

Technical Support Bulletin: S3-FILPC-01

Field Installation of BVS-S3 Load Plate and Chassis assembly

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This procedure outlines the steps required to install the BVS-S3 Load Plate and chassis assembly.

Note: Before performing this procedure, read this entire document. If you have any questions, contact BTECH Technical Support. We are here to assist you!

ELECTROCUTION HAZARD!

This procedure involves working with high voltage. The voltage sensing leads and load current leads carry full battery voltage. Battery Voltage can be as high as 600Vdc depending on the battery system! If you are not trained to work with high voltage equipment, do not attempt to use this procedure!

Tools Required:

1/8" flat screwdriver

#1 Phillips screwdriver

7/16" hex wrench or ratchet wrench with 7/16" socket and 8" extension

9/16" socket and 8" extension

Tape

1. To assist in installation of the chassis and load plate, it may be helpful to tape or tie the various leads within the cabinet to the top of the cabinet. Be careful not to nick any wires.
2. Guide the chassis/load plate assembly rails onto the four bolt studs in the corners of the BVS cabinet. Install the washers and tighten the 9/16 nuts.
3. If adjustments or measurements are to be made that require access to the internal components of the chassis, the chassis cover should be at least partially reinstalled with several of the top mounting screws at this time for safety.
4. Reinstall the cables that run from the left side of the chassis to the display board into the clips. Note: The red trace on the ribbon cable should be on the bottom as the cable leaves the chassis. Sufficient slack should be left between the clips to permit the door to swing open. The cable is normally folded under diagonally after it lands on the door so the red trace is on the right side as the cable runs up to the display board. Reconnect the cables on display board starting with the top connector. CAUTION: BE CAREFUL THAT THE PINS ARE PROPERLY ALIGNED TO PREVENT DAMAGE TO THE UNIT! If required, remove the cover plate on the display board to ensure proper alignment of connectors on the plug.
5. If there are ground leads connected to the chassis, load plate, cabinet or building ground, reconnect the leads at this time.

6. **CAUTION: The plugs to be reconnected in this step carry battery voltage! Verify that no bare wire is exposed where the wires are inserted into the plugs and the wires are not loose. If bare wire is visible, avoid contact with the exposed wire(s)!** Starting at the right-hand side of the chassis, carefully reinstall the orange Weidmueller plugs from the sockets on the top of the chassis. **CAUTION: Each of the plugs is labeled. Insert the plugs in the appropriate socket!** Press the front and rear edges of the plugs until they snap firmly into position.
7. Reconnect the remainder of the plugs into the appropriate sockets at the top of the chassis. Firmly press on the plugs until they snap into position. **DO NOT** install the black load lead connector(s) into the sockets at the top, left-hand side of the load plate yet!
8. Plug the AC step-down transformer into bottom plug of the duplex outlet on the right side of the cabinet and plug the cord into the appropriate socket on the top of the chassis. A beep should be heard indicating that the processor has rebooted. If not, unplug the transformer and wait 5 seconds and then plug back in. The beep should now be heard.
9. If the unit is equipped with a modem, plug the modem power supply into the duplex outlet and reconnect the phone cable to the modem. Reinstall the modem cable (or modem if directly connected) to the chassis.
10. Turn **ON** the **NICAD** battery switch and move the **RUN/STANDBY** switch to the **RUN** position. These switches are located on the top of the right-hand side of the chassis.
11. Within several minutes the display should show the normal battery voltage.
12. Reinstall the black load lead connector(s) into the sockets located at the, top left-hand side of the load plate.
13. **NOTE: If a new chassis is being installed or a new motherboard was installed in the old chassis, a current clamp calibrated with the motherboard must be installed!**
14. Allow the chassis to warm-up for several hours before making any measurements or adjustments!
15. Following any adjustments to internal components, the chassis cover should be reinstalled.

Route the printer cable in the cable clips on the chassis leaving sufficient slack to allow the door to close. Plug the printer into the appropriate socket.