



CARD PRINTER PRINTHEAD REPLACEMENT INSTRUCTIONS

CAUTION: The discharge of electrostatic energy that accumulates on the surface of the human body or other surfaces can damage or destroy the printhead. Please ensure that the workstation and operator working with the printhead are properly grounded to eliminate ESD.

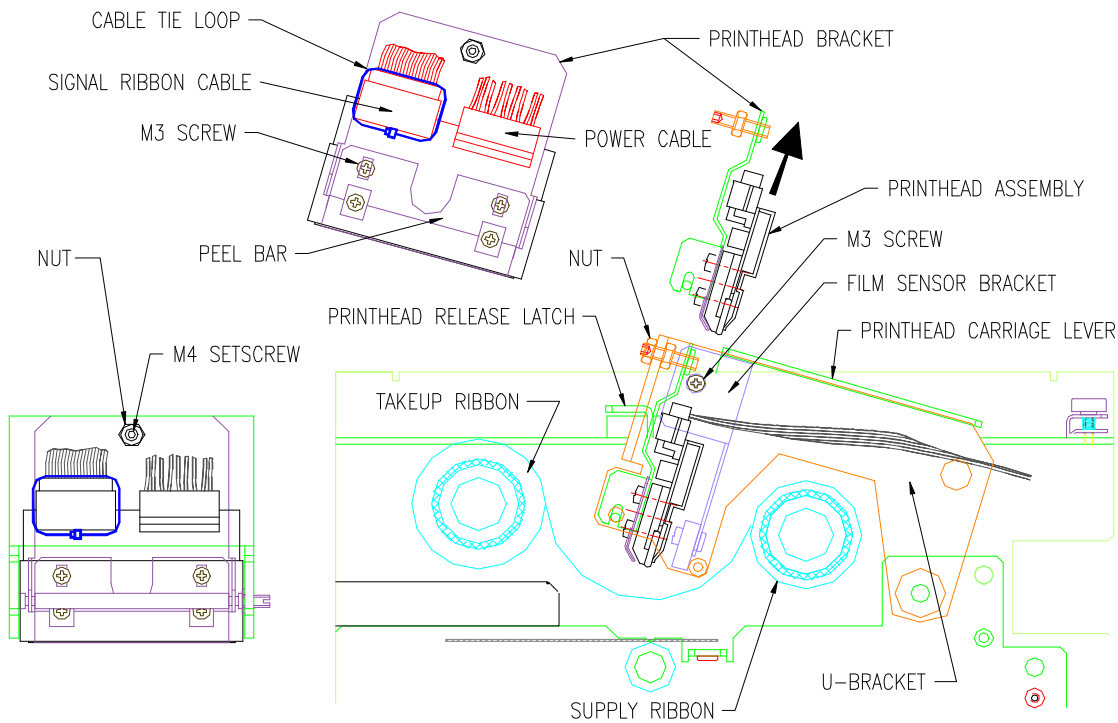
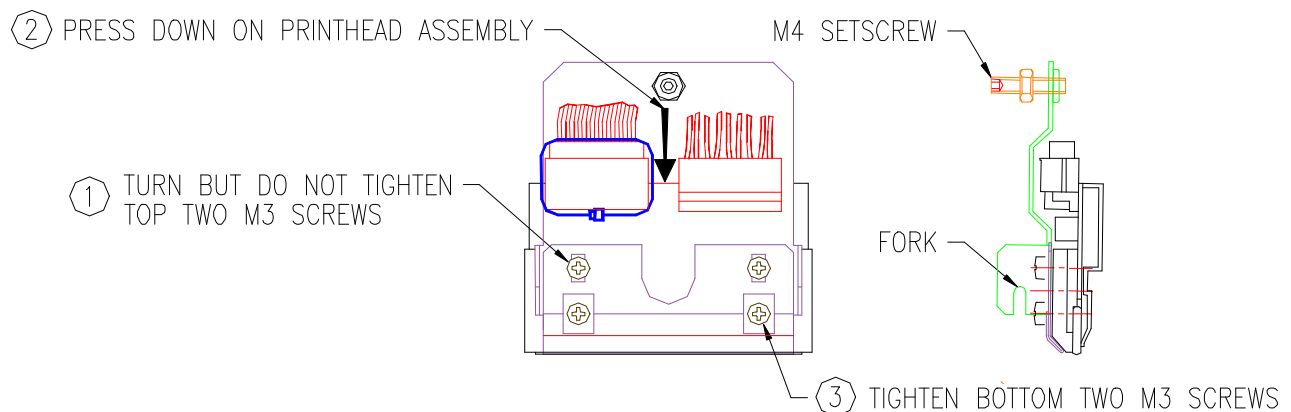


Diagram of P300 Card Printer - Printhead Carriage Assembly

1. Turn power off on the card printer. LED lights on front panel will go off.
2. Remove power cord and parallel cable.
3. Release latch to open Printhead carriage.
4. If present, remove ribbon supply and ribbon take-up from spindles. Remove M3 screw from film sensor bracket. Lift and move aside film sensor bracket.
5. Insert and hold a 2mm hex key into setscrew at the top of the aluminum U-bracket. Loosen

and remove the nut on the outside of the U-bracket with a 7mm wrench. Do not adjust the inside nut.

6. Slide set screw away from U-bracket hole and lift printhead assembly from U-bracket.
7. With printhead bracket in hand, remove the (4) four M3 screws holding the peel bar and bracket to the printhead.
8. Place peel bar and printhead bracket aside.
9. Remove cable tie loop from ribbon connector. (Do not cut or discard this loop because it will be reused with the new printhead).
10. Unplug the power and signal connector cables from the printhead.
11. Acquire the new printhead and record the head resistance value on the label attached to the heatsink (i.e. R=1765) for reference.
12. Reattach the power connector cable to the printhead.
13. Slide cable tie loop into signal connector. Plug the connector into the printhead. Attach loop to connector body and housing to lock connector.
14. Reinstall the printhead bracket and peel bar.
 - A. Press down on the printhead assembly with slight force before tightening the (2) two M3 screws on the bottom of the printhead bracket. This procedure will ensure that both ends of the printhead will be referenced against the bottom surface of the mounting holes on the printhead bracket to eliminate printhead misalignment
 - B. Turn but do not tighten the (2) two M3 screws on the top of the printhead bracket that secures the peel bar.



Printhead Installation to Bracket

15. Install printhead assembly back into U-bracket, capturing the forks on the printhead bracket onto the camshaft then inserting the M4 setscrew into the hole of the U-bracket.
16. Acquire the nut and reinstall onto the M4 setscrew using the 7mm nut wrench and holding the setscrew from rotating with the 2mm hex key. Tighten the nut against the U-bracket.
17. Reinstall the color film sensor bracket to the U-bracket and tighten the M3 screw. Ensure that the M3 screw retaining the color film sensor to the steel bracket is secured. The sensor should also be mounted straight on the mounting bracket to minimize sensor misreading due to the sensor angle relative to the film path.
18. Push the printhead carriage lever to latch the assembly down.
19. Verify that the tension is minimal on the signal ribbon cable from the connector on the printhead to the shaft that captures the cable with a cable tie. Create a service loop if too much tension exist which can lift the printhead on this side during the printing routine.
20. Plug the power cord into the AC inlet and the parallel cable into the parallel port on the printer. Turn the power switch on. LEDs on the front panel will light up.
21. Insert a .030 inch (.75 mm) card into the back end of the printer path so that the right end of the card makes contact with the front black plastic card guide.
22. Run the WindColor for Windows software.
23. Click on the "Tools" menu. Click on the "Printer Tools" menu.
24. The printer tools menu will appear and at the middle of the menu, enter the following:

[ESC] !D [CR]

EXECUTE

25. Click on the EXECUTE bar to send the special command (!D) to drop the printhead down.
26. Next, enter the following to store the new resistance value of the printhead into memory that was recorded on paper earlier. **DO NOT** use the sample number 1765 shown.

[ESC] !R 1765 [CR]

EXECUTE

27. Applying a slight force on the center top of the peel bar to ensure that the peel bar is contacting (but not deflecting) the card, tightened the (2) two M3 screws on the top to secure the peel bar and printhead bracket onto the printhead.

28. Verify that the peel bar is contacting the card by looking through the left end of the printer for any light passes the interface between the peel bar and the card. This procedure locates the peel bar to be parallel and flush with the printhead to achieve optimum print quality.
29. Turn power off and than back on to cycle the printhead up to the home position. Remove the card from the card path.
30. Install a color ribbon and synchronize the ribbon to the yellow panel. Install cards to feeder box and place card weight on top of card stack.
31. Turn power off. Depress the push-button on the front panel and turn power back on. Hold the push-button until the rightmost LED goes off. Release push-button and the test card print sequence will initialize, printing a sample test card.
32. Study the printed test card for color image quality and darkness.

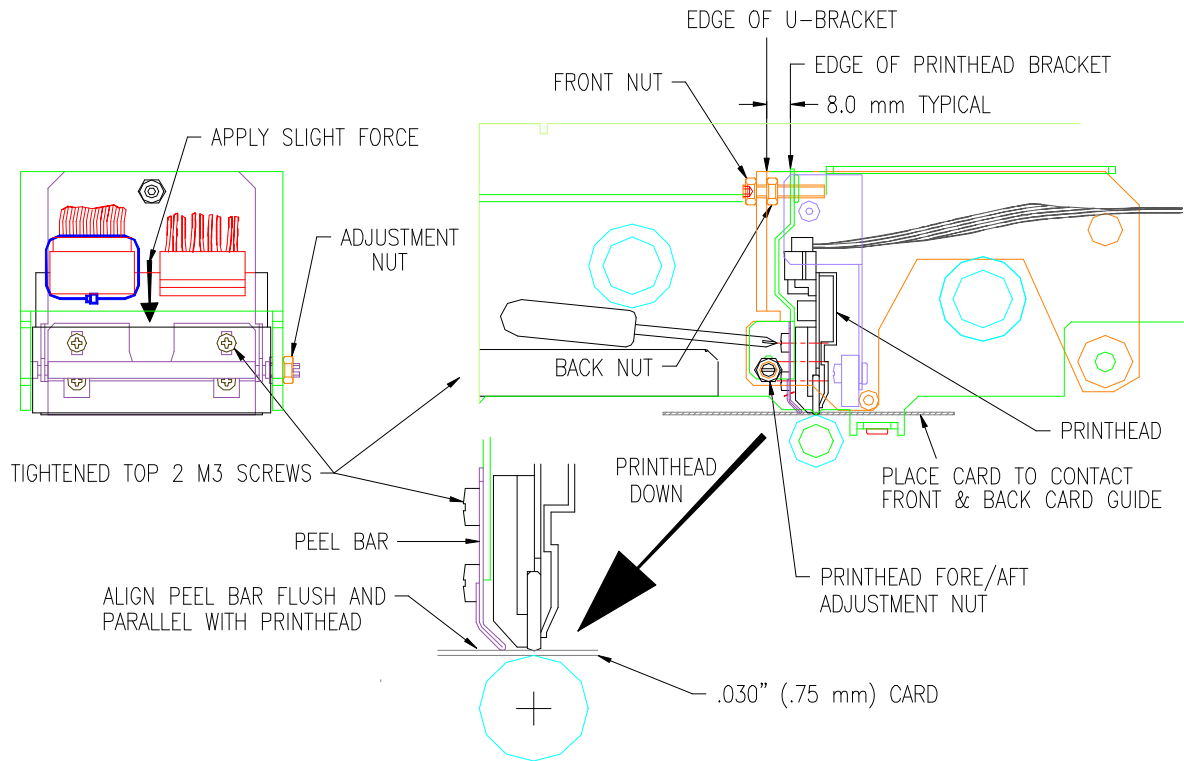


Diagram for Peel Bar Alignment and Printhead Adjustment

PRINthead ADJUSTMENT

33. There are two adjustments to control the print quality of the printhead onto the card. The first adjustment controls the angle of the printhead and the second adjustment is for the forward / back position of the printhead.
34. The angle adjustment is performed by releasing the front and back nut on the U-bracket and positioning the printhead bracket edge relative to the U-bracket edge. Adjust the

distance between the printhead bracket and U-bracket in increments of 0.5mm (forward and back) to finetune the print quality desired on the card. Resume if necessary until the optimum image results are attained.

35. Adjusting the printhead angle will shift the heat element line on the printhead forward or back relative to the centerline of the platen roller. The printhead fore/aft adjustment nut (located toward the lower left corner of the U-bracket) provides the necessary correction to align the heat element line to the platen centerline.
36. Turn the nut in 30° increments (clockwise and CCW) to move the printhead. Print a test card after each adjustment to verify the print quality achieved. Resume if necessary until the optimum image results are attained.

