Replacing the PLCs

Technical Note – 10100142 Rev. A

Safety Procedures

Before reading this Technical Note, please refer to the section on Safety Procedures in the Barak User's Manual.

About this Technical Note

This Technical Note describes the procedure for replacing the PLCs on the **Barak** printer.

Barak's PLCs

There are two PLCs (PROGRAMMABLE LOGIC CONTROLLERS) installed on the printer:

- The MACHINE PLC is installed to the left of the POWER SWITCH, at the rear right corner of the printer, as shown in the figure below.

The Machine PLC →

The Machine PLC

- The BLOCK PLC is installed at the top rear of the CARRIAGE, as shown in the following two figures:
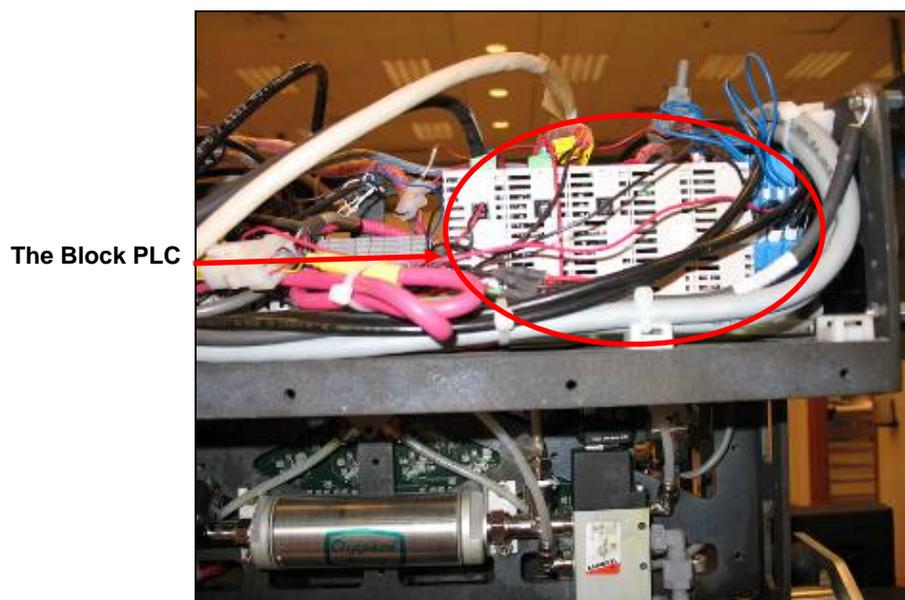
The Block PLC →

The Block PLC – general view

Pull these 5 clips and remove the PLC unit from its rails.
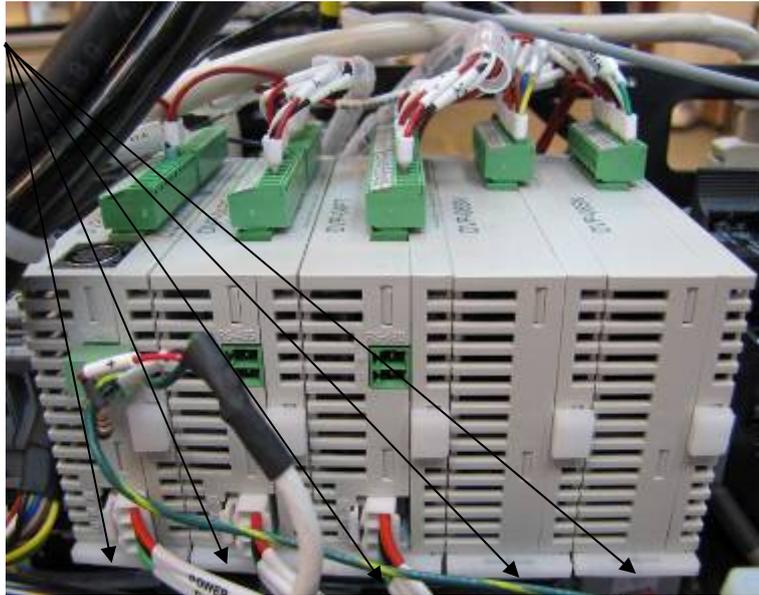
The Block PLC – close-up view

Replacing the Machine PLC Hardware

1. Shut down the printer.

2. Put switch into STOP mode.

3. Disconnect the two green connectors.

4. Disconnect the DATA COMMUNICATION CABLE from underneath the module DVP-14SS.

5. Disconnect the white connector(s) from underneath the PLC you wish to replace.

6. Remove the PLC from the printer by pulling the white clips, and removing it from the rail.

If you are changing only one module, make sure that you firmly connect the module's connectors, as shown above.

7. Make sure that the new PLC's switch is set to STOP.

8. Attach the new PLC to the rail by lifting the white clip on top of the PLC and the one that is located underneath. Make sure that the PLC is securely connected to the one next to it.

9. Verify that the original green connector is not burnt and that there are no black marks on it.

10. Connect the original green connector to the new PLC.

11. Reconnect the three wires to the 24v (white connector).

12. Power up the printer.

Replacing the Block PLC Hardware

From the Replacing the Machine PLC Hardware section, repeat steps #1-12.

Updating the Block/Machine PLC Software

Burning a File into the PLC

➢ **Burn a File into the PLC:**

1. Double click the '**DVPServer**' application at `C:\Program Files\Matan Barak FE\Drivers\Delta` to enter the **DVP_Tool**.

2. Click OPEN to chose the desired ***.DVZ** file (**BlockPLC.dvz** or **MachinePLC.dvz**) by double clicking it, as shown below.
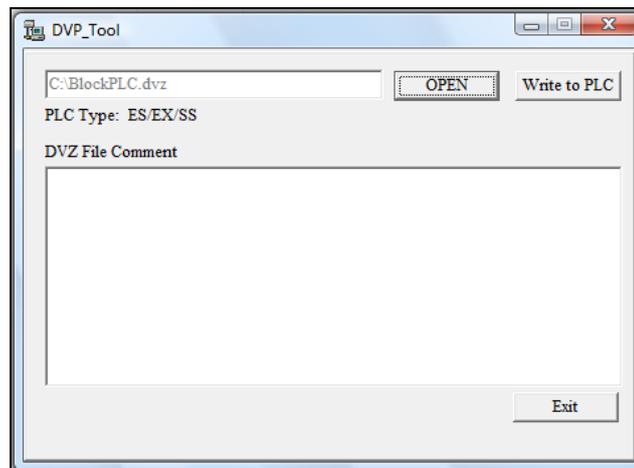
3. Click WRITE TO PLC to open the COMMUNICATION SETTINGS dialog box.

4. Configure the parameters in the COMMUNICATION SETTINGS dialog box, and note the STATION ADDRESS and the COM PORT.

Both the Machine and Block PLC allocation is for the same COM Port and it is set according to the Barak FE in the ENGINEERING dialog box (Currently set to COM8).

For Block PLC, the STATION ADDRESS should be set to '1', as shown below.
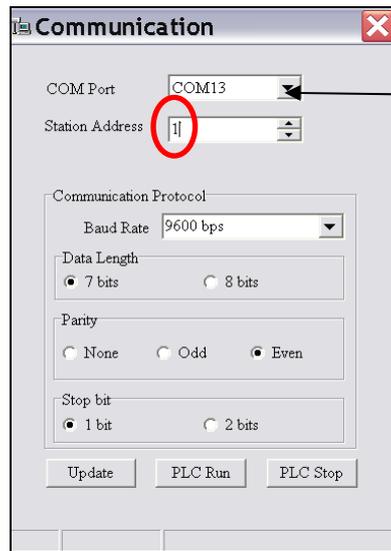
Change this field from COM13 to COM8

For Machine_PLC, the STATION ADDRESS should be set to '2', as shown below.
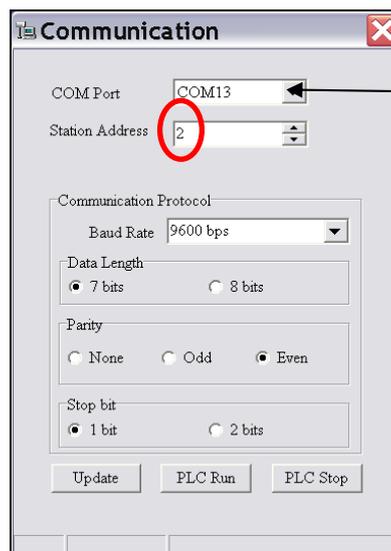
Change this field from COM13 to COM8

5. Click UPDATE for PLC updating by the correct file.

   The following message appears.
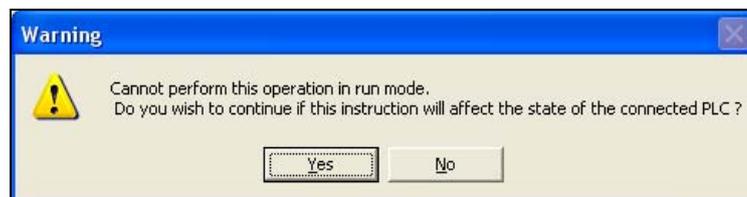
6. Click YES to confirm.

The UPDATE starts.

When the UPDATE has finished, the following message appears.
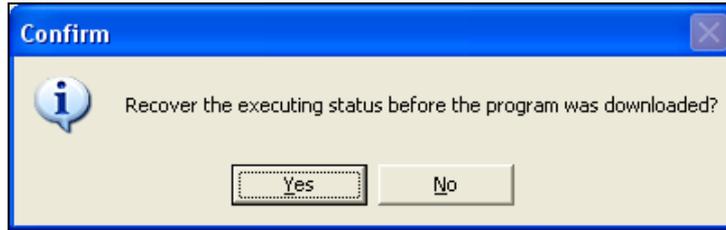
7. Click YES to confirm.

8. The following message appears.

Click OK.

9. Click the EXIT button to close the COMMUNICATION dialog box.
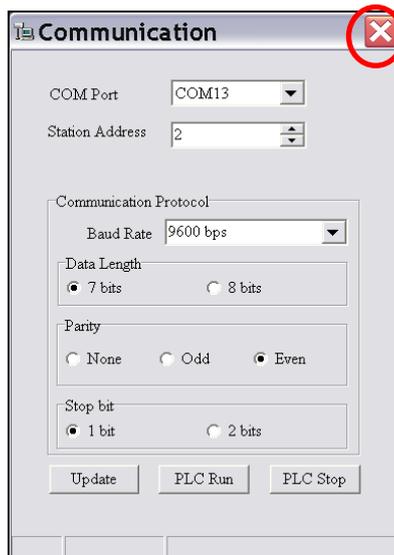
10. Choose another ***.DVZ** file, by clicking OPEN again, or click EXIT to close the **DVP_Tool**.
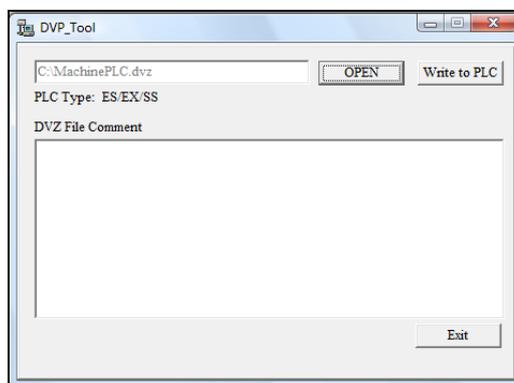
Machine PLC is located at the right side of the printer next to the UV power supplies, and the main electric panel.

Appendix A: Damage Report Form
(not for Print Head)

Customer's Name:	
Address:	
Barak5 Printer S/N*	
Faulty Part Name	
Details of faulty part:	
Remarks:	
Signed:	
Name:	
Position in Company:	
Date:	

*The Printer's Serial Number is displayed on the label located at the rear of the printer near the left end of the rollers, as shown below.

Document History

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