- ↻** Enters changes to data values.
- ▲** Increments data value in selected position of secondary display.
- ▼** Allows changing of the data value viewed in the secondary display.

Setup Guide

Set the counter to one of these modes:

- *Pre-determining Batch Counting Mode* - counts components and displays the total count as the components pass beyond the counter sensor mounted on the forming machine. The counter shuts off the machine when the preset count is reached.
- *Totalizing Counting Mode* - the same as using the machine without a counter. In this mode, the counter will not stop machine operations.




NOTE: Inertia in the CF8 and CF9 may cause a count overrun which can be read on the counter display.

Pre-determining Mode

When the forming machine is set to operate in the pre-determining mode, the counter will stop forming machine operations when the preset value on the counter is reached.

1. Sensor brackets must be installed on the forming machine.
2. Plug the twist lock plug that comes with the forming machine into the accessory outlet on the forming machine control panel.
3. Plug in the counter cords - the power cord into a power outlet and the auxiliary cord into the auxiliary outlet on the forming machine.
4. Set the forming machine power switch to AUX.
5. To set the number of components to be formed:

Counter Model A: First, press the Select button on the counter, then use the Digit buttons to set a preset value, and then press Select **twice**.

Counter Model B: First, press  on the counter, then use the same key to select the digit to be changed, and the  key to increment the digits. After you have finished entering the desired preset value, press .

6. Load the forming machine with components.
7. Switch the counter power on. The forming machine will run until the preset count is reached.
8. Choose one:
 - a. To repeat the same quantity, press RESET (RST or F1/RST) on the counter and RESET on the machine.
 - b. To run a different quantity, repeat steps 5-7 and press RESET on the forming machine.
 - c. To run components without using the counter just press RESET on the forming machine.

Totalizing Mode

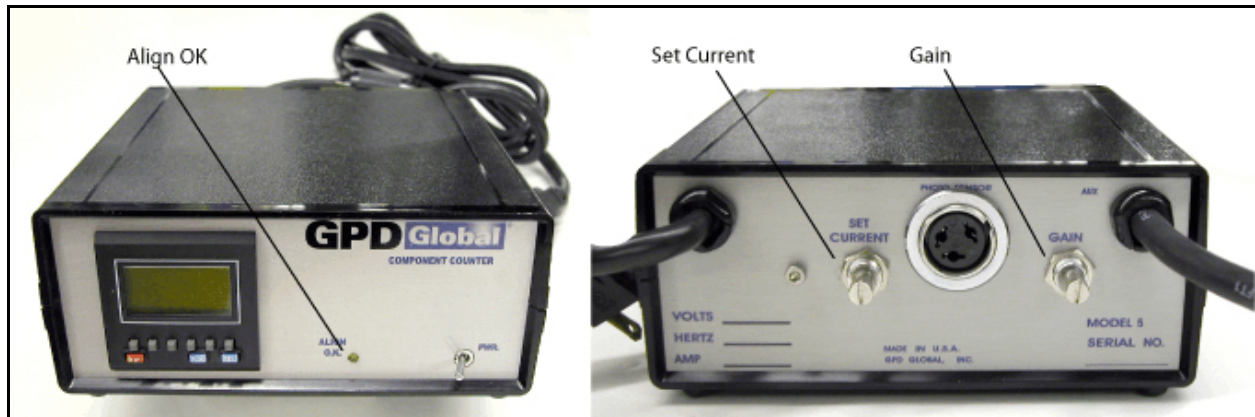
Set up for using the forming machine in the totalizing (batch) mode is the same as when using the machine without a counter. In this mode, the counter will not stop machine operations.

1. Set the forming machine power switch to RUN.
2. To track total component count: prior to running a new batch of components, press the RESET button on the forming machine (this enables the motor) and then press RESET (RST or F1/RST) on the counter (to zero the display).
3. When the component run is complete, note the total component count on the counter display.
4. To reset the counter display, press RESET (RST or F1/RST).

Adjustments

Both the sensor sensitivity potentiometer and the infrared LED drive current potentiometer are pre-set at the factory. The following instructions need only be used if tampering has occurred and the original settings need to be reestablished.

- The LED current adjustment adjusts from minimum 10 M.A. counterclockwise to 50 M.A. clockwise.
 - To increase sensitivity on trim potentiometer, turn clockwise.
1. Align the sensing brackets on the forming machine by sight as best as possible.
 2. Set GAIN to “half way”.
 3. Set SET CURRENT such that the Align OK LED on the front panel just lights.



Troubleshooting Hints

1. Check twist lock plug, line voltage, and line plug on forming machine.
2. Check for proper counter set up.
3. Check alignment of LED and sensor brackets.
4. Verify that bracket screws are tight.
5. Check fuse in counter.
6. Check for any broken or intermittent leads.
7. Clean face of the emitter on the lower bracket (infrared light is invisible to the eye).
8. Check for dirt in the slot of the upper bracket. Use isopropyl alcohol if use of a cleaning solvent is necessary. The use of sharp tools could damage the detector or emitter face.

Suggested Spare Part

Fuse: p/n 4300-0072, quantity of 1

Appendices

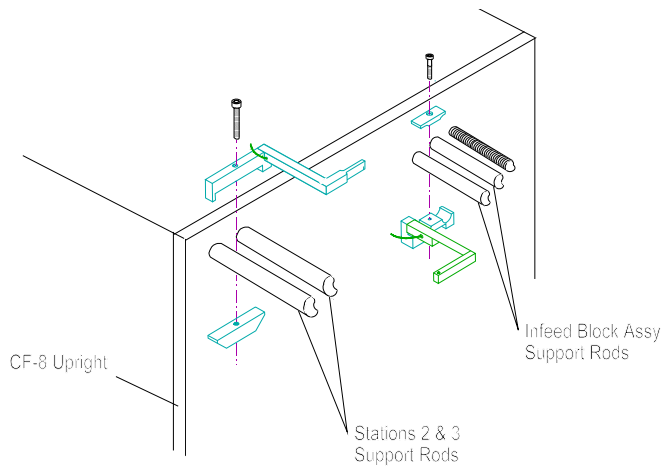
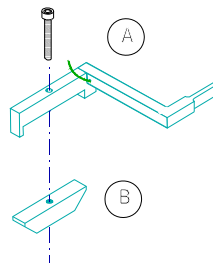
Preset Counter Electrical Schematic	00010-008-002-02
Counter Bracket Installation on CF8	page 5
Counter Bracket Installation on CF9	page 6

COUNTER BRACKET INSTALLATION ON CF8

One counter can be easily moved from one CF-8 to another as counting requirements change. This procedure is intended for use by operator or maintenance personnel.

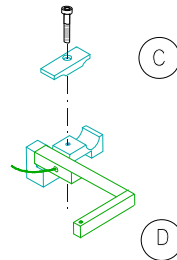
Install Counter Brackets

1. Counter Bracket A/B:
 - a. Unscrew A from B.
 - b. Position A so it rests on *Stations 2 & 3 Support Rods* (see figure below), flush with *CF-8 upright*.



- c. Hold B underneath the *Stations 2 & 3 Support Rods*, flush against the *CF-8 upright*.
- d. Secure A and B with the provided screw.

2. Counter Bracket C/D:
 - a. Remove CF-8's dual infeed chutes.
 - b. Unscrew C from D.



- c. Position C so it rests on *the Infeed Block Assembly Support Rods* (see bottom left figure), flush with the *CF-8 upright*.
- d. Hold D underneath the *Infeed Block Assembly Support Rods*, flush against the *CF-8 upright*.
- e. Secure C and D with the provided screw. **DO NOT over tighten.**
- f. Reinstall the dual infeed chutes.

Install Counter

1. Place the counter on top of the CF-8 cabinet.
2. Plug the counter bracket wiring harness into the counter's back panel.
3. Plug the counter power cord with the twist lock plug into one of the CF-8's accessory outlets. Plug the dummy connector plug (that accompanied the machine) into the second accessory outlet.
4. Plug the counter's regular power cord into a power source per machine *Specifications*.
5. Set up the counter per standard instructions.

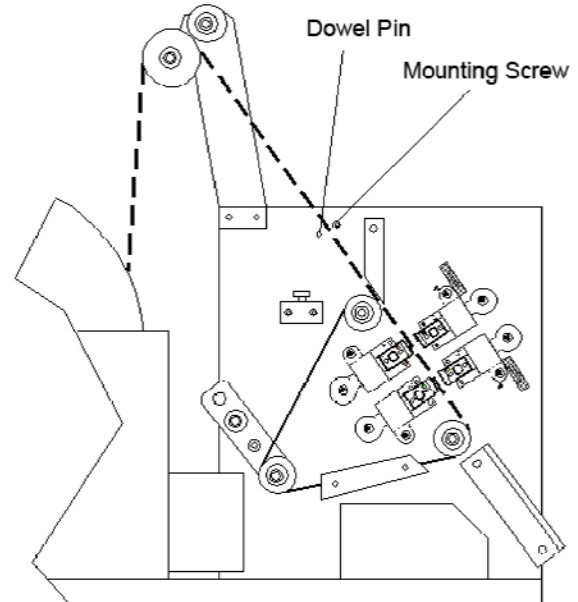
COUNTER BRACKET INSTALLATION ON CF9

Installation is simple and fast so that one counter can easily be moved from one CF-9 to another as counting requirements change. Use this procedure as your guide when you want to install the GPD CF-9 Electronic Component Counter (P/N CC789-5) on the CF-9 with either the standard counter bracket (P/N 903-108) or the Head Counter Bracket (P/N 903-109).

- * This procedure is intended for use by operator or maintenance personnel.
- * Select the installation procedure that corresponds with the type of counter bracket you plan to install.

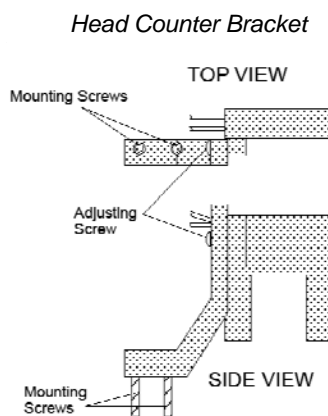
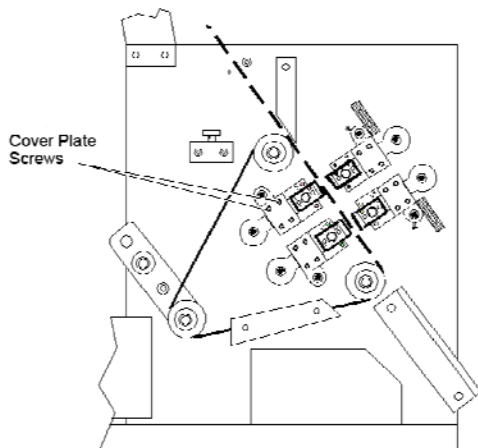
Standard Counter Bracket

1. Install counter bracket:
 - a. Remove *mounting screw*.
 - b. Slide counter bracket onto *dowel pin*.
 - c. To secure counter bracket in place, replace and tighten mounting screw.
2. Place counter on top of CF-9 cabinet.
3. Plug counter bracket wiring harness into counter's back panel.
4. Plug counter power cord with twist lock plug into accessory outlet on CF-9's control panel.
5. Plug counter's regular power cord into a power source per *Specifications* in GPD's *CF-9 User's Guide*.

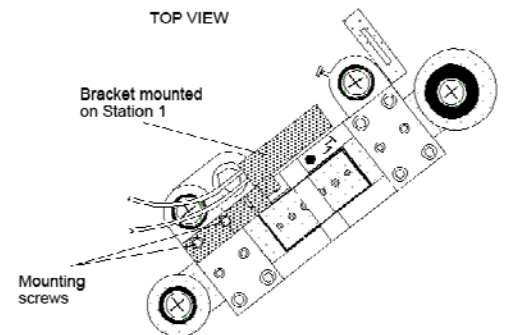


Head Counter Bracket

1. Install counter bracket:
 - a. Remove Station 1 *cover plate screws* (see below left).
 - b. Position *head counter bracket* (see below center) on cover plate (see below right).
 - c. Secure bracket in place with the longer *mounting screws* provided with the bracket.
 - d. If necessary, adjust bracket by loosening *adjusting screw* and sliding bracket up or down into desired position.
2. Place counter on top of CF-9 cabinet.
3. Plug counter bracket wiring harness into counter's back panel.
4. Plug counter power cord with twist lock plug into accessory outlet on CF-9's control panel.
5. Plug counter's regular power cord into a power source per *Specifications* in *CF-9 User's Guide*.



Head Counter Bracket Installed



Warranty

GPD Global® warrants that this product will be free from defects in material and workmanship for a period of one (1) year from the date of original purchase. GPD Global® will repair, or at its option, replace this GPD Global® product during the warranty period at no charge, provided it is returned (shipping-postage paid) to the GPD Global®, Colorado service facility.

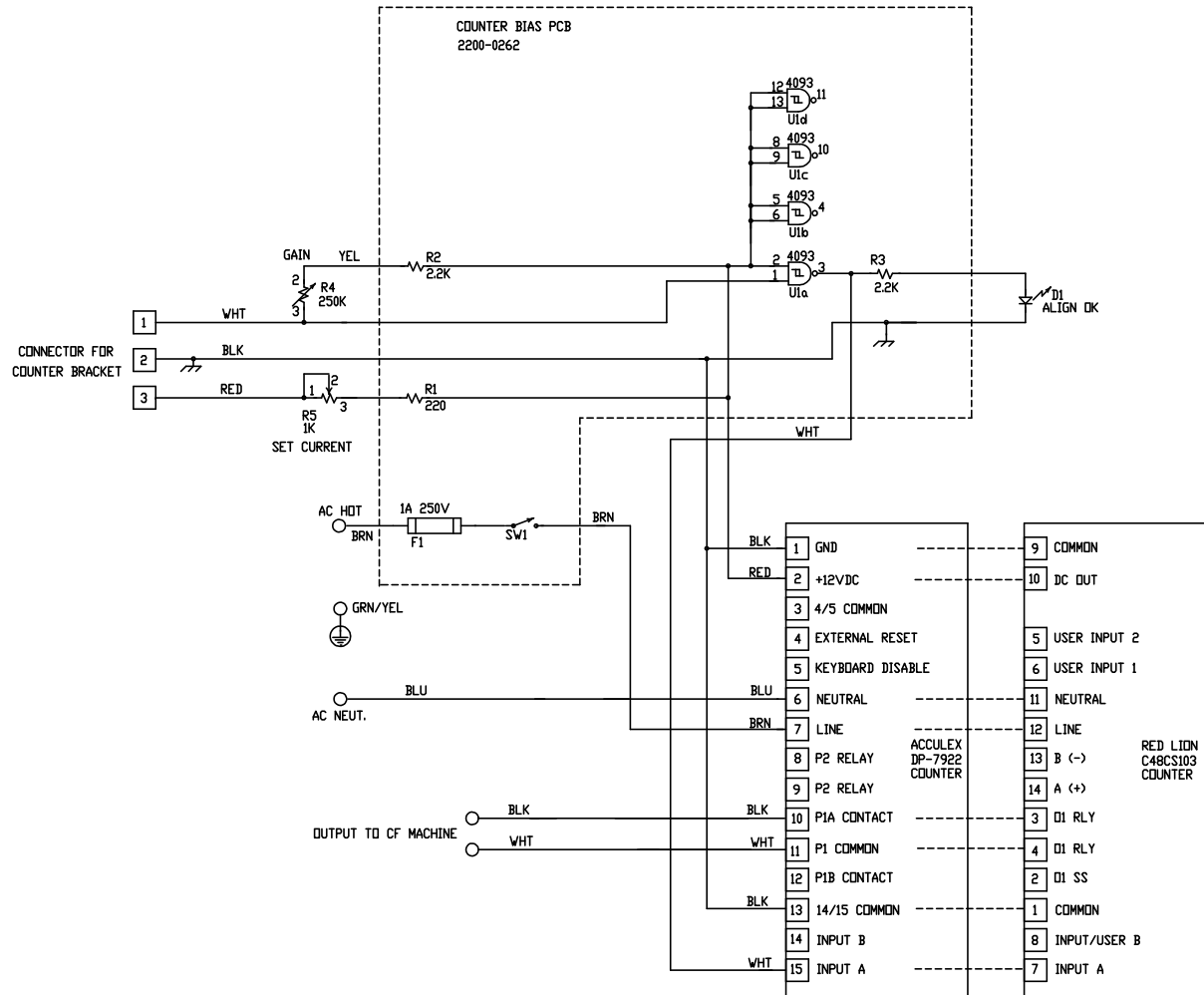
The one year warranty does not cover normal wear and tear to the cutting and forming tooling, since life usually depends on use.

This warranty does not apply if the GPD Global® product has been damaged by accident, abuse, misuse, or misapplication, has been modified without the written permission of GPD Global®, or if any GPD Global® serial number has been removed or defaced.

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Specifications, descriptions, and all information contained in this manual are subject to change and/or correction without notice.

Although reasonable care has been exercised in the preparation of this manual to make it complete and accurate, this manual does not purport to cover all conceivable problems or applications pertaining to this machine.



GPD GLOBAL®

DRAWN: SAH
USED ON: CF7,8,9
DATE: 01-11-10

NAME: PRESET COUNTER

DRWG NUMBER: 00010-008-002-02