

## RAYPAK SERVICE INSTRUCTIONS

### PROTÉGÉ SERIES VARIABLE-SPEED PUMP (VSP) MODEL RPVSP1 KIT 018236F, PROGRAMMABLE CONTROLLER

**IMPORTANT NOTICE:** These instructions are for the use of qualified individuals specially trained and experienced in the installation and maintenance of this type of equipment and related system components. Installation and service personnel are required by some states to be licensed. Persons not qualified shall not attempt to install, service, or maintain this equipment.

**DANGER – SHOCK HAZARD:** Make sure electrical power to pump and heaters is disconnected to avoid damage to components, potential serious personal injury or death.

**WARNING:** Make sure water & power have been turned OFF before making any repairs or service to the unit.

#### Scope

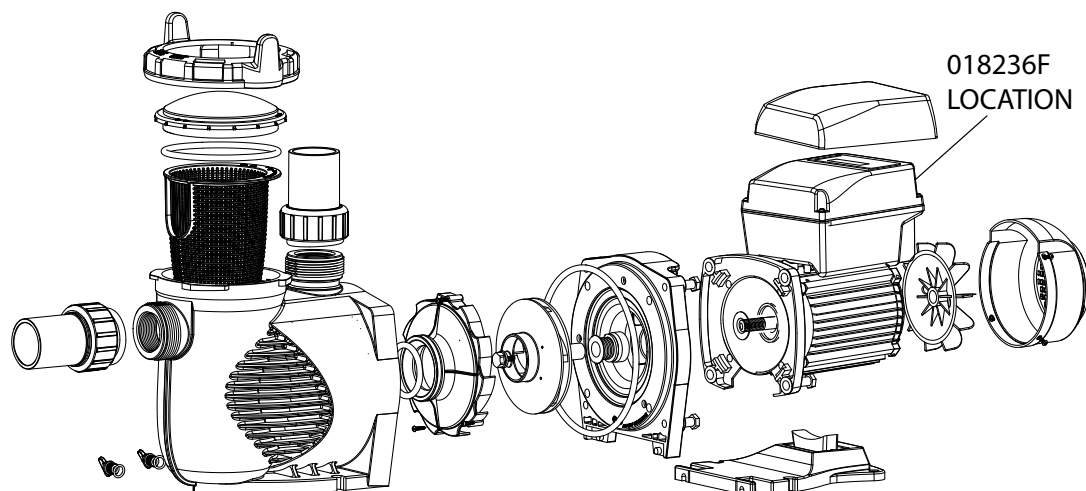
This kit provides the part required to install a replacement programmable controller PC Boards for the Protégé Line of Variable-Speed Pumps (VSP).

#### Required Tools


- Phillips fine-head screwdriver

#### Parts Provided In This Kit

- One (1) Set of PC Boards



## Programmable Controller / PCB Board Replacement



**⚠ DANGER: ELECTROCUTION OR ELECTRICAL SHOCK RISK. DISCONNECT ELECTRICITY BEFORE WORKING ON PUMP, OR SHOCK, BURN OR ELECTROCUTION CAN RESULT.**

Always disconnect pool pump power at the circuit breaker before servicing the pump. Death or serious injury to service people, pool users or others due to electric shock could result from failure to avoid the high danger risk.

1. Power must be in the **OFF** position in the breaker panel, as the unit is hard-wired directly into the power panel, meaning that is the only way to cut power.
2. Isolate the pump by closing valves if provided.
3. Relieve the filter pressure by loosening the filter drain valve until the pressure gauge reads zero.
4. Lift the smoked plastic sun cover off the controller as shown in **Figure 1**. Set it aside.



**Figure 1. Sun Cover Identification**

5. Remove the four (4) Phillips head screws that fastens the Controller Cover and keypad to the Controller Housing as shown in **Figure 2**. Remove keypad Controller PC board, located on the inside of the control cover panel by removing the four (4) Phillips head screws that fasten it to the cover. Unplug the keypad ribbon cable carefully and slowly.



**Figure 2. Sun Cover Screw Location**

6. Unplug the wire harness from the five (5) pin receptacle as shown in **Figure 3** and **Figure 4**. Set the cover aside.

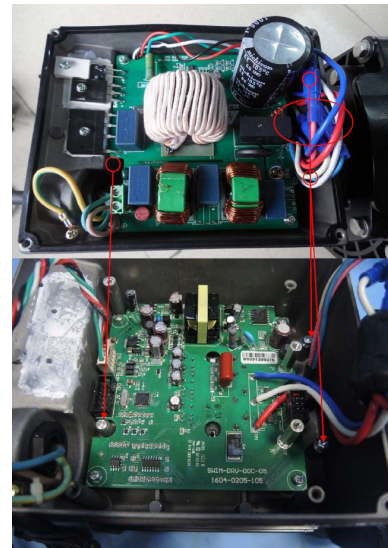


**Figure 3. Cover Removal**



**Figure 4. Plug Removal**

7. Unfasten and remove the 3 Phillips head screws that anchor the Controller to the Pump as shown in **Figure 5**.



**Figure 5. Screw Location**

8. Reverse Step 7 to Step 1 in order to install the new Controller unit, and bring the pump back into operation.