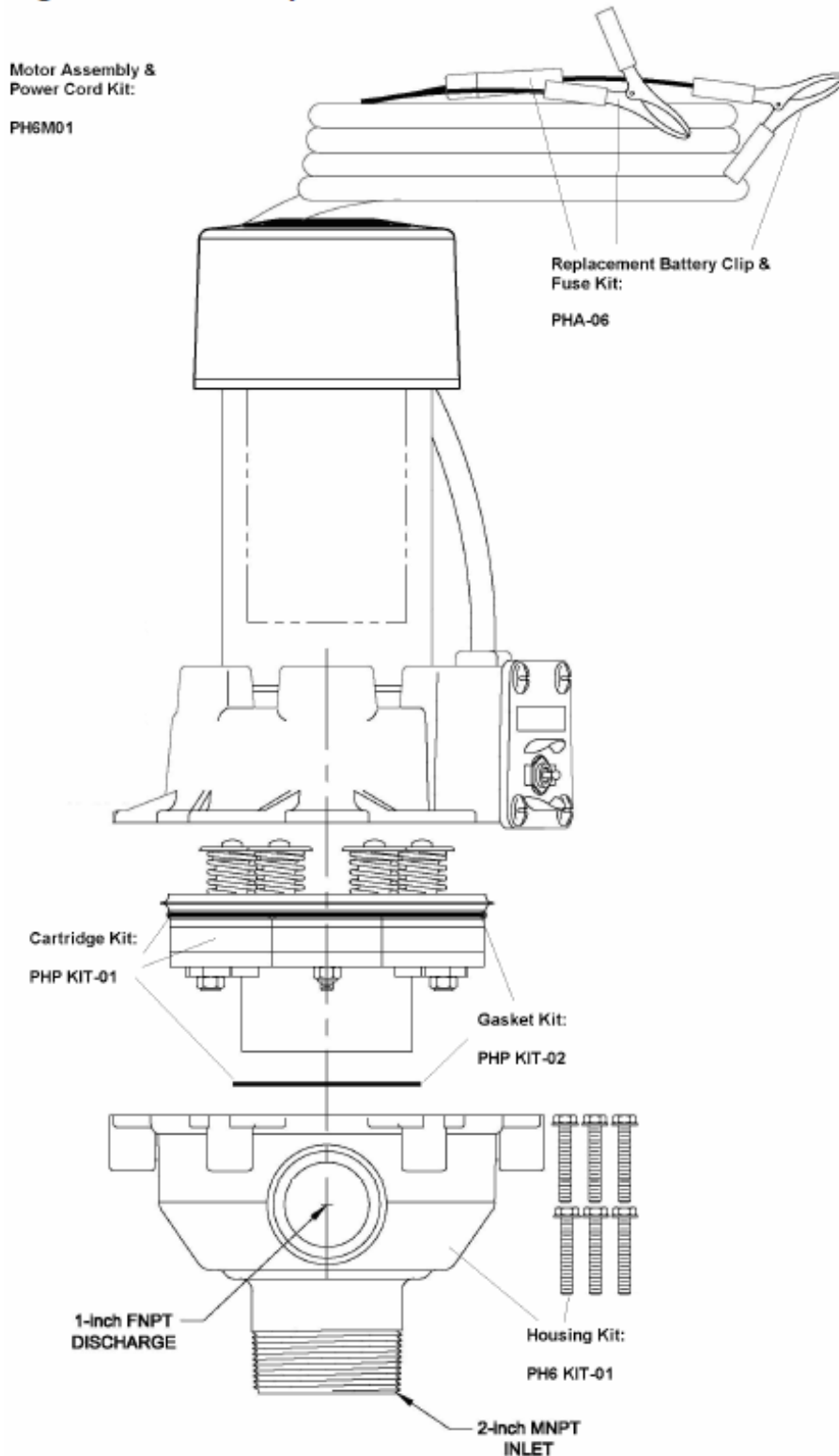


Figure 1: PH6 Pump



PH6 Service Kits:

Several service kits are available that allow reworking the PH6 pumps. Standard materials and configurations are underlined.

PHP KIT-01: This cartridge kit is the cartridge kit that includes the Pump Cartridge with Santoprene / EPDM diaphragm, O-ring and Bottom Gasket.

PHP KIT-01V: Same as the PHP KIT-01, but with a Viton O-ring and Bottom Gasket.

PHP KIT-02: This gasket kit contains a replacement EPDM Bottom Gasket and O-ring (no Pump Cartridge).

PHP KIT-02V: Same as the PHP KIT-02, but all materials are Viton.

PHP KIT-03: This power switch kit contains a replacement On/Off Toggle Switch, Molded Junction Box Cover, and screws.

PH6 KIT-01: This kit contains a replacement Nylon Pump Housing and (6) screws.

PH6M01: This motor kit contains a replacement Motor Assembly consisting of the 12-volt motor assembly with Cables, Terminal Connection Clamps, and Wobble Plate.

PHA-06: This kit contains a replacement red wired Alligator Clip (with Fuse) and a black Alligator Clip.

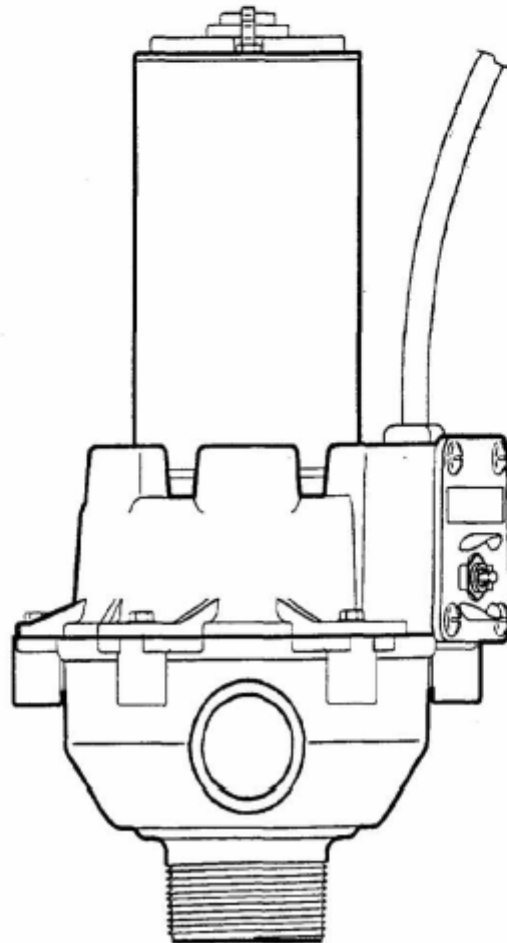
PHP Kit-05MM-01: This kit is an assembly of the Bottom Housing and the male 3-pin Micro-Matic Coupler. Be sure to order the PHP KIT-02 to replace the Bottom Gasket and O-ring.

PH6 KIT-02: This kit contains a replacement Polypropylene Pump Housing and (6) screws.



PH6 Operator Manual

12-Volt DC Plastic Herbicide Pumps



Operating Procedures:

Depending on pump model and mounting arrangement the pump can be mounted in either a vertical or horizontal (optional accessories required) position.

-Vertical Mounting (PH6 Pump, PH6P, and varieties):

1. Secure pump to tank using appropriate customer supplied fitting.
2. Secure 1-inch hose to the 1-inch discharge port of pump.
3. Connect Terminal Clamps to the positive (red) and negative (black) terminals on a 12-15 volt, DC power source.

-Vertical Mounting (PH6P-MM, PH6P09, PH6P16):

1. Secure pump to tank by fitting the 3 pin male Micro Matic coupler into the appropriate 3 slot female Micro Matic coupler and dip tube assembly, and lock into place.
2. Secure 1-inch hose to the 1-inch discharge port of pump.
3. Connect Terminal Clamps to the positive (red) and negative (black) terminals on a 12-15 volt, DC power source.

-Horizontal Mounting (CES-PH6 and most standard varieties):

*Note: Some configurations will have differing fittings used to connect pump to tank. The general procedure for installation is, to connect the pump to the tank first, and then secure the motor bracket to the tank, tightening all connections afterward.

1. In the horizontal position screw the 2-inch Street Elbow onto the bottom 2-inch male NPT suction port of the pump.
2. Secure 2-inch to 1-inch Bung Adapter fitting to the free end of 2-inch Elbow.
3. Secure to tank per connection instructions.
4. Adjust Motor Support Bracket to properly support the Motor in a level, horizontal position.
5. Secure 1-inch hose to the 1-inch discharge port of the pump (or if using a pump mounted SEM-10 meter, the discharge port of the meter). A 1-inch elbow may be used to position hose in direction of service.
6. Connect Terminal Clamps to the positive (red) and negative (black) terminals on a 12-15 volt, DC power source.

For CES-MTS pump installation, see the specialized IOM manual included with your pump.

Recommended Practices:

- These pumps were designed to be used with an 8-12 foot long hose. Use with longer hoses will decrease flow rate.
- **DO NOT** leave power switch in the “on” position when pump is not in use. This could lead to complete emptying of tank if a leak occurs.

- DO NOT run pumps continuously for longer than 30 minutes under a no flow (dead headed) situation.
- DO NOT over tighten plastic threaded connections. Breakage can occur, resulting in fluid exposure.
- If valve on end of hose is equipped with an internal check valve that does not allow air removal the pump may need to be primed first in order to build up enough pressure to expel air in the system. The length of hose, fluid level of tank and additional accessories will affect pump priming. It may be necessary to first fill pump with water or chemical before connection of the hose.
- Teflon Tape is the recommended thread sealant on all pipe connections.
- Replace cartridge O-ring and Bottom Gasket if Pump Cartridge is removed or replaced.
- Flush pump assembly with water prior to any maintenance or new installation, as exposure to chemicals can cause bodily harm. Gloves and proper eye protection should be worn.

Disassembly/ Assembly Procedures:

Pump Cartridge Removal:

1. Purge pump with clean water.
2. Disconnect Terminal Connection Clamps from 12-15 volt DC power source.
3. Remove Motor by removing the six (6) Screws from the pump assembly.
4. Remove Cartridge from Pump Housing by placing blunt object (Screw Driver Handle, etc.) into the suction port of Pump Housing and push the Cartridge out of Pump Housing. Do Not pry cartridge from the Pump Housing, as damage to O-ring area can occur.

Cartridge Installation:

1. Assure bottom Pump Housing Gasket is centered in bottom of Pump Housing.
2. Align flat surface on side of Pump Cartridge with discharge port on Pump Housing.
3. Push Pump Cartridge lightly on outside top surface into the Pump Housing. Do Not Force: if Cartridge does not go down re-align Cartridge in Pump Housing.
4. Replace Motor Assembly onto Pump Housing with Cartridge in place. Be sure to align one of the six dimples on the Wobble Plate with one of the 6 Motor Hold Down Screws. This will assure proper line up of Wobble Plate on Piston tops.
5. Secure the six Screws into the Pump Housing using a diagonal tightening pattern. Recommended torque specification is 28-32 in-lbs.

Motor Assembly Removal:

1. Purge pump with clean water.
2. Disconnect Terminal Connection Clamps from 12-15 volt DC power source.
3. Remove Motor by removing the six (6) Screws from the pump assembly.