



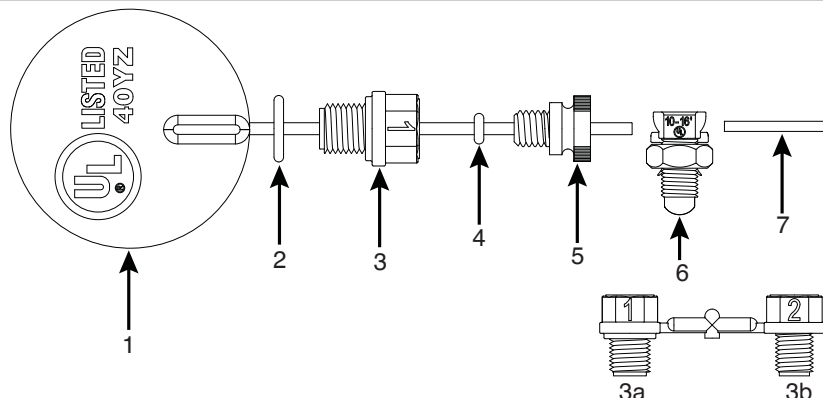
# PoolBond Above Ground Installation Instructions

Part No.  
PB-AG

**PoolBond**  
ELECTRICAL POOL BONDING

Patent: US 9,194,148 B1

1. Lollipop Bonding Plate
2. Pump Drain O-ring (Large)
- 3a. PoolBond Drain Plug #1
- 3b. PoolBond Drain Plug #2
4. Wire Seal O-Ring (Small)
5. Nylon Thumb Screw
6. Split Bolt Connector
7. Bonding Grid #8 Wire (Not Supplied)



### O-Ring Replacement Part #

Pump Drain O-Ring (2)  
PB-OR-10798

Wire Seal O-Ring (4)  
PB-OR-28846

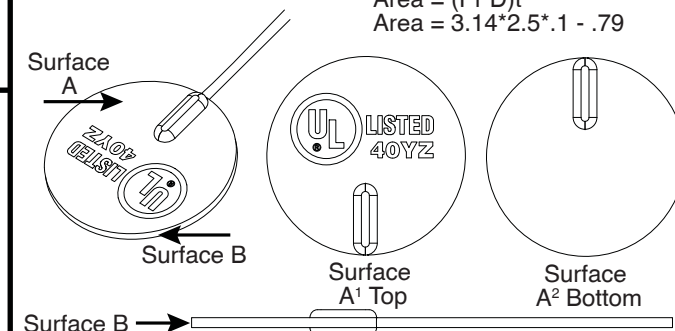
### Surface Area - Water Bonding Specifications

The 2008 National Electrical Code (NEC) requires that an intentional electrical bond of a minimum conductive surface area of 9 square inches be installed and in contact with the swimming pool water. This requirement is spelled out in Section 680.26(C). PoolBond PB-AG meets the specifications spelled out by the NEC.

Definitions  
 $Pi = \pi = 3.14$   
 $D = \text{Diameter} = 2.5$   
 $r = \text{radius} = D/2$   
 $t = \text{thickness} = .1$

Surface A  
 $\text{Area} = Pi * r * r$   
 $\text{Area} = 3.14 * 1.25 * 1.25 = 4.91$

Surface B =  $L * W = (\pi * D) * t$   
 $\text{Area} = (Pi * D) * t$   
 $\text{Area} = 3.14 * 2.5 * .1 = .79$



Total Area = Surface A<sup>1</sup> + Surface A<sup>2</sup> + Surface B  
 Total Area = 4.91 + 4.91 + .19 = 10.61

## IMPORTANT FIRST STEP - SELECT PROPER DRAIN PLUG

- This Water Bonding Kit is furnished with 2 drain plugs (3); one marked "1" (3a) and the other marked "2" (3b).
- Plug #1 (3a) is larger in diameter and is shorter than Plug #2 (3b).
- The proper drain plug (3) should easily thread into the pump drain hole using only finger pressure.
- Remove the drain plug and strainer basket from your above ground pool pump.
- **Important: Install plug #1 (3a) first.** If plug #1 (3a) threads easily into the drain hole, discard plug #2 (3b).
- If plug #1 (3a) fits tight in the drain hole try plug #2 (3b).
- If plug #2 (3b) does not fit properly call the technical support line listed below.
- Remove the Drain Plug (3) from the Pump Housing

## Installation

**Step 1.**  
Insert Lollipop Bonding Plate (1) into strainer housing, passing wire through the housing drain opening. **See Figure A.**

**Step 2.**  
Position the large O-Ring (2) on the proper drain plug (3) and tighten into the pump drain hole. The wire will pass through the hole in the drain plug (3). Tighten the plug approximately 1/4 turn after the O-ring (2) contacts the pump housing. **See Figure B.**

**Step 3.**  
Position lollipop bonding plate (1) in strainer housing to avoid interference with the strainer basket by bending the wire. **See Figure C.**

**Step 4.**  
Insert the wire seal O-ring (4) into the pump drain plug (3). Finger tighten the nylon wire seal thumb screw (5) until the wire seal O-ring (4) is properly seated (approximately 3-1/2 turns). Do not use tools to tighten thumb screw (5), use only your fingers. **See Figure D.**

**Step 5.**  
Connect the lollipop wire to the bonding grid (7) using the split bolt connector (6). Install strainer basket to complete the installation. **See Figure E.**

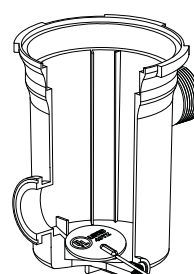


Figure A

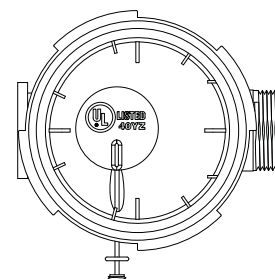


Figure B

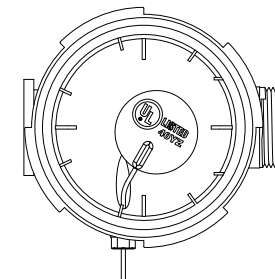


Figure C

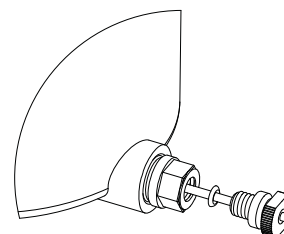


Figure D

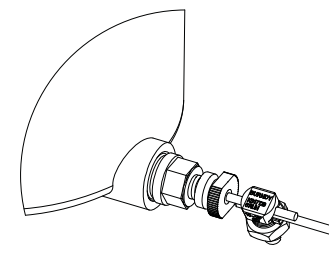


Figure E



Perma-Cast Co. Pueblo, CO  
 www.permacastonline.com  
 Call 719-544-9544