

**Fill System Before Use**

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This system has been given a full functional test by the Perfect Point Test Department to verify proper operation and functionality. The dielectric system was then drained prior to packaging and shipment. **THE DIELECTRIC SYSTEM MUST BE REFILLED AND BLED BEFORE FIRST USE**

Failure to properly fill and bleed the dielectric system prior to operation will cause serious damage and void the warranty. Please follow these system filling and bleeding instructions prior to e•drill operation. If you have any questions regarding these procedures please contact the Perfect Point, Inc. Customer Service Department for assistance at (714) 891-6533.

The following instructions assume the user has been trained in system operation and has read and understood the e•drill User Guide.

**1.0 Unpack System:**

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| 1.0 | Unpack the system and locate the joined clear Drain/Fill Tubing and Plastic Fill/Drain container included with the shipment.  |
| 1.2 | Connect the Mobile Service Unit (MSU) Power Cord and Hand Held Terminal (HHT) prior to proceeding.  |
| 1.3 | Insert the ends of the Fill/Drain tube in the VACUUM and PRESSURE Ports in the back of the MSU. Fill the Plastic Container with approximately 2 Gal. of clean tap water. Submerge the opposite end of the tubing in the water. Ensure the end the tubing will remain submerged throughout the following procedures or air will be introduced into the system and bleeding procedures will take longer than necessary. |

**Fill Drain Tubing and Plastic Tub Set Up**

**2.0 System Power Up and Filling:**


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| 2.1 | Power up the system. It will take approximately 30 seconds for the HHT to load the system program. Once the terminal screen is lit and menus appear, proceed to Step 2.2.   |
| 2.2 | Use the HHT to access the system Maintenance screen. Run the "Top Off" procedure to charge the dielectric system. The vacuum pump will start, drawing water into the system until the HHT indicates the tank is <i>full</i> and the pump shuts off automatically. |

**Hand Held Terminal Maintenance Screen**


**SEE REVERSE SIDE**

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	<p>2.3 Next, run “Empty Sediment Tank” routine to purge the system of air, while taking care to hold the end of the fill drain tube submerged in the container. The pressure pump will start, expelling water from the system until the HHT indicates the tank is <i>empty</i> and the pump shuts off automatically. A popup screen will appear on the HHT asking if the Sediment Tank is being cleaned. Select “NO”.</p> <p>Run the “Top Off” procedure once more to fully fill the system.</p> <p>If you have reason to believe that all the air has not been bled from the fluid system, repeat Step 2.3.</p>	<p style="text-align: center;"><b>Empty Sediment Tank Popup Screen</b></p> 
<b>3.0 Bleeding E•drill Umbilical:</b>		
	<p>3.1 When connecting an e•drill gun to the system, it is good practice to bleed the e•drill umbilical before use. Connect the e•drill Umbilical Cable to the MSU. Be sure the umbilical VACUUM and PRESSURE lines are installed in their proper locations. Turn the MSU Circuit Breaker “ON”. When the HHT has booted up, navigate to the Maintenance screen.</p> <p>Install an Electrode and its matching Adapter in the e•drill, and completely retract the Electrode using the Retract button.</p>	
	<p>3.2 Press the “Empty Sediment Tank” button on the HHT Maintenance screen; the pressure pump will start. Next; using the empty Plastic Fill/Drain container, depress the e•drill ground pin against the floor of the container. Allow entrapped air and water flow to escape from the e•drill tip until a steady flow of water is achieved, then stop the pump by pressing the “Empty Sediment Tank” button again.</p>	