FIELD INSTALLATION OF A SERIES 1000 EXPANSION KIT

These instructions describe the installation of hardware to control an additional pair of hose outlets. When expanding by more than 2 hose outlets, follow the same instructions but realize the kit quantities will increase and several of the steps will need to be repeated multiple times.

The following kits must use these instructions:

C05760	Exp. Kit, 2 To 4 Pumps 115V	C06108	Exp. Kit, 2 To 4 Pumps 230V
C05761	Exp. Kit, 2 To 6 Pumps 115V	C06109	Exp. Kit, 2 To 6 Pumps 230V
C05762	Exp. Kit, 2 To 8 Pumps 115V	C06110	Exp. Kit, 2 To 8 Pumps 230V
C05763	Exp. Kit, 4 To 6 Pumps 115V	C06111	Exp. Kit, 4 To 6 Pumps 230V
C05764	Exp. Kit, 4 To 8 Pumps 115V	C06112	Exp. Kit, 4 To 8 Pumps 230V
C05765	Exp. Kit, 6 To 8 Pumps 115V	C06113	Exp. Kit, 6 T0 8 Pumps 230V

The following is a list of parts that may be in your expansion kit. The quantity of parts and selection of cable assemblies will vary with the individual kits, however each kit will have at least one item associated with Item 1 through 11. Item 12 will only be used with 230V expansion kits.

Item	P/N	Description
1	C06091	Cable Assy., Sw Detect, Pulser
2	C04116	Screw, 8-32 x ½ Pan Hd Phillips
3	C05677	PCB Assy, PC 1000 Series 115V
	C05675	PCB Assy, PC 1000 Series 230V
4	C08759	Screw, 6-32 x 3/8 Phl w/lwsh
5	C05687	Relay Module Assy., 2 hose
6	C05767	Cable Assy, Rib. PC to MPU 4P
	C05766	Cable Assy, Rib. PC to MPU 6P
	C05722	Cable Assy, Rib. PC to MPU 8P
7	C05727	Cable Assy, Pmp Control Pwr 4P
	C05726	Cable Assy, Pmp Control Pwr 6P
	C05725	Cable Assy, Pmp Control Pwr 8P
8	C08687	Decal, Pulser/Sw Det, red, blk 3-4
	C08688	Decal, Pulser/Sw Det, red, blk 5-6
	C08689	Decal, Pulser/Sw Det, red, blk 7-8
9	C02293	Decal, Nos. .36 high, black 1-4
	C02294	Decal, Nos. .36 high, black 5-8
10	C08683	Decal, dual Nos. .24 high, red 1-4
	C08684	Decal, dual Nos. .24 high, red 5-8
11	C02418	Decal, Nos. .24 high, white 1-4
	C02952	Decal, Nos. .24 high, white 5-8
12	C02833	Decal, L1 L2 230V Sw. Detect

INSTALLATION INSTRUCTIONS

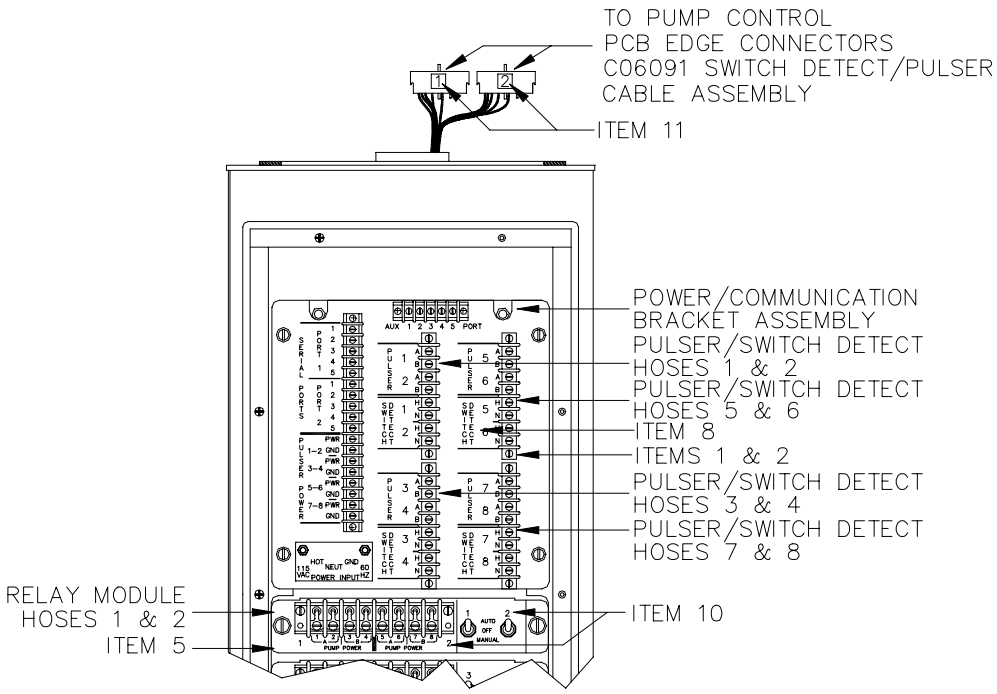
1. Unlock and open the rear door of the Series 1000 head. Remove the pump control access panels.

2. Turn off the AC power switch located to the lower right in the rear of the head.

3. Remove the hood of the unit from the head. This is done by removing the four external screws (two each side) which secure the hood to the Series 1000 head. Also remove the two internal wing nuts which secure the top of the hood to the hood support bracket.

4. Turn off all breakers to the pumps or dispensers, solenoids, submersible pumps, Series 1000, etc., to ensure all power has been removed from the Series 1000 pedestal.

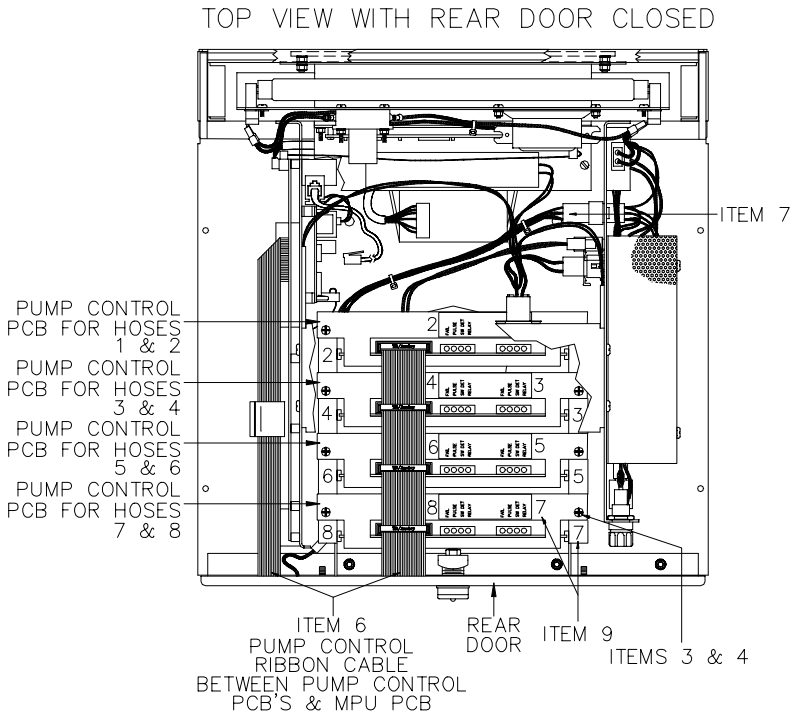
5. Locate the Power/Communication Bracket Assembly in the pedestal of the Series 1000. Install the C06091 Switch Detect/Pulser Cable Assembly (Item 1) by feeding the cable connectors and wiring through the appropriate slot in the Power/Communication Bracket Assembly and secure in place with 2 C04116 8-32 x ½ Phillips screws (Item 2). The four spade wires of the assembly should be fed down to the area of the Relay Module Assemblies. The two black edge connectors should be routed up through the pedestal and into the head of the Series 1000.

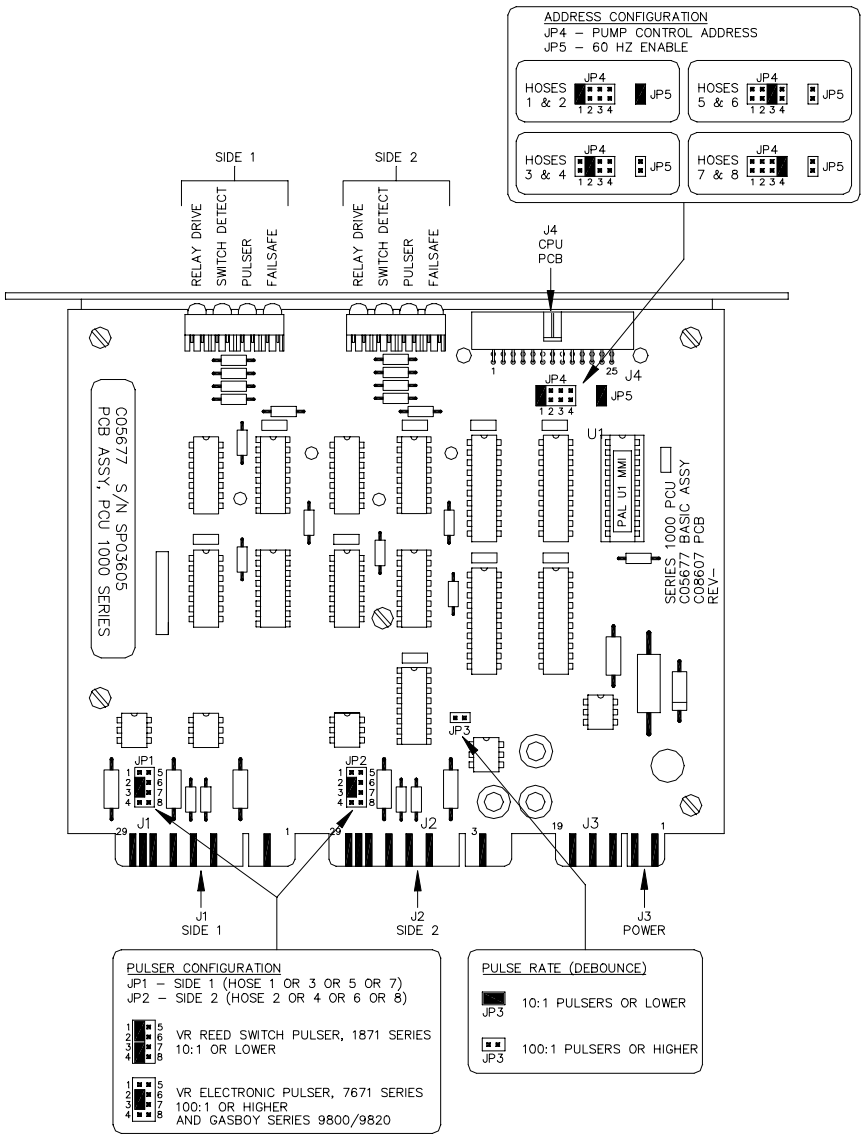


6. Locate the decal for the pulser and switch detect identification (Item 8) of the previously installed C06091 Switch Detect/Pulser Cable/Terminal Block Assembly. Line up and apply the decal to the left of the terminal block on the Power/Communication Bracket Assembly.

7. Locate the Series 1000 Pump Control PCB(s) in the Pump Control Support Bracket on the rear door of the Series 1000 head. Remove the Pump Control Ribbon Cable from each Pump Control PCB and also from the MPU PCB, and discard.

8. Locate the Series 1000 Pump Control PCB Assembly (Item 3) and set up the jumpers to properly address the board and select the proper pulser configuration (see the jumper diagram on the next page). Install the PCB Assembly into the next available slot in the pump control support brackets and secure it with 2 C08759 6-32 x 3/8 Phillips Screws with lockwashers (Item 4). Locate the black decal numbers (Item 9) and trim out the individual numbers with a scissors. Apply the numbers to the Series 1000 Pump Control PCB Assembly and to the pump control support brackets. Remember the odd numbered pumps are to the right, the even numbered pumps are to the left.

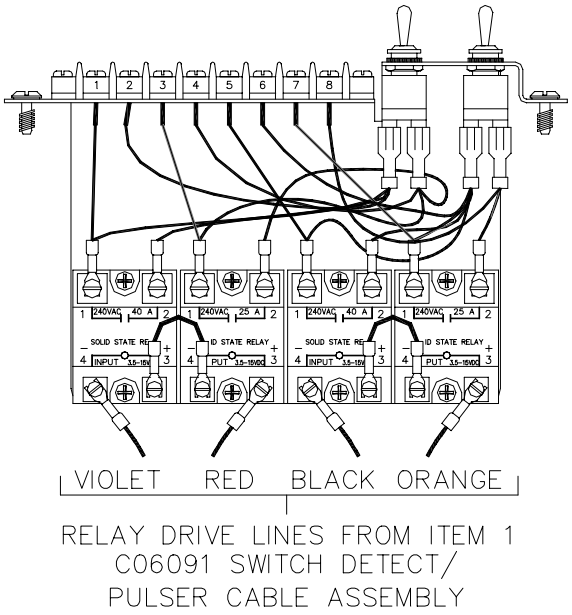




PCU Jumper Settings

9. Locate the two black edge connectors that were fed into the head of the Series 1000 as part of the installation of the C06091 Switch Detect/Pulser Cable Assembly. The two connectors are identical except that one uses a red and a violet wire as the relay drive while the other uses an orange and a black wire. The connector with the red and violet wires must be connected to the J1 edge connection of the Series 1000 Pump Control PCB Assembly. The connector with the orange and black wires must be connected to the J2 edge connection. Locate the white decal numbers (Item 11) and trim out the individual numbers with a scissors. Apply the numbers to the top of the black edge connectors just installed. The connector attached to J1 of the Pump Control PCB Assembly must be labeled as the odd numbered pump while the connector attached to J2 must be labeled as the even numbered pump.

10. Locate the existing relay module(s) in the pedestal of the Series 1000. The four spade wires from the previously installed C06091 Switch Detect/Pulser Cable Assembly are the relay drive lines and should be attached to the C05687 Relay Module Assembly (Item 5) as indicated on the drawing. When the connections are complete mount the Relay Module Assembly into the next available position and secure with the captive screws. Locate the red decal numbers (Item 10) and trim out the individual numbers with a scissors. Apply the numbers to the Relay Module Assembly in two locations, the terminal block and the override switches. The odd numbered pumps are on the left of the terminal block and the left switch. The even numbered pumps are on the right of the terminal block and the right switch.



11. Locate the new Ribbon Cable Assembly (Item 6) and attach it between the Series 1000 Pump Control PCBs (J4 connectors) and the MPU PCB (J9 connector).

12. Locate and remove the Pump Control Power Cable attached to the J3 edge connector on the rear of each Series 1000 Pump Control PCB. Remove the other end of the cable from the 6 position connector located near the Emergency Stop/Disable Pumps switch on the power supply support bracket. The cable can be discarded. Install the new Pump Control Power Cable (Item 7) in place of the previously removed cable, taking care to install the properly numbered connector to the corresponding J3 edge connector on the Series 1000 Pump Control PCB.

13. If you have a 230V expansion kit, you will have an Item 12 decal. Locate the Item 8 decal that was applied to the Power/Communication Bracket Assembly in Step 6. By the Switch Detect portion of the decal are the letters H and N. Apply the Item 12 decal so it covers the H and N letters.

14. Replace the hood of the unit and fasten it with the four external screws and two internal wing nuts removed previously.

15. Turn on all breakers to the pumps or dispensers, solenoids, submersible pumps, Series 1000, etc., to reapply all power within the Series 1000 pedestal.

16. Turn on the AC power switch.

17. Close and lock the rear door of the Series 1000 head. Reinstall the pump control access panels.