

# MagicStream™ Laminar LED Light Engine and Laminar Deck Cover Replacement Kit Installation Instructions

The Laminar LED light engine replacement kit includes:

- LED light engine with 10 screws and o-ring - P/N 590021

The Laminar deck cover and trim ring replacement kit includes:

- Deck cover with matching trim ring: Black P/N 590025, gray P/N 590026, tan P/N590027



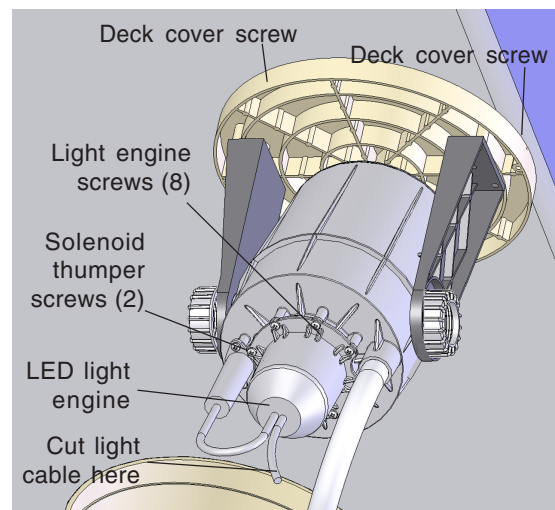
## **Risk of electrical shock or electrocution!**

This MagicStream™ Laminar must be installed by a licensed or certified electrician or a qualified pool serviceman in accordance with the National Electrical Code and all applicable national, state and 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.

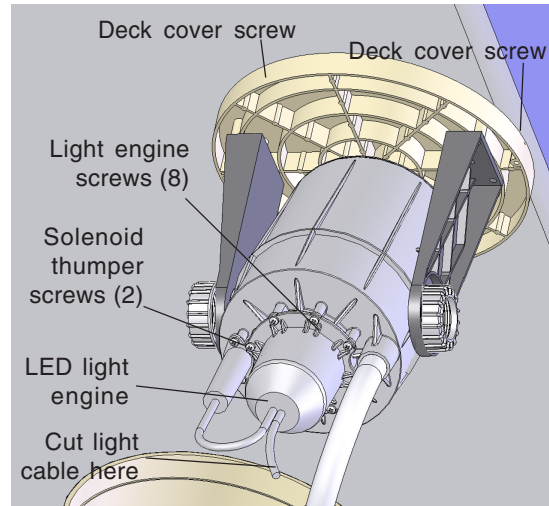
## LAMINAR LED LIGHT ENGINE REMOVAL AND INSTALLATION

The following procedure describes how to remove and replace the Laminar LED light engine.

1. **⚠ WARNING** **Switch AC power OFF** at the circuit breaker before servicing the MagicStream Laminar. Failure to do so could result in death or serious injury to service personnel, pool users or others due to electric shock.
2. **LED light engine removal:** Remove the two deck cover retaining screws.
3. Remove the laminar deck cover and Laminar assembly from the Laminar housing and place them on the deck.
4. Turn the Laminar assembly upside and it place face down.
5. Remove the eight (8) retaining screws securing the LED light engine to the Laminar assembly.
6. Remove the two (2) retaining screws securing the solenoid thumper to the Laminar assembly.
7. Firmly pull the LED light engine from the Laminar assembly.
8. At the transformer, disconnect the LED light wire from the transformer.
9. With the LED light engine separated from the Laminar assembly, cut the attached LED light engine cable that runs to the transformer.
10. **Route the replacement LED light conduit cable:** Strip back the ends of two wires on the replacement LED light cable and existing light cable in the conduit. Tape the wires together so that the cable can be pulled through the conduit.
11. From the transformer end of the cable, pull the cable through conduit until the new cable is visible and exits the conduit at the transformer. At the Laminar, leave three (3) feet of cable slack in the deck housing.
12. Connect the LED light wires to the 12 VAC taps of the transformer.
13. Connect the 120 VAC side of the transformer to a 120 VAC GFCI power feed that is controlled by a single switch. When installing multiple laminars, make sure all the laminars are connected to a single switch. You will use this switching capability to program the LED light engine.



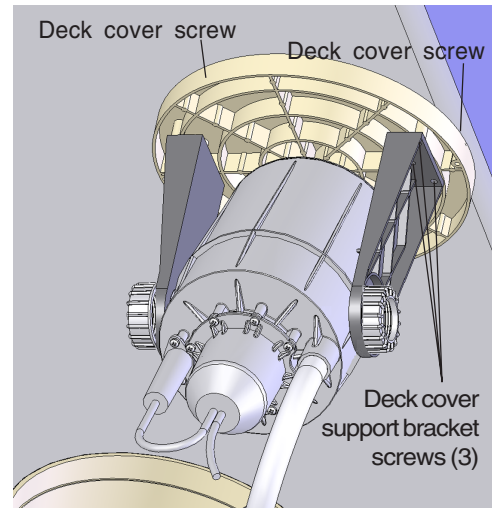
14. **LED light engine installation:** Position the o-ring over the top of the Laminar assembly opening.
15. Carefully insert the end of the LED light engine into each of the screens inside the Laminar assembly. Be sure that each screen is aligned and centered on the transparent shaft.
16. Align the o-ring with the top of the LED light engine and the Laminar assembly opening.
17. Secure the LED light engine to the Laminar assembly with the eight (8) retaining screws.
18. Mount the solenoid thumper onto the Laminar assembly and secure with the two (2) retaining screws.
19. Reinstall the Laminar assembly and adjust as necessary. Adjust the Laminar so that the Laminar orifice is visible through the slot in the deck cover.
20. Place the deck cover and Laminar unit in the deck housing. If the hoses in the deck housing prevent the proper seating of the deck housing cover, you may have to loosen the union nut briefly and allow the hoses to twist, so that they spiral out of the way, into the deck housing.
21. Secure the deck housing cover with the two retaining screws.
22. Adjust the Laminar throttling valve to  $\frac{1}{4}$  open. Turn on the supply pump and let the Laminar fill with water.
23. When a stream of water begins to flow from the Laminar orifice, adjust the flow, elevation and direction as desired.



## DECK COVER AND TRIM RING REMOVAL AND INSTALLATION

The following procedure describes how to remove and install the deck cover and matching trim ring:

1. **Deck cover removal:** Remove the two deck cover retaining screws.
2. Remove the Laminar deck cover and Laminar assembly from the Laminar housing and place them on the deck.
3. Turn the Laminar assembly upside and it place face down.
4. Remove three (3) screws from each of the support brackets.
5. Remove the deck cover from the brackets.
6. **Deck cover installation:** Carefully mount the deck cover on top of the support brackets. Secure the cover with three (3) retaining screws for each bracket.
7. Insert the Laminar assembly into the deck housing.
8. Secure the deck cover to the deck housing with the two (2) retaining screws.

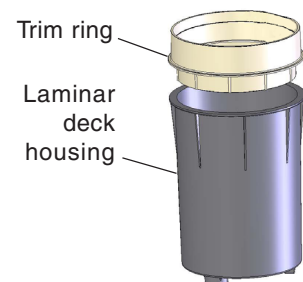


## TRIM RING REMOVAL AND INSTALLATION

**Note: The deck housing trim ring cannot be removed or replaced if the Laminar is already installed in the concrete pool deck.**

To remove and install the trim ring *before* MagicStream Laminar is installed in concrete:

1. Pull upward on the trim ring to remove it from the deck housing.
2. Position the trim ring over the Laminar housing. Press downward on the trim ring to secure in place.
3. Secure the deck cover to the deck housing with the two (2) retaining screws.



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