

Equipment Technical Bulletin

Replacing NS-500 and NS-1000E PCBs with D3000 PCB



Safety



Always wear personal protective equipment such as gloves and safety glasses when working with potentially hazardous chemicals.

Electrical installation must be performed by personnel trained in accordance with local regulations.

Replacing NS-500 PCB with D3000 PCB

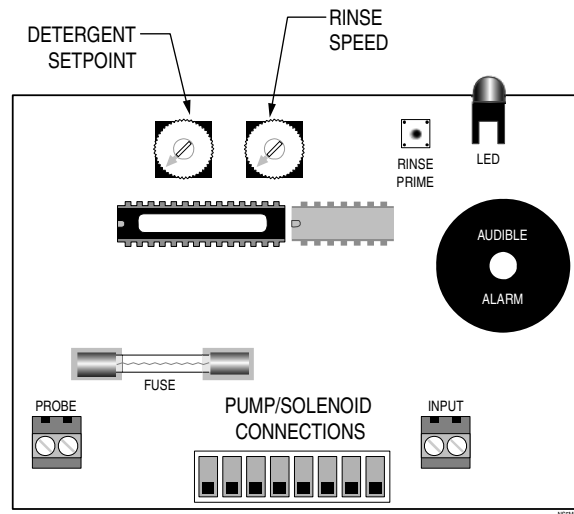


Figure 1. NS-500 PCB

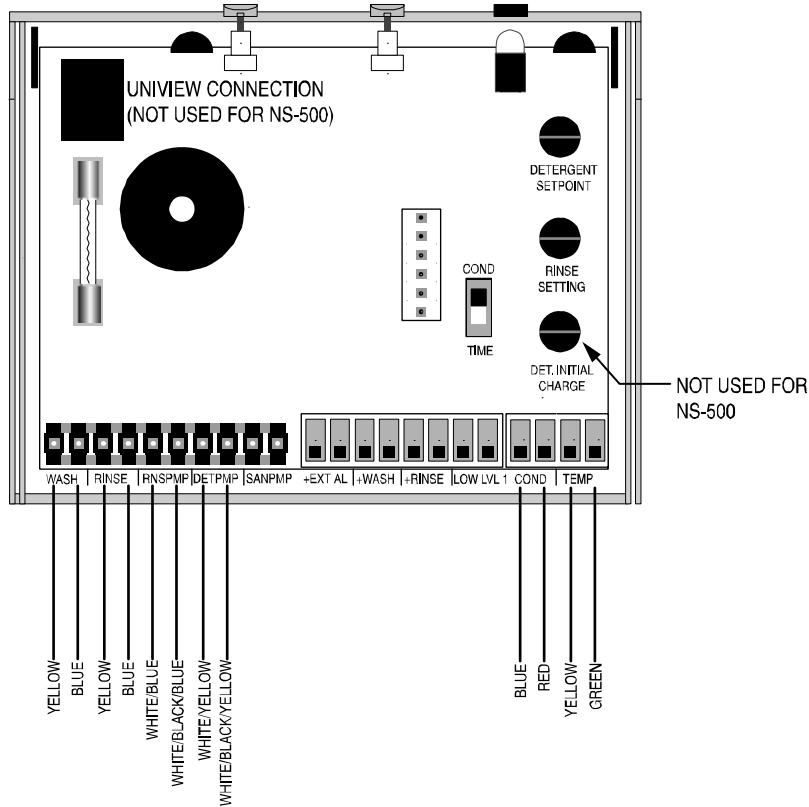
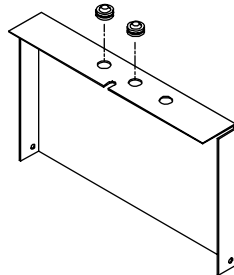


Figure 2. D3000 PCB with transformer, pump/solenoid and probe wire connections from NS-500.

1. Disconnect power from the NS-500.
2. Note the positions of the NS-500 potentiometer dials.
3. Make note of the positions of the wire harnesses in the pump/solenoid connections.
4. Disconnect the wire harnesses from the pump solenoid connections. Cut tie wraps if necessary.
5. Remove the NS-500 PCB.
6. Using a screwdriver, poke through the NS-500 label where there are holes in the sheet metal. This will allow room for the prime buttons on the D3000 PCB.
7. If desired, insert a switch boot (code #039460) into each hole as shown. Please note that this boot is purely for cosmetic purposes and is sold separately from the D3000 PCB kit.



8. Snap the D3000 PCB into place.
9. Connect the wire harnesses to the appropriate positions. Figure 2 shows the correct wire colors from the NS-500 wiring to positions on the D3000 PCB.
10. Program the unit using the potentiometer dials, following the instructions in the **D3000 Installation and Setup Guide** under **SETUP/Programming/Potentiometer Programming**. This guide can be found on the Beta

Technology website.

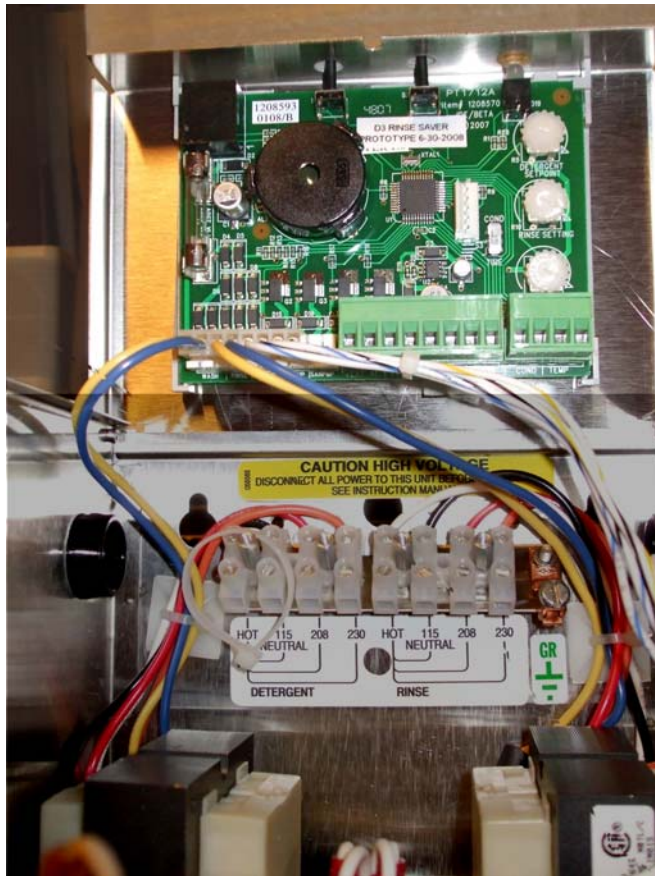


Figure 3. D3000 PCB installed in NS-500 enclosure.

Replacing NS-1000E PCB with D3000 PCB

When the NS-1000E is fitted with a D3000 PCB, you will be able to program it with either its potentiometer dials or with the Uniview programmer. Please note that the Uniview programmer must be ordered separately, under code #058017.

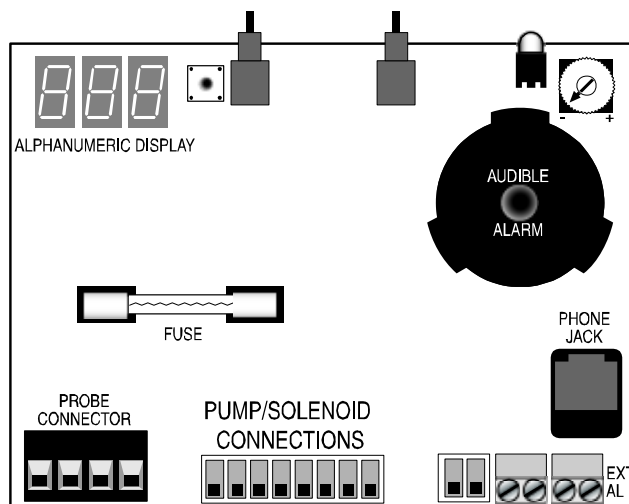


Figure 4. NS-1000E PCB

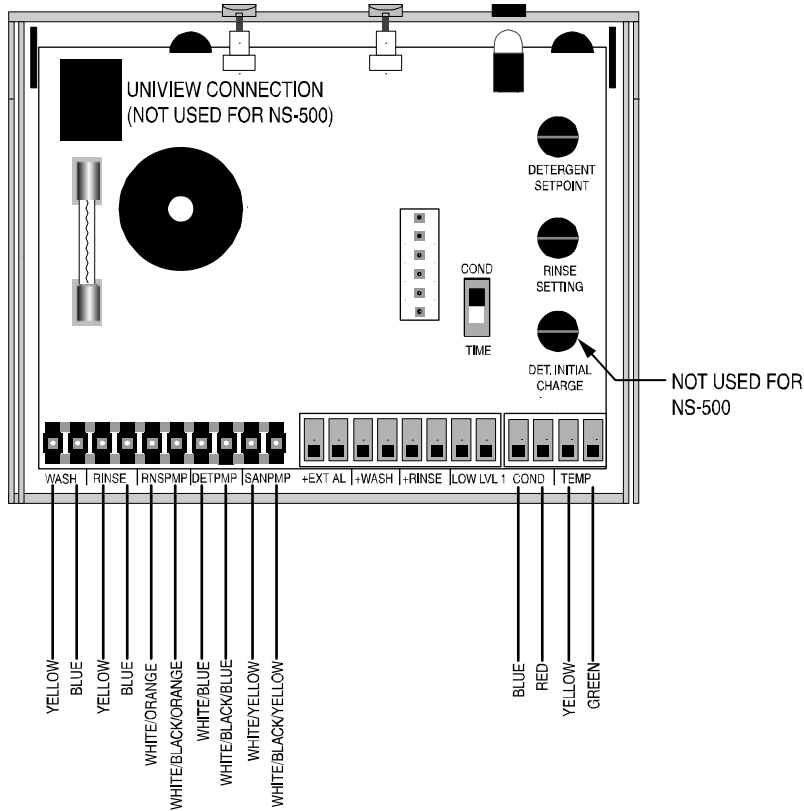


Figure 5. D3000 PCB with transformer, pump and probe wire connections from NS-1000E.

1. Make note of all mode and setup information for your existing NS-1000E.
2. Disconnect power from NS-1000E unit.
3. Make note of the positions of the wire harnesses in the pump/solenoid connections.
4. Disconnect pump/solenoid wire harnesses from NS-1000E PCB.
5. Remove NS-1000E PCB.
6. Connect Uniview programmer cable to Uniview Connection point on D3000 PCB.
7. Insert D3000 PCB into NS-1000E enclosure.
8. Connect the NS-1000E wire harness to wash or rinse power, or both if you have 2 transformers on your unit.
9. Power up the unit.
10. Program the unit using the Uniview, following the instructions in the **D3000 Installation and Setup Guide** under **SETUP/Programming/Potentiometer Programming**. This guide can be found on the Beta Technology website.
11. Disconnect power from the NS-1000E unit and pull the D3000 PCB out far enough to disconnect the Uniview cable.
12. Put the D3000 PCB back into place and connect all of the pump harnesses appropriately. Figure 5 shows the correct wire colors from the NS-1000E wiring to positions on the D3000 PCB. You may need to cut tie wraps so that the wire harnesses can reach their connection points.



Figure 6. D3000 PCB installed in NS-1000E enclosure.



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