

Section IV Flood Lamp Replacement Procedure

1. Turned off main electrical switch or circuit breaker, as well as the switch which operates the underwater light itself.
2. Material required for installation,
 - i. New washer (Part Number: 2021048)
 - ii. New flood lamp (Part Number: 4011057) or New LED bulb (Part Number: 04011016)
3. Loosen the pilot screw on the face ring assembly by a screw driver, and place the light fixture on deck
4. Loosen the bolt of the wire clamp by a screw driver, See Figure, 4. Then remove the face ring assembly from the light encasing.
5. Remove and discard the old washer and the old flood lamp .
6. Install the new flood lamp and the new washer; make sure the washer is sat in the proper position.
7. While holding the fixture upright, place the lens and face ring on top of the light encasing.
8. Turn over the underwater light with the lens facing downward, hold the ends of the uni-tension clamp together. Insert the bolt through one end of the bend end and then insert the other end through the other bent end and thread the bolt into the nut. Using a screwdriver tighten the screw and nut until the distance between the ends of the clamp equals 0.25 inches (6.4mm) or less; see Figure 5 .

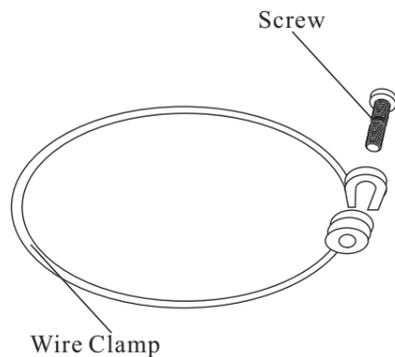


Figure 4 Loosen the bolt to remove the face ring assembly from the light encasing.

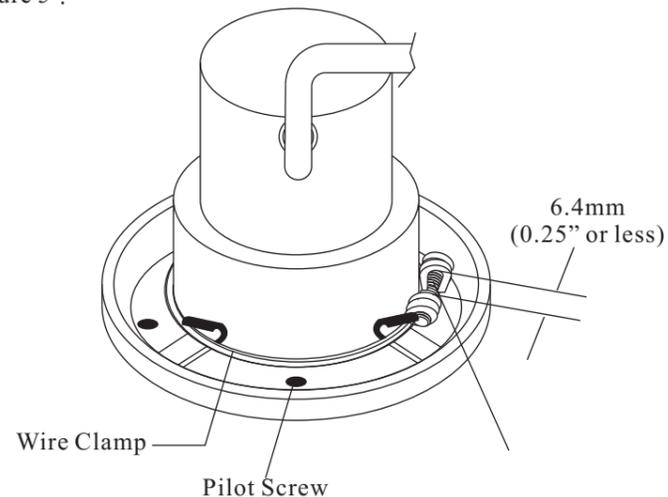


Figure 5 Tighten the bolt until the distance between the ends of the clamp equals 6.4mm (0.25") or less

9. Coil the extra cord around the fixture and place the light assembly into the niche.
10. Fasten the pilot screw of the face ring assembly to the niche.
11. Fill pool or spa until the underwater light is completely submerged in water before operating the light for more than 10 seconds. Turn on main switch or circuit breaker, as well as the switch which specifically operates the underwater light, to check for proper operation.

	WARNING
<p>Never operate this Underwater Light for more than 10 seconds unless it is totally submerged in water. Without total submersion, the light assembly will get extremely hot, which may result in serious burns or in damage of the lamp or lens. This may result in serious injury to pool users, installers, or bystanders, or in damage to property.</p>	

Remark: 1" (inch) = 25.4 mm (millimeter)

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EMAUX Underwater Light S100 Series

For Concrete Pool Only

Installation Procedures

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS
UL-S100 AC 12V/75W
LED-S100 AC 12V/3W
STW 3/C 16AWG (1.31mm²)

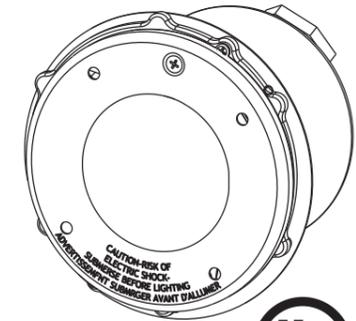


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NOTE

- Use for EMAUX underwater light UL-S100L (Code: 88040702), UL-S100P (Code: 88043802), UL-S100S (Code: 88043902), LED-S100L (Code: 88042302), LED-S100P (Code: 88044002) and LED-S100S (Code: 88044102) only
- Not intended to be installed facing upward
- Intended for fresh & salt water swimming pool

⚠ DANGER	
Risk of Electrical Shock or Electrocutation	
	<p>This underwater light must be installed by a licensed or certified electrician in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below.</p>

⚠ WARNING	
<p>Before installing this product, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (+852) 2832 9880 for additional free copies of this manual.</p>	

IMPORTANT NOTICE	
	<p>Attention Installer. This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.</p>

Section I - General Information.

- A. Ensure that the electrical system of your pool conforms to the following requirements of the National Electrical Code (NEC), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the niche (fixture-housing) is installed.
- B. Some of the NEC requirements are listed below.
1. The NEC requires that the top of the light lens be at least 18 inches (457mm) below the water level. Be sure to position niche so that you comply with this requirement. Some installers position niche 24 inches (610mm) below anticipated water level to avoid any inspection authority issues with this requirement.
 2. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI), and have an appropriately rated circuit breaker.
 3. The junction box or the low voltage transformer is located at least 8 inches (203mm) above water level and at least 48 inches (1912mm) from the edge of the pool, see Figure 4.
 4. The light fixture and all metal items within 5 foot (1534mm) of the pool must be properly electrically bonded.
 5. The niche must be properly installed so the pilot screw hole is at the 6 o'clock position and that the top edge of the underwater light's lens is at least 18 inches (457mm) below the surface of the water in the pool; see Figure 4.
 6. The niche is properly electrically bonded and grounded via a ground connector located at the rear of the niche; see Figure 2.
- C. Use only EMAUX lighting fixtures in this niche to ensure proper bonding and grounding connections.

NOTE

The required orientation of all Emaux lights is with the pilot screw at the 6 o'clock position. This is guaranteed by proper niche installation, see figure 8

WARNING



Never operate this Underwater Light for more than 10 seconds unless it is totally submerged in water. Without total submersion, the light assembly will get extremely hot, which may result in serious burns or in damage of the lamp or lens. This may result in serious injury to pool users, installers, or bystanders, or in damage to property.

Section II - Concrete Pool Installation Instructions

Installation of the niche

1. Prior to concreting the pool, put light niche in place. Be sure the top of the niche be at least 18 inches (457mm) below the water level, see Figure 1 below,

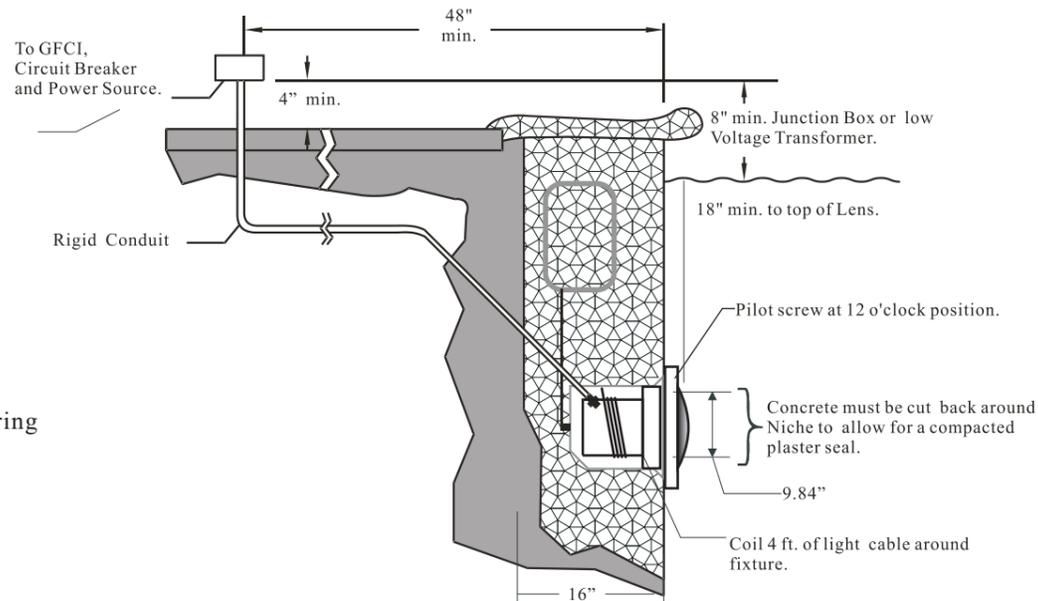


Figure 1 - Wiring

2. Make sure the niche is aligned with the pilot screw hole on the face plate is at the 12 o'clock position
3. For concreting the pool, make sure the face plate of the niche is not covered by concrete

Installation of the underwater light fixture

4. Install the underwater light fixture, after the concrete is solidified.
5. Feed cord through conduit to junction box leaving at least 18 inches (457mm) of cord at the light fixture to coil around the back of the light, see Figure 2. This 18 inches (457mm) of cord coiled around the light if for service after the pool is filled with water.



Figure 2 Cord to coil around the back of the light fixture

6. Cut the cord at the junction box, leaving at least 6 inches (152mm) of cord to make connection
7. Strip 6 inches (152mm) of the outer cord jacket to expose the two insulation wires and make the wire connection to the junction box.
8. Feed the paraffin to seal the connection
9. Secure the junction box cover in place
10. Before operating the light for more than 10 seconds, fill the pool with water until the underwater light is completely submerged in water. To check for proper operation, turn on main street or circuit breaker as well as the switch that operates the underwater light itself.

Section III - Replacement Parts

- For
- UL-S100L (code: 88040702)
 - UL-S100P (code: 88043802)
 - UL-S100S (code: 88043902)
 - LED-S100L (code: 88042302)
 - LED-S100P (code: 88044002)
 - LED-S100S (code: 88044102)

Item NO.	Part Number	Product Description	QTY	Unit
1	3011058	φ3/16×9/8" Pilot Screw	1	Pc
2	3017010	Face Ring Assembly for S100 Lights	1	Set
3	3017012	Wire With Nut for S100 Lights	1	Pc
4	3021018	M6 Cushion Nut	1	Pc
5	3012006	M6 Cushion	2	Pcs
6	3011133	M6*40 Bolt for Wire	1	Pc
7	87012003	Lens for S100 Lights	1	Pc
8	2021048	Waterproof washer for S100 Lights	1	Pc
9	3011060	M3*8 Screw	2	Pcs
10	3017076	Reflector Cover	1	Pc
11	4011057	Flood lamp MR16 12V/75W	1	Pc
	4011016	LED Bulb MR16 AC12V/3W	1	Pc
12	89040704	Light Encasing with 4.5m cable for S100 Lights	1	Set
13	89040705	S100 Stainless Steel Lights Niche	1	Set
14	89040706	S100 Stainless Steel Lights Plastic Niche	1	Set

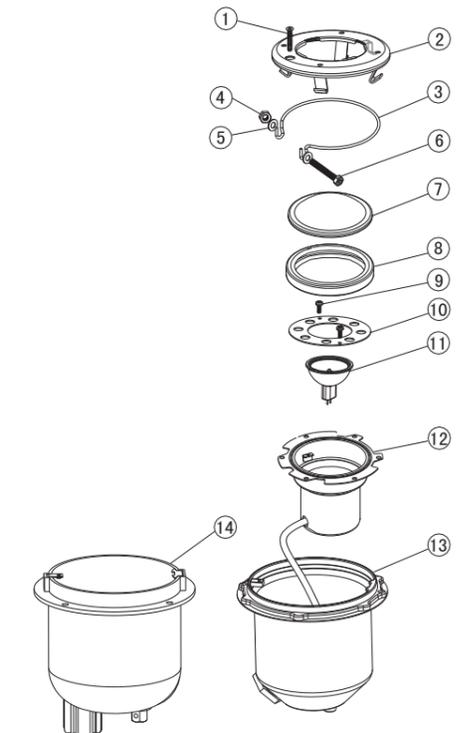


Figure 3 Replacement Parts
SAVE THESE INSTRUCTIONS