

# Printware

A DIVISION OF VANGUARD GRAPHICS INTERNATIONAL

## [Marker Assembly Replacement]

**Summary:** This procedure shows the easiest way to back up the current marker settings; remove and replace a defective marker and load the settings into a newly installed marker assembly.

**Applicable Products:** All PlateStream Platesetters

**Tools/Parts Required:** Flathead Screwdriver; Torx Bit; Loupe; Phillips Screwdriver

### STEP 1 – BACK UP THE PLATESTREAM SETTINGS

- **NOTE: First, determine if the PlateStream Control Panel is located on the RIP or the PlateStream. If it is on the RIP, skip to Step B. If it is on the PlateStream, Follow Step A and skip Step B.**

#### Step A

Record the settings from the Control Panel to the form below to re-enter after the marker is replaced.

#### From the Control Panels Main Menu:

1. Select #1 – Set the DPI (#2) to 900. Record the Image Power (#3) for the corresponding DPI.
2. ESC back to the Main Menu.
3. From the main menu, go to #4 (More Information) and #8 – make sure the punch is turned off—if your machine has a punch.
4. Select #4 (More Information), #2 (Calibrate), #1 (Calibrate Transport). Write down the values for **Cut Length, Overlap Length, Backup Length, and Mini Backup Length**.
5. Go back to the Main Menu at the Control Panel. Select #4 (More Information) again and turn on the punch (#8). Return to the Calibrate Transport menu and record the values for **Backup Length** (punch on) and **Punch Length** (punch on).
6. ESC back to the Main Menu.
7. From the Main Menu: Select #7 (7 isn't visible on the screen) and enter ↑,→,↓,←. If done correctly, the Factory Menu will be visible. Select #5 – *Misc. Hardware* from this menu. Record the **MT Speed** in the table below.
8. Return to Step 1 and change the DPI to 1200. Record the values from steps 2, 3, 4 and 5.
9. Return to Step 1 and change the DPI to 1800. Record the values from steps 2, 3, 4 and 5.
10. Return to Step 1 and change the DPI to 2400. Record the values from steps 2, 3, 4 and 5.

	<i>Resolution (DPI)</i>			
	<b>900</b>	<b>1200</b>	<b>1800</b>	<b>2400</b>
<i>Image Power [Upper]</i>	_____	_____	_____	_____
<i>Image Power [Lower]</i>	_____	_____	_____	_____
<i>Cut Length</i>	_____	_____	_____	_____
<i>Overlap Length</i>	_____	_____	_____	_____
<i>Backup Length (Punch off)</i>	_____	_____	_____	_____
<i>Backup Length (Punch on)</i>	_____	_____	_____	_____
<i>Punch Length (Punch on)</i>	_____	_____	_____	_____
<i>Miniplate Backup Length</i>	_____	_____	_____	_____
<i>MT Speed [Upper]</i>	_____	_____	_____	_____
<i>MT Speed [Lower]</i>	_____	_____	_____	_____

**Step B**

This step will save the settings to the RIP. After the marker is installed, then we can load the saved settings, back to the new Marker.

1. From the Main Menu on the Control Panel:
  - a. Select #4 (More Information)
  - b. Select #2 (Calibrate)
  - c. Select #5 (Save Imager Settings to the RIP)

Once “saving” is complete, ESC back to the Main Menu.

**STEP 2 – DISCONNECT THE MARKER CABLES**

1. Power down PlateStream and remove all of the cables that connect to the board on the back of the Marker. Keep track of the cable connections: you will be connecting them to the same locations on the new Marker.
2. Disconnect the ground strap. The strap goes from the imager frame to the marker. A screw attaches it to the chassis.

**STEP 3 – REMOVE THE MARKER ASSEMBLY FROM THE PLATESTREAM**

1. Install the shipping brace from the new marker on this one before removing it from the PlateStream. (see **Figure 1**)
2. Remove the caps on the marker support shocks with a flathead screwdriver.
3. With another persons help, remove the support shocks from the marker assembly.
4. While one person supports the front of the Marker, use a flathead screwdriver to pry the left marker hinge off the brass bushing and pull up slightly. The tension spring

will pull the marker to the right. Place the left hinge on the support post. (see **Figure 1**)

5. Now pry the right hinge off the brass bushing.
6. Grab the Marker by the frame – one person on each side for support and lift it out of the chassis.
7. Once the Marker is removed, check to make sure there are not any focus shims being used. If there is, they will be in-between the brass bushing and e-clip by the left Marker hinge.

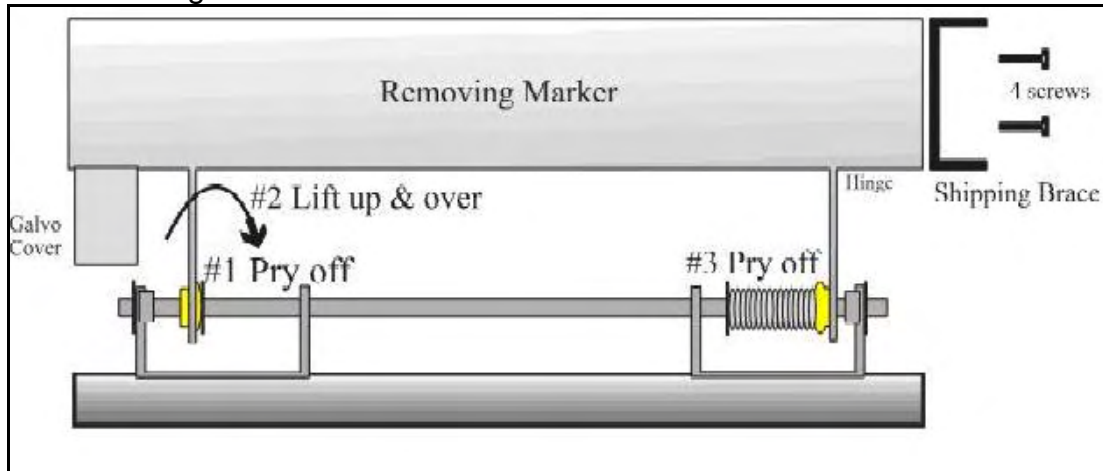


Figure 1 – Marker Assembly front view

#### STEP 4– INSTALL THE NEW MARKER

1. Place the left hinge onto the shaft. Place the right hinge onto the support post to the right of the spring. Be careful to not put the right hinge inside of the spring. If you do so, you will need to pry it out with a screwdriver. (see **Figure 2**)
2. Slide the right hinge onto the brass bushing. Once the right side is on the brass bushing, the left hinge can be lifted up and pulled to the left until you are past the left bushing. (see **Figure 2**)
3. Place the left hinge on the support post and let the tension spring pull the marker onto the bushing. Wiggle the marker slightly until the bushing snaps into place. Reconnect the shocks and locking caps. Inspect the hinge to make sure the bushings are flush to the hinge. (see **Figure 2**)
4. Reconnect the cables and the ground strap to the board on the backside of the marker.
5. Remove black tape covering opening on bottom of marker.

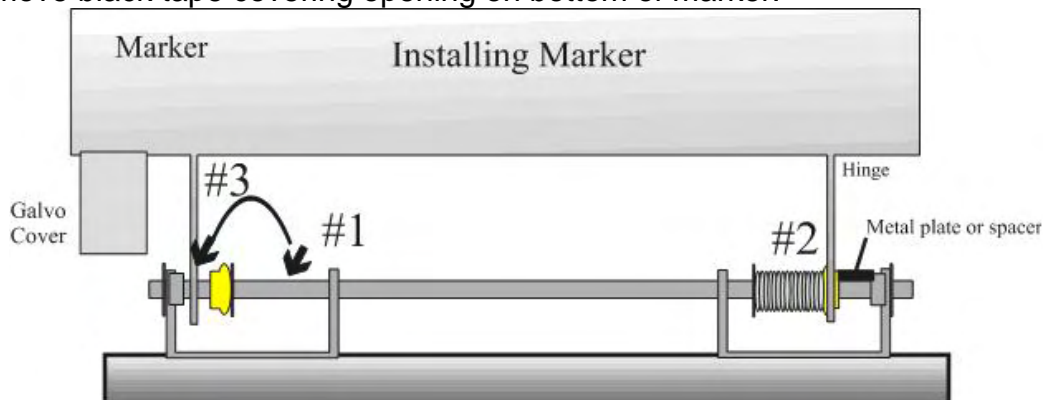


Figure 2 – Marker Assembly front view

### STEP 5 – LOAD THE PREVIOUS MARKERS SETTINGS

#### For Control Panel on PlateStream

1. Use the table you filled out to re-enter the settings into the Control Panel. Make sure to get every setting for every DPI. Refer to **Step A** if you need a reference for navigation to enter in the settings.
2. After the settings are entered, cycle the power on the PlateStream to allow the setting to initialize.

#### For Control Panel on RIP

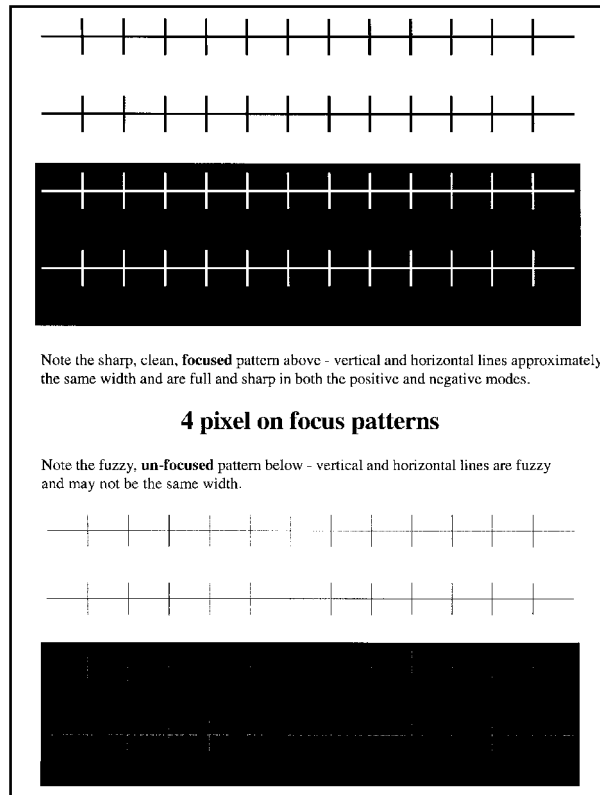
1. From the Main Menu on the PlateStream Control Panel – Select #4 (More Information).
2. Select #2 (Calibrate).
3. Select #6 (Load Imager Settings from RIP).
4. After a short time, the settings are loaded and you will need to cycle the power on the PlateStream to allow the settings to initialize.

### STEP 6 – ADJUST THE IMAGE POWER

[ **\*\* The Image Power must be adjusted when installing a new marker. Image power could vary considerably. \*\*** ]

1. At your normal DPI setting, image a 12” long “4 pix on focus” plate from the Control Panel’s – Test Plate Menu (#2 from the Main Menu).
2. Inspect the plate (under an eye loop – **at least** 15X power).
3. Notice there is a negative of the cross hairs. With a proper image power, you should see an equal size in the crosshairs. NOTE: The image may be fuzzy because the focus is not yet set.
4. **If the black crosshairs are thicker than the silver:** The image power is too high. Adjust it down by 3-5 points, until you obtain the desired Image Power. Then fine-tune it by adjusting it by 1. *The image power can be adjusted in the Setup menu: #1 on the Main Menu.*
5. **If the silver crosshairs are thicker than the black:** The image power is too low. Adjust it 3-5 turns, until you obtain the desired Image Power. Then fine-tune it by adjusting it by 1.

**Example of good  
Focus and/or good  
Image Power: ⇒**



**Example of bad  
Focus and/or high  
Image Power: ⇒**

### STEP 7 – MARKER FOCUS PROCEDURE

\*\*\* Again, make sure any shims previously installed were removed from the shaft – in between the brass bushing and e-clip. \*\*\*

1. At your normal DPI setting, image a 12” long, “4 pix on focus” test plate from the Control Panel. (2 – Test Plate; Change length to 12”; Change Test Pattern to – 4 pix on focus).
2. Unless you have gone through the **Printware Advanced Technical Training** and know how to properly adjust the focus, send this test plate overnight to the address below to be reviewed by Printware technicians.
3. If you have been through training, go through the focus procedure.

**Printware LLC – Attn: Service  
2935 Waters Road, Suite 160  
St. Paul, MN 55121**

If there are any difficulties please call Printware Customer Service at  
1-800-456-1400 \*2