

Fiber Optic Water Features



Lighted Rain Waterfall

LIGHTED RAIN WATERFALLS - Straights only!

These unique Lighted Rain Water Falls come complete with fiber pre-attached.

Fiberstars Lighted Rain Waterfall adds dramatic nighttime excitement that is breathtaking. The rain waterfall is available in five different sizes, listed below.

Our Lighted Rain Waterfall requires the least amount of fiber for the maximum amount of light output. Each one comes with 45' of pre-attached fiber and is paintable. You can easily combine the waterfalls for 6', 7' and 8' sizes. 5-8 GPM per foot. More information on page 33.

New for 2008! Brightening Shield added

-Hides points of light while reflecting light onto rain droplets

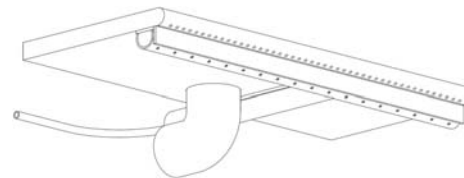
Part #	Description	List \$
Lighted Rain Waterfall - Complete with Fiber - STRAIGHTS ONLY!		
LRWF12-45	12" Rain Waterfall with 45' of 25 Strand Fiber	\$381.84
LRWF18-45	18" Rain Waterfall with 45' of 36 Strand Fiber	\$465.37
LRWF24-45	24" Rain Waterfall with 45' of 50 Strand Fiber	\$572.76
LRWF36-45	36" Rain Waterfall with 45' of 75 Strand Fiber	\$713.55
LRWF48-45	48" Rain Waterfall with 45' of 100 Strand Fiber	\$930.73

INSTALLING THE LIGHTED RAIN WATERFALL*

Fiberstars Lighted Rain Waterfalls are designed to provide single rows of water and project them away from the falls lip at a 45 degree angle. The rows of water simulate the sound and effect of rain falling into the pool creating a unique and pleasant sound for you. The minimum water flow is between 5 and 8 GPM (gallons per minute). Keep in mind that as you increase the GPM flow rate, the further out the "rain" fall will extend from the wall of the pool. The Fiberstars Lighted Rain Waterfall must be installed with lip of the fall extending a minimum of 2" from the wall. Notch the beam for inclusion of the fiber and water connections. These rainfalls come in straight, non-radius designs only. You may use multiple 18" Lighted Rain Waterfalls to do radius applications.

PLUMBING

The Fiberstars Lighted Rain Waterfalls water supply line should be 1-1/2" PVC SCH 40 pipe. A 3 way valve should be installed at the equipment pad to regulate the water flow to achieve the minimum specified flow rate. A rock trap is included with this fall and should be installed in a horizontal position with the debris trap pointing down. Place the rock trap as close to the fall as possible. Most important, **MAKE SURE THAT THE ROCK TRAP IS INSTALLED WITH THE FLOW ARROW POINTING TOWARDS THE FIBERSTARS LIGHTED RAINFALL.**



FIBERINSTALLATION

A 1" conduit is required for the fiber optic cable which should be run from the fall to the illuminator location. Install the fiber optic cable into the illuminator per the directions included with the illuminator. Use only sweep elbows or heat-bent PVC to maintain a 2" radius on all conduit connections.

START-UP

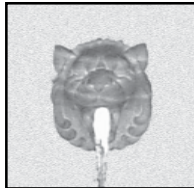
After the pool is complete and filled with water, the Fiberstars Lighted Rain Waterfall is ready to be used. Make sure the openings are clear of debris before turning on the water supply pump. Slowly open the 3 way valve until the air is purged and water begins to flow from the fall. Adjust flow to achieve your desired effect.

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Stream™ LRWF on page 27 for the LED version.



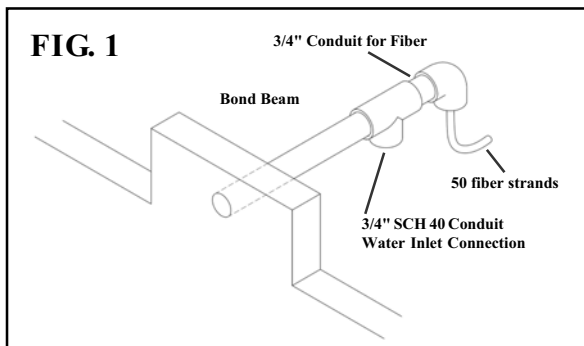
Fiber Optic Water Features



Aqua Accent Deluxe

AQUA ACCENT DELUXE LIGHTING KIT

Fiberstars multi-application Aqua Accent Deluxe lights up wall features and sconces. The Aqua Accent Deluxe Lighting Kit is designed to be installed during the gunite phase of pool building. The kit is pre-assembled for an easy connection to a 3/4" water supply line and a 3/4" conduit connection for the fiber. The kit comes with 45' of 50-strand preattached fiber.



For a complete installation manual, please visit our website at www.fiberstars.com.

Part #	Description	List \$
FAA-DL-45	Aqua Accent Deluxe (Lion's Head / Bubbler) Lighting Kit. Includes 45' of 50-strand fiber. -DOES NOT include Lion's Head fixture.	\$182.01



WATERFALL LIGHT BAR KIT - Straight or Radius

Fiberstars Waterfall Light Bar Kit allows you to add color to waterfalls and rainfalls. This light bar easily mounts to the bottom lip of a sheer waterfall or rainfall, straight or rADIUSed. There are two fibers per inch that aim down to light the water flow. A 3/4" conduit is placed next to the waterfall so you can run fiber back to the illuminator.

NOTE: For standard Light Bars, the fiber tail exits out of the left side.

Reversed Light bars are now available (fiber tail exit on the right side). Add an "R" to the part numbers below. This will enable you to combine two lightbars to make 6', 7' and 8' sizes. No additional cost.

Light output is more dramatic on rainfalls.

More information on page 33.

Part #	Description	List \$
Waterfall Light Bar Kits - FOR RADIUS OR STRAIGHTS!		
WLB12-25	Waterfall Light Bar, 12" wide, 25' of 25-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$154.18
WLB12-45	Waterfall Light Bar, 12" wide, 45' of 25-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$175.59
WLB18-25	Waterfall Light Bar, 18" wide, 25' of 36-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$190.58
WLB18-45	Waterfall Light Bar, 18" wide, 45' of 36-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$226.98
WLB24-25	Waterfall Light Bar, 24" wide, 25' of 50-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$231.26
WLB24-45	Waterfall Light Bar, 24" wide, 45' of 50-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$292.10
WLB36-25	Waterfall Light Bar, 36" wide, 25' of 75-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$279.91
WLB36-45	Waterfall Light Bar, 36" wide, 45' of 75-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$352.98
WLB48-25	Waterfall Light Bar, 48" wide, 25' of 100-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$401.65
WLB48-45	Waterfall Light Bar, 48" wide, 45' of 100-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	\$535.52

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

INSTALLING THE WATERFALL LIGHT BAR*

NOTE: We strongly recommend using Rain Waterfalls when using a Fiberstars Water Light Bar (WLB). The lighting effect on Rain Waterfalls is much more dramatic than on sheer falls!

Ideal for radius rainfalls!

For all sizes of Fiberstars Waterfall Light Bars, install 3/4" PVC conduit from the left side of the fall (see Fig. 1) to the illuminator location. The conduit should be placed so the top of the hole in the conduit is even with the bottom of the waterfall lip.

The Fiberstars Waterfall Light Bar can be installed before or after the fall is installed. **Note:** Installation of light bar on radius falls before the fall is installed is recommended. Make sure the bevel on the light bar track is angling away from the pool wall, toward the back of the water (see Fig. 2). Simply attach the light bar to the fall using clear PVC cement. Be careful not to obstruct the water flow with the light bar track or PVC cement. Pull fiber through the conduit at the waterfall back to the illuminator location.

IMPORTANT! On sheer falls there must be 1 1/8" between the finished tile and the front lip of the fall. On rain falls there must be 1 5/8" clearance for installation of light bar. **You must use a 6" extended lip!**

TIPS FOR A MULTIPLE LIGHT BAR INSTALLATION

1. When installing multiple light bars, make all fiber runs the same length to insure uniformity of light using the longest run as the guide.

2. When using multiple light bars to light waterfalls longer than 48", install two 3/4" conduits, one on each end of two waterfalls (see Fig. 3). You will use one standard Lightbar and one Reversed Lightbar.

Example: WLB48-25 (fiber tail exits on the left side) and WLB48-25R (fiber tail exits on the right side)

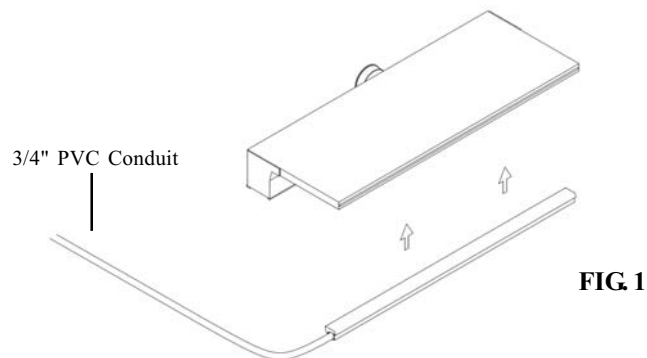


FIG. 1

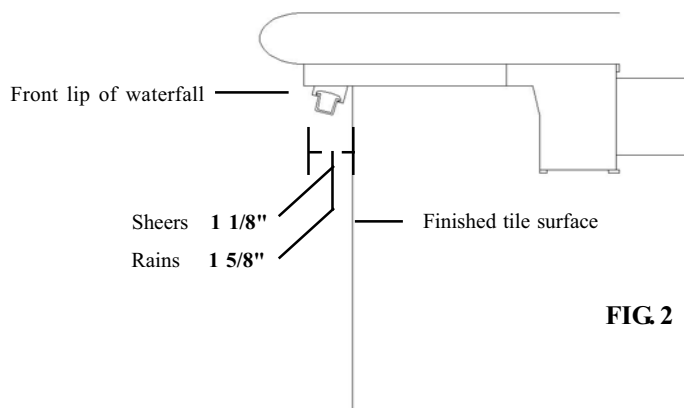


FIG. 2

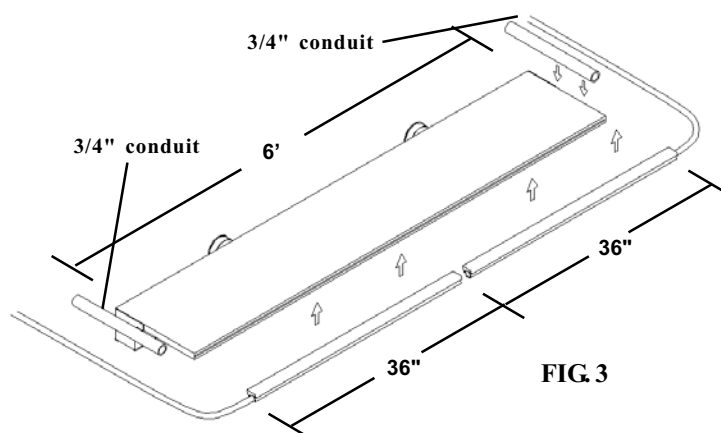


FIG. 3

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.



Fiber Optic Water Features



Large Laminar Flow Fountain



Deck Box

LARGE LAMINAR FLOW FOUNTAINS -

These beautiful Laminars are perfect for night time viewing either individually or in multiple arrangements.

Fiberstars Large Laminar Flow Fountain comes with 20' or 40' of fiber pre-attached. It includes a Light Enhancement Device (built in), which is a fully adjustable device for increasing the light output in the water flow. The fiber and laminar are produced together for an optimum light output. For best lighting results, keep the water throw to 6' up and 6' out.

DIMENSIONS OF DECK BOX: 15 1/4" H x 13 1/2" W

The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

Also available in complete kits (see below) which include:

- 2 laminar fountains each with 20' or 40' of 150 strand fiber pre-attached
- 2 Deck Boxes
- 2 Light Enhancement Devices
- 1 Fiberstars 2004-AS or 6004-AS Illuminator

Approximate Flow Rate is 10 GPM per Large Laminar.

Note: The lighted laminar flow fountains are more dramatic when the laminars are placed with the water flow aimed towards the main viewing area. **A separate cartridge filter is required for installation.**

*For an installation manual, visit our website at www.fiberstars.com or see page 37 for general specifications.

Part #	Description	List \$
LLF20-DB	Large Laminar Flow Fountain with 20' of 150 Strand Fiber - Includes Deck Box	\$704.00
LLF40-DB	Large Laminar Flow Fountain with 40' of 150 Strand Fiber - Includes Deck Box	\$871.05



LARGE LAMINAR FLOW FOUNTAINS - Complete Kits! Includes Auto-Sync Illuminators!

Part #	Description	List \$
COMPLETE KITS - Everything you need in one box! Illuminators are Auto Synch (AS).		
2LLF2-DBKITAS	2 Laminar Flow Fountains with 20' of Fiber ea. Includes 2 Deck Boxes and a 2004-AS Illuminator	\$1,897.24 (For use in synching with each other.)
2LLF4-DBKITAS	2 Laminar Flow Fountains with 40' of Fiber ea. Includes 2 Deck Boxes and a 2004-AS Illuminator	\$2,231.35 (For use in synching with each other.)
2LLF2-DBKIT-6AS	2 Laminar Flow Fountains with 20' of Fiber ea. Includes 2 Deck Boxes and a 6004-AS Illuminator	\$2,126.70 (For use in synching with each other.)
2LLF4-DBKIT-6AS	2 Laminar Flow Fountains with 40' of Fiber ea. Includes 2 Deck Boxes and a 6004-AS Illuminator	\$2,461.05 (For use in synching with each other.)

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Stream™ Large Laminar Flow Fountains on page 25 for the LED version.

Fiber Optic Water Features



Mini Lighted Fountain



Mini Deck Box vs. Large Deck Box

MINI LIGHTED FOUNTAINS -

The only Mini Lighted Fountain with pre-attached fiber!

Fiberstars' new MINI Lighted Fountains are unique and small, measuring 13"H x 10"W. These small lighted fountains are perfect for those applications where bundled water features are desired. They are designed for water flows of 3' in height and 3' in distance. They come with 20' or 40' of **75 strand fiber** pre-attached and include a deck box.

Also available in complete kits (see below) which include:
 3 Mini Lighted Fountains, each with 20' or 40' of **75 strand fiber** pre-attached
 3 Deck Boxes
 1 Fiberstars 2004-AS Illuminator

DIMENSIONS OF DECK BOX: 13" H x 9" W

The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

The minimum flow rate is 5GPM per Mini Fountain.

NOTE: The Mini Lighted Fountains are more dramatic when the fountains are placed with the water flow aimed towards the main viewing area. **A separate cartridge filter is required for installation.**

*For an installation manual, visit our website at www.fiberstars.com or see page 37 for general specifications.

Part #	Description	List \$
ML20-DB	Mini Lighted Fountain with 20' of 75 strand Fiber, pre-attached - Includes Deck Box	\$429.94
ML40-DB	Mini Lighted Fountain with 40' of 75 strand Fiber, pre-attached - Includes Deck Box	\$501.16



MINI LIGHTED FOUNTAINS - Complete Kits! Includes Auto-Sync Illuminators!

Part #	Description	List \$
COMPLETE KITS - Everything you need in one box! Illuminators are Auto Synch (AS).		
3ML2-DBKITAS	3 Mini Lighted Fountains with 20' of 75 strand fiber ea., pre-attached Includes 3 Deck Boxes & a 2004-AS Illuminator , for use in synching with each other.	\$1,897.24
3ML4-DBKITAS	3 Mini Lighted Fountains with 40' of 75 strand fiber ea., pre-attached Includes 3 Deck Boxes & a 2004-AS Illuminator , for use in synching with each other.	\$2,112.01

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Stream™ Mini Lighted Fountain on page 26 for the LED version.



Fiber Optic Water Features



Dual Mini Lighted Fountain



Deck Box

DUAL MINI LIGHTED FOUNTAIN

The Dual Mini Lighted Fountain doubles your viewing experience with only one deck box.

Fiberstars' new DUAL Mini Lighted Fountain is unique and small, measuring 13"H x 10"W. These small lighted fountains are perfect for those applications where bundled water features are desired. They come with 20' or 40' of **100 strand fiber** pre-attached and include a deck box. For best lighting results, keep the water throw to 3' up and 3' out.

DIMENSIONS OF DECK BOX: 13" H x 9" W

The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

The minimum flow rate is 5GPM per Mini Fountain.

NOTE: The Dual Mini Lighted Fountain is more dramatic when the fountains are placed with the water flow aimed towards the main viewing area. **A separate cartridge filter is required for installation.**

*For an installation manual, visit our website at www.fiberstars.com or see page 37 for general specifications.



Part #	Description	List \$
DML20-DB	2 Mini Lighted Fountains with 20' of 100 strand fiber per mini lamina (200 total fibers), pre-attached -Hooks up to ANY Fiberstars Illuminator	\$640.26
DML40-DB	2 Mini Lighted Fountains with 40' of 100 strand fiber per mini lamina (200 total fibers), pre-attached -Hooks up to ANY Fiberstars Illuminator	\$832.98

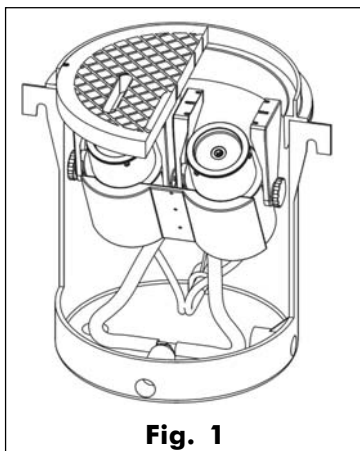


Fig. 1

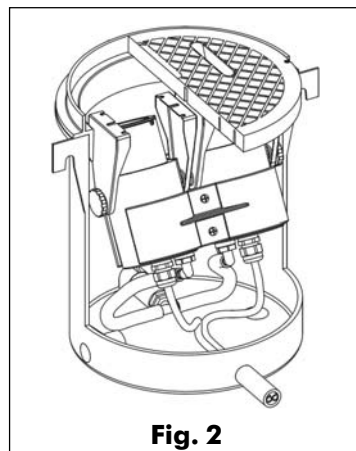


Fig. 2

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Stream™ Dual Mini Lighted Fountain on page 26 for the LED version.

Large and Mini Laminar Information

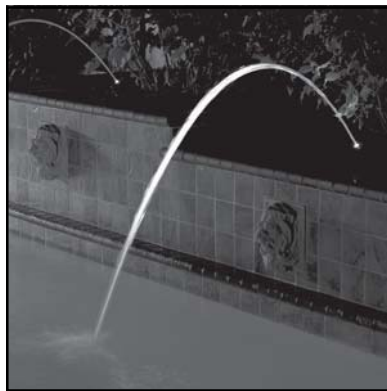


COLOR LIGHT STREAM™ and FIBER OPTIC WATER FEATURES

INSTALLING THE LARGE LAMINAR AND MINI FOUNTAIN



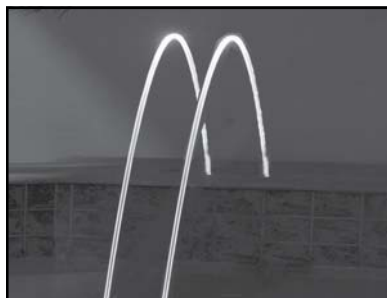
**Large Laminar
Flow Fountain**



Mini Fountain



**Mini Deck Box
vs.
Large Deck Box**



Dual Mini Fountain

IMPORTANT GENERAL SPECIFICATIONS FOR LARGE LAMINARS AND MINI FOUNTAINS INSTALLATION:

1. The water supply to the laminar flow fountain should be filtered with a cartridge filter. Sand filter and DE filters will likely produce small particles of debris that will clog the internal filter screens of the laminar flow fountains.

2. Water supply is dependant upon 3 important factors:

A. Pump Size: If a dedicated pump is used it must be a minimum of 1/2 hp and a supply flow rate at 16 ft. of head.

B. Plumbing pipe size

C. Number of laminar flow fountains on system

3. A plumbing loop must be utilized.

4. Each plumbing loop should have a gate valve installed for flow adjustment. All gate valves should be located as close as possible to the equipment pad area to reduce water turbulence from entering the laminar fountain.

5. Maximum fiber optic distance is 5 feet off of the fiber distance. This is caused by plumbing fitting, etc..

20 feet = 15 feet maximum distance

40 feet = 35 feet maximum distance

6. The Large Laminars are designed for total water throws of 12'.

Examples: 6' up, 6' out

5' up, 7' out

4' up, 8' out

7. The Mini lighted fountains are designed for total water throws of 6'.

Examples: 3' up, 3' out

2' up, 4' out

1' up, 5' out

8. Laminar flow fountains are susceptible to wind conditions. The higher the angle of your fountain, the more they may be effected. If your area has regular amounts of high winds, you may consider moving the laminars closer to the pool edge and decreasing the angle of the fountain.

***For the complete installation manual, please visit our website at www.fiberstars.com.**



Fiber Optic Water Features



Bubblers

LIGHTED BUBBLER DELUXE - 75 Strands of Fiber

Perfect for sun shelves, swim outs, beach entry areas, or small fountain areas. Provide that splash of color in a flume of water approximately 4" - 6" above the water surface.

Fiberstars Bubbler Deluxe mounts flush on sun shelves, swim outs, etc. You can locate the bubbler just under or out of the water on fountains for two completely different effects. Each bubbler is preassembled for easy connection to a water supply line and a conduit connection for the fiber. The bubbler comes with 45' of 75 strand fiber pre-attached and uses Fiberstars' sealed lens assembly. It has simple water flow requirements and needs 1-1/2" plumbing for water and 3/4" conduit for fiber.

Part #	Description	List \$
BLK-DL-45	Lighted Bubbler Deluxe with 45' of 75 Strand fiber pre-attached -Includes tee for water & fiber connections	\$316.92
BLK-DL-45F	Lighted Bubbler Deluxe with 45' of 75 Strand fiber pre-attached -Includes tee for water & fiber connections - For FIBERGLASS pools	\$364.56

USING THE LIGHTED BUBBLER DELUXE

The Lighted Bubbler Deluxe may be installed in many different methods and applications, such as: Flush with interior surface (described below), raised off the surface area but with the tip under the water surface (typically fountains), or raised above the water surface (typically fountains). The minimum flow rate is 8-10 GPM.

INSTALLATION FOR GUNITE POOLS (BLK-DL-45)

The Lighted Bubbler Deluxe is designed to be installed during the gunite phase of pool building. Two conduits should be run to the bubbler: 1-1/2" PVC pipe for water supply and 3/4" conduit for fiber. The pipe supplying the water to the bubbler should have a gate valve or ball valve installed to adjust the water supply flow. The conduit for the fiber optic cable should be run to the Fiberstars illuminator position and installed per directions included with the illuminator.

FOR FLUSH SUN SHELF / SWIMOUT INSTALLATIONS

IMPORTANT NOTICE - DO NOT INSTALL THE BUBBLER TIP MORE THAN 4" ABOVE THE GUNITE SURFACE AREA! THE INTERIOR OPTIC ROD IS 4 3/4" DOWN FROM THE TIP'S TOP AND WILL BE DAMAGED IF TRIMMED FOR FLUSH INSTALLATIONS BELOW THIS LEVEL!

The Lighted Bubbler Deluxe is designed so that the tip of the bubbler is approximately **4 to 8 inches underwater**. Keep in mind that the deeper the tip is underwater the less the lighting effect will be above the water. Fiberstars recommends that during installation the Lighted Bubbler Deluxe tip is capped off with tape, etc. so that no debris gets into the internal area of the bubbler. After connecting the fiber to the illuminator and the completion of all steps indicated above, turn on the water supply. Adjust the water volume to achieve the desired water flume/lighting effect.

ALSO AVAILABLE FOR FIBERGLASS POOLS (BLK-DL-45F). For an installation manual see www.fiberstars.com

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

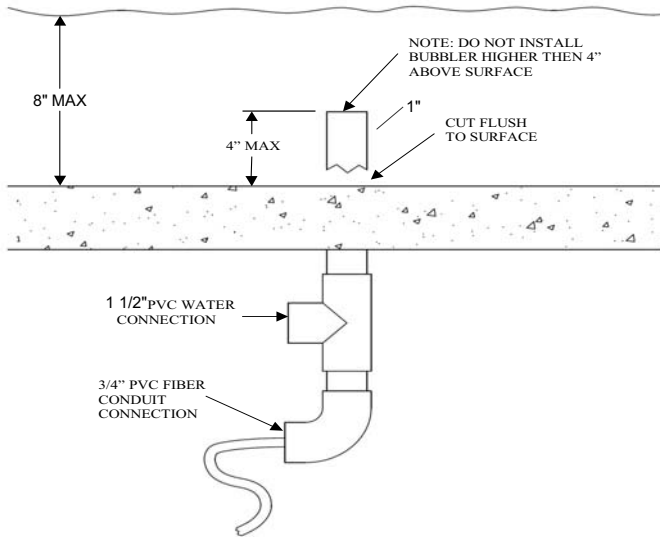
*See Color Light Stream™ Lighted Bubbler on page 30 for the LED version.

Fiber Optic Water Features

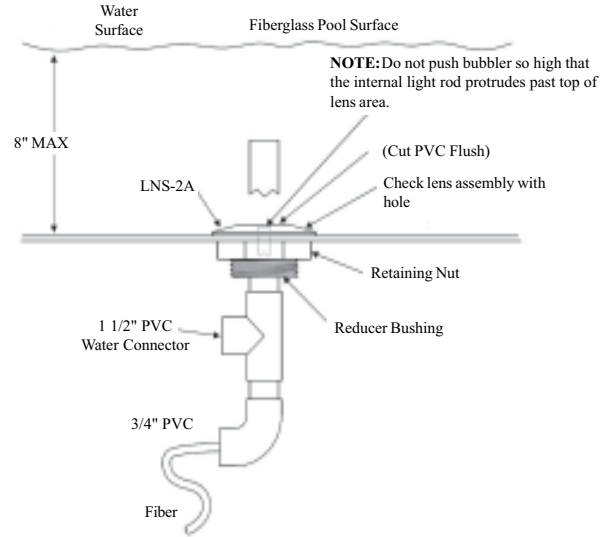


USING THE LIGHTED BUBBLER DELUXE* (CONT'D)

Lighted Bubbler for Gunitite Pools



Lighted Bubbler for Fiberglass pools



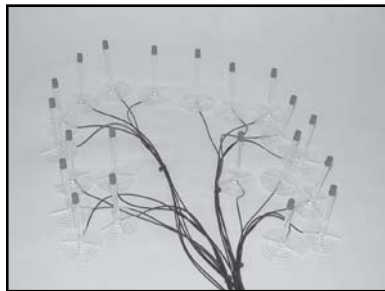
*See Color Light Stream™ Lighted Bubbler on page 30 for the LED version.



STAR FLOOR KITS

An easy way of creating fiber optic points of light in floors, swim outs and steps for the gunite pool builder.

Fiberstars has taken the custom job and created two unique and easily installed kits for the gunite pool. Star Floor Kits work with any interior surface materials. They come with 60' of fiber pre-attached and are available in 2 kits: 10 or 25 points of light. Each fixture has 2 strands of fiber. Now it is easy to add the twinkle in any gunite pool.



Star Floor Kits

Part #	Description	List \$
SFK10-60	10 Floor Fixtures (2 strands of fiber each) for installation in gunite pools - Includes 60' of fiber pre-attached	\$252.68
SFK25-60	25 Floor Fixtures (2 strands of fiber each) for installation in gunite pools - Includes 60' of fiber pre-attached	\$640.26

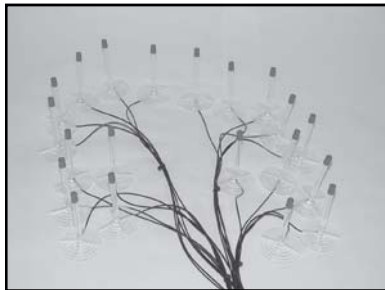
NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Stream™ Star Floor Kit on page 29 for the LED version.



Fiber Optic Water Features

INSTALLING THE STAR FLOOR KIT



Star Floor Kits

These unique fixtures and fiber optic cable kits will allow for the installation of fiber optic lights into the interior of a gunite pool. These kits are NOT designed for use in fiberglass or vinyl pool applications.

****NOTE:**

**SFK10-60 This kit includes 10 fixtures. 2 strands each.
2 fixtures at 56', 57', 58', 59', 60'.**

**SFK25-60 This kit includes 25 fixtures. 2 strands each.
5 fixtures at 52', 54', 56', 58', 60'.**

INSTALLATION:

1. 1-1/2" conduit should be run from the illuminator location to the general location within the pool where the Star Floor fixtures are going to be located.
2. After gunite, the 1-1/2" conduits should be cut down so that it is below the interior surface area.
3. Take the Star Floor Kit assembly and layout the fiber so that the fiber can be pulled back through the conduit. It also helps the fiber get warm, so that it is easier to place the fixtures down on the pool surface.
4. Mark on the pool's interior surface a location for each Star Floor fixture.
NOTE: It is recommended that after this point in the installation you go to a location where you can view the overall design of the star Floor fixtures before proceeding further.
5. At this time, pull the fiber through the conduit and remove any slack from the pool's interior.
6. Use a small amount of caulking on the base of each Star Floor fixture to hold it in place on the gunite surface.
NOTE: You may also elect to form a small pocket in the gunite in which the Star Floor fixture can be caulked to. This helps reduce the amount of plaster, etc. that will be required to cover the fixture.
7. Make sure all the fiber running from each Star Floor fixture is laying flat. You may want to use a small amount of caulk on any strands that are trying to rise up off the floor.
8. **IMPORTANT STEP: Make sure all the Star Floor fixtures are secured in place. Use a Portland cement mixture to plaster over all the Star Floor fixtures, fiber, and conduit entry point(s). It is very important to ensure that there is no leakage at the conduit entry point(s). This method of going over the fiber strands and the Star Floor fixtures also helps protect the fiber / fixtures during the plastering process.**
9. Once the interior surface has dried, trim each Star Floor fixture flush.
10. To change the light effect out of each fixture you may do the following to the remaining tip that is flush with the interior surface:
 - A. Polish the tip with med. grit/ dry sand paper. This will give you the least amount of light from the tip.
 - B. Use a medium grade sand paper and sand the tip end. This will achieve a higher amount of light output than item A.
 - C. Use a very heavy grade of sand paper and make the tip end extremely rough. The rougher the tip end is made, the more light you will see.
11. The final step is to terminate the fiber according to directions in the illuminator.

This product requires no maintenance. Over time, as the Star Floor fixture tips become rougher, the tips will glow even brighter.

Multiple kits can be used to create more elaborate effects.

Fiber Optic Water Features



StarGlo

STAR GLO

StarGlo fixtures are flexible and are great for lighting up rock waterfalls and landscape features.

Part #	Description	List \$
StarGlo		
SG-100	Star Glo Landscape Fixture. No Fiber included	\$26.77
SG-KIT-15	Star Glo Kit - Includes 1 SG-100 with 15' of 25 strand fiber	\$107.17
SG-KIT-25	Star Glo Kit - Includes 1 SG-100 with 25' of 25 strand fiber	\$160.13
SG-KIT-40	Star Glo Kit - Includes 1 SG-100 with 40' of 25 strand fiber	\$240.17

USING THE STAR GLO TO CREATE LIGHTED ROCK WATERFALLS

CASCADING WATER LIGHTING METHOD

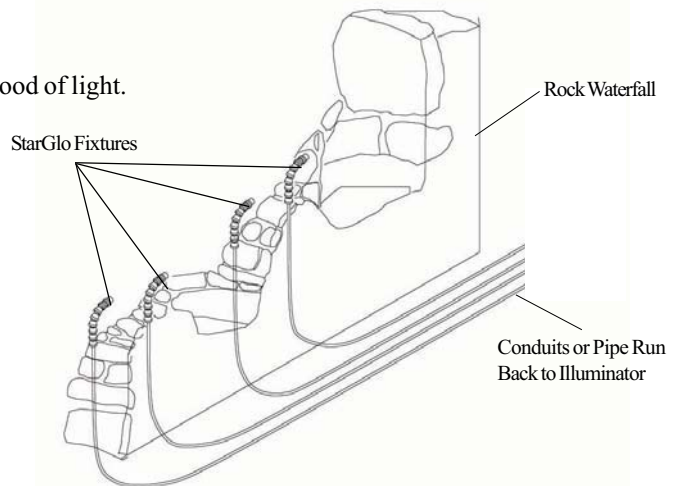
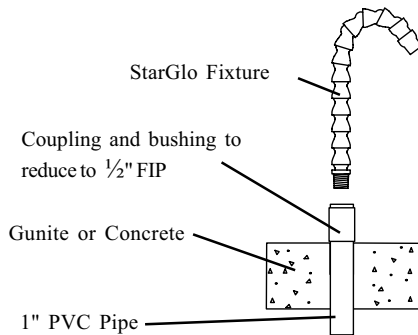
HOW TO DO IT

This method should be done during the construction of the waterfall, but can be done afterwards by hiding the pipe or conduit with rocks and concrete. Using StarGlo fixtures (or kits) you can light areas of cascading water in the waterfall. The StarGlo fixtures should be placed above water level and pointed towards areas where the most water action will occur. This will typically be at the bottom of a waterfall with the StarGlo pointed back towards the cascading water. **DO NOT place the StarGlo submerged under water! It is NOT a watertight fitting!**

Use 1" PVC pipe or conduit from the illuminator to each StarGlo location, then reduce to 1/2" FIP to allow the fixture to thread in. Always use sweep 90° fittings to allow the fiber to be installed easily. 25, 50, or 75 strands of fiber may be used.

WHAT IT DOES

This method will light the splashing water with a small flood of light.



*See Color Light Stream™ Rock Waterfall Kit on page 28 for the LED version.



FiberStix

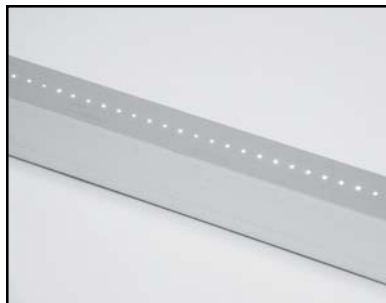
FIBERSTIX®

Fiberstars Fiberstix are like wands of light that are great for illuminating walkways, paths and landscape features.

Part #	Description	List \$
FiberStix		
FSTX-6	FiberStix Landscape Fixture, fiber not included	\$23.81
FSTX-45	45' of 12 Strand Fiber with 1 Fiberstix fixture	\$163.13



Fiber Optic Water Features



Light Beam (LB)

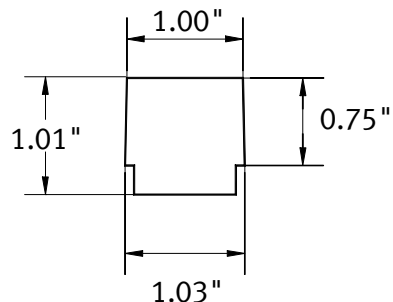
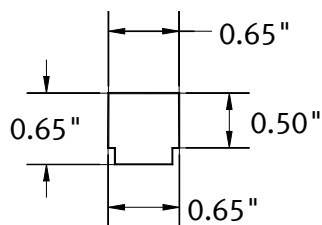
DESIGNER SERIES LIGHT BARS - Special Order Only! LIGHT BEAM BAR*

These Light Beam Bars are designed for STRAIGHT DROP falls or spillovers.

Light Beam by Fiberstars® makes it possible for you to illuminate along a linear path with the light aimed exactly where you want it and at exactly the right intensity. The light that is directed has no electrical hazard, no ultraviolet rays, and is virtually infra-red free.

Low profile, linear light fixture. Square shape available in standard and compact frames as well as low, medium, and high light intensities. Quality aluminum extrusion of rugged construction.

Compact Base Configuration: (up to 168 fibers)



Standard Base Configuration: (up to 480 fibers)

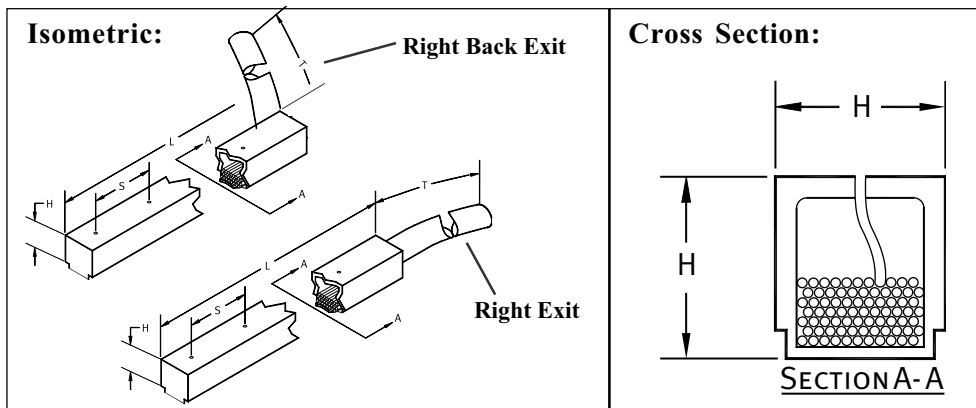
Specifications:

- Beam Spread:** 60 degrees
- Max Lit Lengths:** Standard size: High intensity 108" (2776MM), Medium and Low intensity 120" (3084MM), Compact size: High intensity 36" (914MM), Medium intensity 84" (2134MM), Low intensity 120" (3084MM)
- Base Size:** Standard size: 1" (25.4MM) square
Compact size: 0.65" (16.5MM) square
- Technical Remarks:** Emits a wash of light along an axis. Wash intensity increases when fiber spacing decreases.
- Cable Diameters:** Standard size: 7/8" Max
Compact size: 9/16" Max

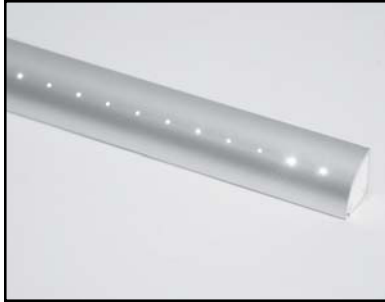
***ORDERING GUIDE AND PRICING ON PAGES 44-45**

Isometric Key:

- H** Base Size
- L** Length up to 120"
- S** Fiber Spacing (0.25", 0.5", & 1")
- T** Tail Length



Fiber Optic Water Features



**Light Beam
Quarter Round
(LBQR)**

DESIGNER SERIES LIGHT BARS - Special Order Only! LIGHT BEAM QUARTER ROUND*

These Light Beam Bars are designed for ARCING falls or spillovers.

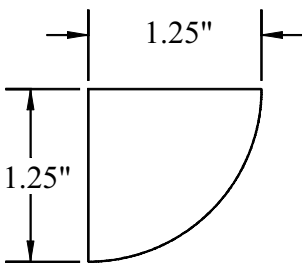
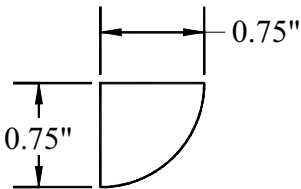
Light Beam Quarter Round by Fiberstars® makes it possible for you to illuminate along a linear path with the light aimed exactly where you want it and at exactly the right intensity. The light that is directed has no electrical hazard, no ultraviolet rays, and is virtually infra-red free.

Low profile, linear light fixture. Quarter round shape allows angular light distribution in a standard or compact frame. Available in low, medium, or high light intensities. Quality aluminum extrusion of rugged construction.

Specifications:

- Beam Spread:** 60 degrees
- Max Lit Lengths:** Standard size: High intensity 108" (2776MM), Medium and Low intensity 120" (3084MM), Compact size: High intensity 36" (914MM), Medium intensity 84" (2134MM), Low intensity 120" (3084MM)
- Base Size:** Standard size: 1 1/4" QR (31.75MM) Compact size: 3/4" QR (19.05MM)
- Technical Remarks:** Light emits 45 degrees from right-angle side Other aims possible by special order.
- Cable Diameters:** Standard size: 7/8" Max Compact size: 9/16" Max

**Compact Base
Configuration:
(up to 168 fibers)**

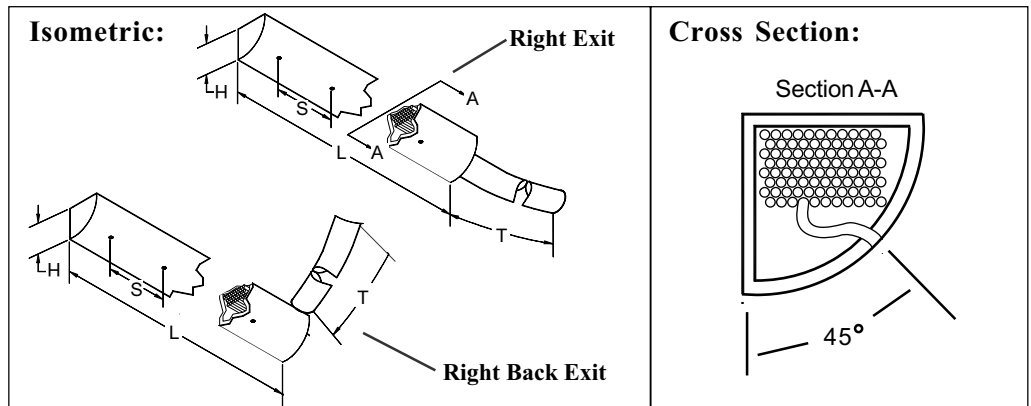


**Standard Base
Configuration:
(up to 480 fibers)**

***ORDERING GUIDE AND PRICING ON PAGES 44,46**

Isometric Key:

- H** Base Size
- L** Length up to 120"
- S** Fiber Spacing (0.25", 0.5", & 1")
- T** Tail Length





Fiber Optic Water Features

ORDERING GUIDE FOR: Light Beam (LB) & Light Beam Quarter Round (LBQR)

Part #	Description
LB	Light Beam
LBQR	Light Beam Quarter Round
	Lit Length: () Specify Inches
	Tail Length: () Specify Feet
	Wash Intensity: M MEDIUM (1" Spacing) H HIGH (0.5" Spacing) U ULTRA (0.25" Spacing)
	Base Size for:
LB	S Standard (1" sq) C Compact (.65" sq)
LBQR	S Standard (1.25" sq) C Compact (.75" sq)
	Finishes: S Standard Clear Anodized B Black Anodized
	Tail Exit: L Left End R Right End LB Left Back RB Right Back C Custom

	Lit Length	20 ft Tail List	30 ft Tail List	40 ft Tail List	50 ft Tail List
Medium Intensity <i>2 Fibers per Inch</i>	up to 12"	\$167.37	\$191.28	\$215.20	\$239.10
	12"-24"	\$310.86	\$364.67	\$418.46	\$472.25
	25" - 36"	\$440.21	\$514.09	\$585.82	\$657.56
	37"-48"	\$538.01	\$627.69	\$717.34	\$807.02
	49"-60"	\$669.53	\$777.13	\$884.75	\$992.36
	61"-72"	\$818.99	\$950.49	\$1,081.99	\$1,213.49
	73"-84"	\$920.60	\$1,064.07	\$1,207.54	\$1,351.01
	85"-96"	\$1,043.17	\$1,204.56	\$1,365.97	\$1,527.37
	97"-108"	\$1,198.59	\$1,395.85	\$1,593.10	\$1,790.36
	109"-120"	\$1,380.90	\$1,596.10	\$1,811.31	\$2,026.51
High Intensity <i>4 Fibers per Inch</i>	up to 12"	\$251.07	\$298.91	\$346.72	\$394.54
	12"-24"	\$466.27	\$573.88	\$681.50	\$789.10
	25" - 36"	\$651.58	\$795.07	\$938.57	\$1,082.06
	37"-48"	\$836.92	\$1,016.25	\$1,195.59	\$1,310.19
	49"-60"	\$992.33	\$1,207.56	\$1,422.78	\$1,638.01
	61"-72"	\$1,264.33	\$1,527.37	\$1,790.41	\$2,053.47
	73"-84"	\$1,452.63	\$1,739.59	\$2,026.55	\$2,313.51
	85"-96"	\$1,697.75	\$2,020.56	\$2,343.36	\$2,666.17
97"-108"	\$1,978.72	\$2,373.10	\$2,767.49	\$3,161.91	
Ultra Intensity <i>8 Fibers per Inch</i>	up to 12"	\$463.30	\$552.98	\$642.66	\$732.31
	12"-24"	\$762.21	\$911.63	\$1,061.07	\$1,210.51
	25" - 36"	\$1,061.09	\$1,300.21	\$1,539.31	\$1,778.42
	37"-48"	\$1,300.21	\$1,599.10	\$1,898.01	\$2,196.90
	49"-60"	\$1,599.10	\$1,957.79	\$2,316.49	\$2,675.16

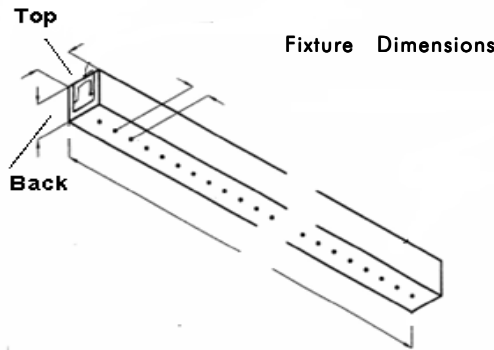
Designer Series

*** All light bars are custom made.
Aftersign off on order form they are not subject to cancellation**

Fiber Optic Water Features



LB						
ordering guide	Lit Length: () Specify Inches	Tail Length: () Specify Feet	Wash Intensity U Ultra (0.125" Spacing) H High (0.25" Spacing) M Medium (0.5" Spacing)	Base Size: S Standard (1" sq) C Compact (.75" sq)	Finishes: S Standard Clear Anodized B Black	Tail Exits: L Left R Right LB Left Back RB Right Back



4 week lead time

ORDER FORM

SCHEMATIC VIEWS ONLY-NOT NECESSARILY TO SCALE, PROPORTION OR FULL DETAIL

Sign-off: Drawing is correct;
fixture shown is approved for fabrication



Part Number: LB-
Quantity:

(Sign/Date) _____

Project Number:
Project Name:

(Print Name) _____

SAMPLE ORDER

LB	96"	20'	H	S	S	R
Ordering Guide	Lit Length: () Specify Inches	Tail Length: () Specify Feet	Wash Intensity U Ultra (0.125" Spacing) H High (0.25" Spacing) M Medium (0.5" Spacing)	Base Size: S Standard (1" sq) C Compact (0.75" sq)	Finishes: S Standard Clear Anodized B Black	Tail Exit: L Left R Right LB Left Back RB Right Back

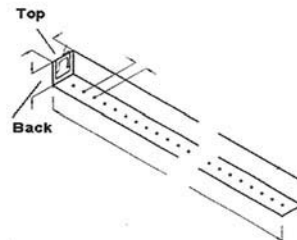


SCHEMATIC VIEWS ONLY-NOT NECESSARILY TO SCALE, PROPORTION OR FULL DETAIL

SIGN OFF: Drawing is correct ; fixture shown is approved for fabrication

Sign: _____ Date: / /

Print Name: _____



Part #: LB-96-20-H-S-S-R Quantity: 2

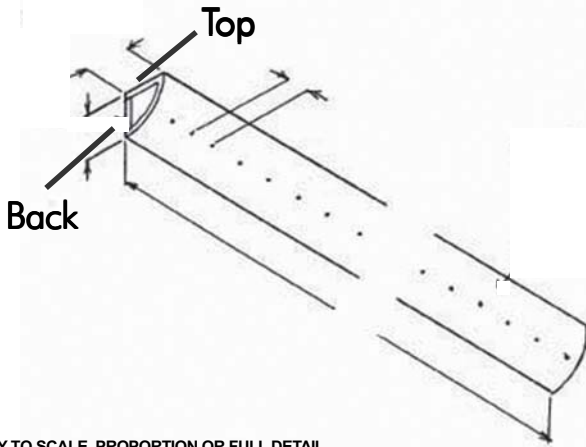
PO#: _____

Note: Custom Product. Lead Time: 4 weeks



Fiber Optic Water Features

LBQR						
ordering guide	Lit Length: () Specify Inches	Tail Length: () Specify Feet	Wash Intensity U Ultra (0.125" Spacing) H High (0.25" Spacing) M Medium (0.5" Spacing)	Base Size: S Standard (1.25"sq) C Compact (0.75"sq)	Finishes: S Standard Clear Anodized B Black	Tail Exits: L Left R Right LB Left Back RB Right Back



4 week lead time

ORDER FORM

SCHEMATIC VIEWS ONLY-NOT NECESSARILY TO SCALE, PROPORTION OR FULL DETAIL

Sign-off: Drawing is correct;
fixture shown is approved for fabrication



Part Number: LBQR-

Quantity:

Project Number:

Project Name:

(Sign/Date) _____

(Print Name) _____

SAMPLE ORDER

LBQR	60"	10'	H	S	B	L
Ordering Guide	Lit Length () Specify Inches	Tail Length: () Specify Feet	Wash Intensity U Ultra (0.125" Spacing) H High (0.25" Spacing) M Medium (0.5" Spacing)	Base Size: S Standard (1.25") C Compact (0.75")	Finishes: S Standard Clear Anodized B Black	Tail Exit: L Left R Right LB Left Back RB Right Back

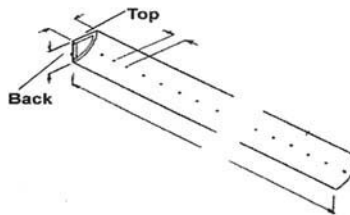


SCHEMATIC VIEWS ONLY-NOT NECESSARILY TO SCALE, PROPORTION OR FULL DETAIL

SIGN OFF: Drawing is correct ; fixture shown is approved for fabrication

Sign: _____ Date: / /

Print Name: _____



Part #: LBQR- 60-10-H-S-B-L Quantity: 1

PO#: _____

Note: Custom Product. Lead Time: 4 weeks

SPECIAL NOTICE!

If you purchase Fiber kits, you need to purchase **ONLY** the Lens Housings (page 49). If you purchase Fiber in Bulk rolls or lengths, you need to purchase **BOTH** the Lens Housings and Sealed Lens Kits.

For instructions on how to install our Sealed Lens onto bulk fiber, please refer to Pg. 48

SEALED LENS KITS

FOR USE WITH BULK FIBER ROLLS ONLY.

KL2-SF KIT

(For 75 strands or less of fiber)

KL2-SF (For use with 75 strands or less of fiber)

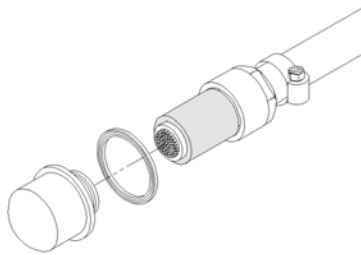
These Sealed Lens Kits are used with fiber that is 75 strands or less. Each KL2 lens assembly can only be used with a single jacket. Kit includes: Silicone Bushing (25 Strand), Silicone Bushing (50 Strand), Silicone Bushing (75 Strand), Lens, Lens Gasket, Compression Nut, Retaining Ring, 7/32" - 5/8" Clamp, and a Tie Rap (for 25 Strand Only).

KL2-PF KIT

(For 100 strand fiber and over)

KL2-PF (For use with 100 strands of fiber and over)

These Sealed Lens Kits are used with fiber that is 100 strands or over. Each KL2 lens assembly can only be used with a single jacket. Kit includes: Silicone Bushing (100 Strand), Silicone Bushing (150 Strand), Silicone Bushing (225/300 Strand), Lens, Lens Gasket, Compression Nut, Retaining Ring, 7/32" - 5/8" Clamp (Up to 150 Strand), and a 1/2" - 29/32" Clamp (225/300 Strand).



Part #	Description	List \$
KL2-SF	Sealed Lens for 75 strands or less of fiber	\$19.27
KL2-PF	Sealed Lens for 100 strands of fiber and over	\$19.27

ASSEMBLY INSTRUCTIONS: SEALED LENS KITS KL2-SF, KL2-PF

SEALED LENS ASSEMBLY

NOTE: The KL2 lens assemblies can only be used with a single jacket.
EXAMPLE: Correct assembly (1) 50 strand. Incorrect assembly (2) x 25 strand to total 50 strands.

1. Strip the fiber jacket back approximately 1-1/2". **FIG. 1**
NOTE: When cutting around the fiber jacket, take care not to nick the fiber.

2. Slide the clamp and compression nut over the fiber jacket. **FIG. 1**

3. **Choose the correct size bushing for the fiber count!** Slide the silicone bushing onto the fiber jacket until the jacket extends approximately 1/8" past the end of the bushing. Slide the compression nut up against the silicone bushing. Slide the clamp up to within 1/4" of the compression nut and tighten. **FIG. 2**

4. Using a hot knife, cut the fiber as straight as possible using the fiber jacket as a guide. Do not saw or rock the knife blade back and forth. Hold steady pressure straight down on the fiber, tilting the blade of the hot knife at a slight angle, easing the pressure slightly while completing the cut. **FIG. 3**

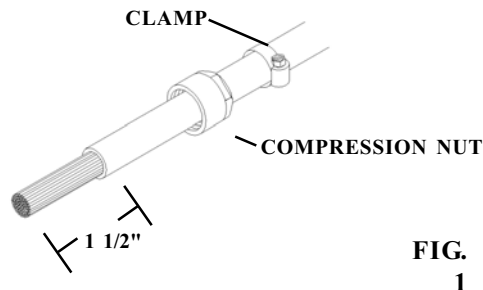


FIG. 1

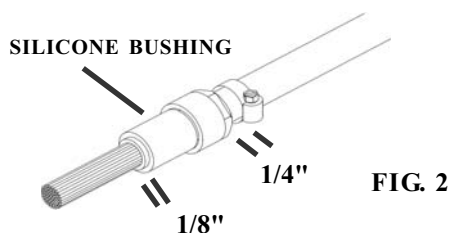


FIG. 2

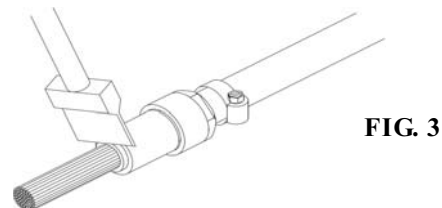


FIG. 3

GUNITE and ACRYLIC

1. Install the lens gasket on the lens. Slide the lens over the silicone bushing and screw the compression nut to the lens. Tighten the compression nut until it contacts the gasket. **DO NOT** over tighten and distort the gasket. **FIG. 4**

2. Install the fiber through the lens housing and tighten lens retaining ring. **FIG. 5**

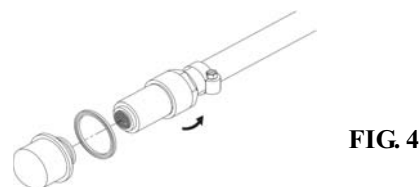


FIG. 4



FIG. 5

VINYL

For a vinyl installation, **DO NOT install the white lens gasket on the lens.** Use the silicone spacer gasket supplied with the vinyl lens housing. Fiberstars part# LNS-2V. **FIG. 6**

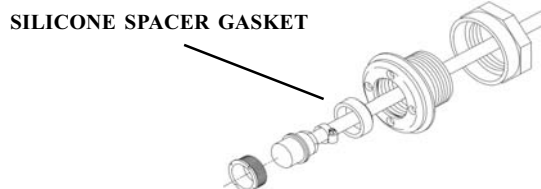


FIG. 6

Lens Housings



SPECIAL NOTICE!

If you purchase Fiber kits, you need to purchase **ONLY** the Lens Housings. If you purchase Fiber in Bulk rolls or lengths, you need to purchase **BOTH** the Lens Housings and Sealed Lens Kits (page 47).

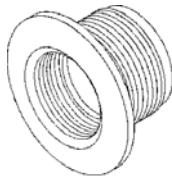
LENS HOUSINGS

FOR USE WITH FIBER KITS AND BULK FIBER ROLLS.

**LNS-2G (white, for gunite pools) OR
LNS-2GB (black, for gunite pools)**

These lens housings glue onto 1-1/2" PVC pipe. Our Sealed Lens Kits (included on all fiber kits) seats in the housing. 1-1/2" slip connection.

Includes: Lens Housing only. **NO LENS INCLUDED.**

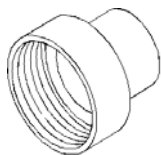


LNS-2G or LNS-2GB

LNS-2GI (insider for gunite pools)

These lens housings glue inside 1-1/2" PVC SCH 40 pipe. Our Sealed Lens Kits (included on all fiber kits) seats in the housing. 1-1/2" SCH 40 inside connection.

Includes: Insider Lens Housing only. **NO LENS INCLUDED.**

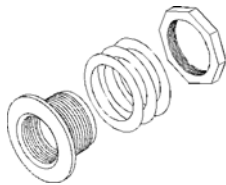


LNS-2GI

**LNS-2A (white, for acrylic / fiberglass)
LNS-2AB (black, for acrylic / fiberglass)**

These lens housings glue onto 1-1/2" PVC SCH 40 pipe. Includes nuts and gaskets for sealing on acrylic and fiberglass vessels. Our Sealed Lens Kits (included on all fiber kits) seats in the housing. 1-1/2" slip connection.

Includes: Lens Housing with nut only. **NO LENS INCLUDED.**

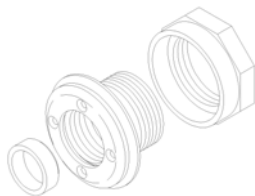


LNS-2A

LNS-2V (white, for vinyl liners)

These lens housings have 1-1/2" FIP threads. Includes nut, faceplate, and screws for sealing on the liner. Our Sealed Lens Kits (included on all fiber kits) seats in the housing and is completed by a silicone spacer, which takes the place of the old spacer and gasket. 1-1/2" FIP connection.

Includes: Lens Housing with nut, face plate and screws, and silicone spacer. **NO LENS INCLUDED.**



LNS-2V

Part #	Description	List \$
LNS-2G	Lens Housing (Wall Fitting) for Gunite - White	\$11.31
LNS-2GB	Lens Housing (Wall Fitting) for Gunite - Black	\$11.31
LNS-2GI	Lens Housing (Wall Fitting) for Gunite - Insider	\$11.31
LNS-2V	Lens Housing (Wall Fitting) for Vinyl - White	\$22.53
LNS-2A	Lens Housing (Wall Fitting) for Acrylic - White	\$14.99
LNS-2AB	Lens Housing (Wall Fitting) for Acrylic - Black	\$14.99



Lens Housings

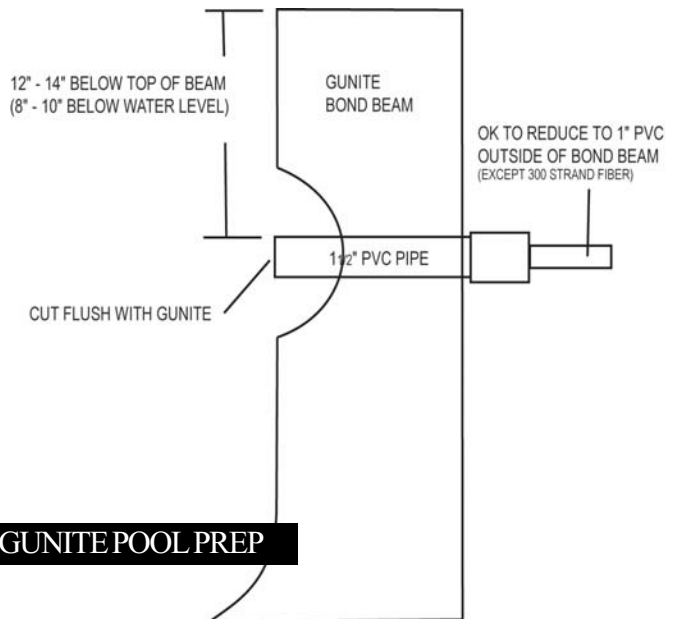
LENS HOUSING PREP - GUNITE POOLS

For: LNS-2G (white)
LNS-2GB (black)
LNS-2GI (insider)

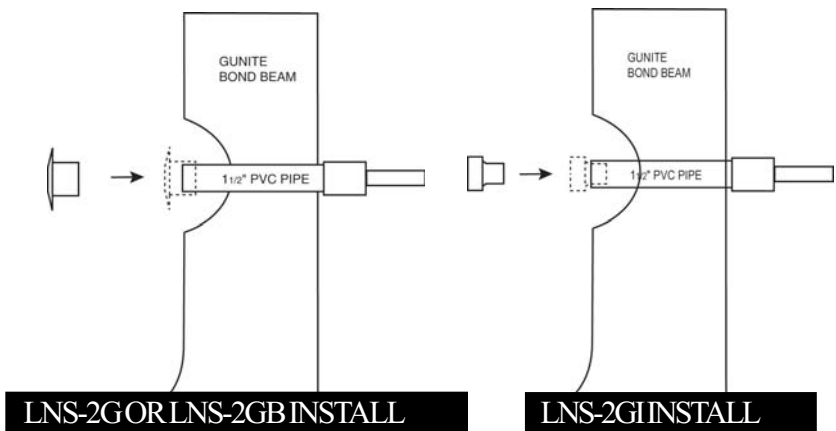
1) BEFORE GUNITE: Run PVC conduit from illuminator location to lens locations as demonstrated on page 3. Pool light conduits should enter the pool shell 12" to 14" below the top of the bond beam as shown at right. Shoot gunite and scoop out around the ends of the conduit.

2) AFTER GUNITE, BEFORE PLASTER: Cut the conduit flush with the gunite wall as shown. Follow the instruction manual for the lens housing, and glue it on to the end of the conduit.

3) Plaster or apply pebble surface, and trowel the material flush with the lens assembly as shown. It is acceptable if the plaster or pebble material rises slightly to meet the lens housing as shown. DO NOT CREATE A CONCAVE "BOWL", it will create a shadow on the bottom of the pool.

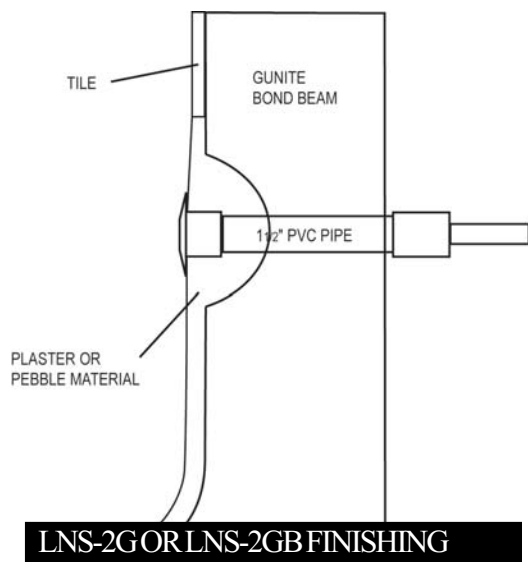


GUNITE POOL PREP

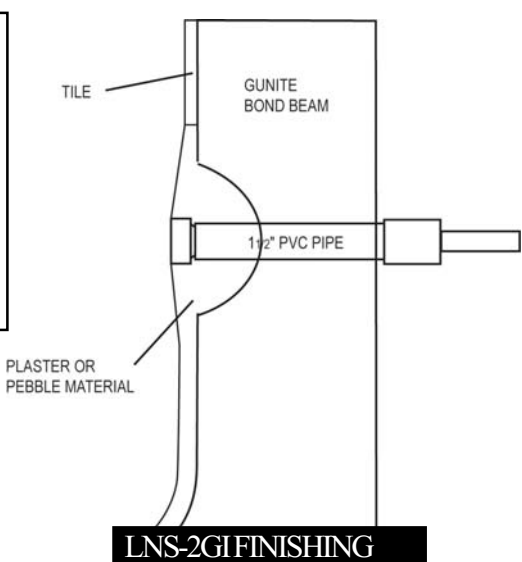
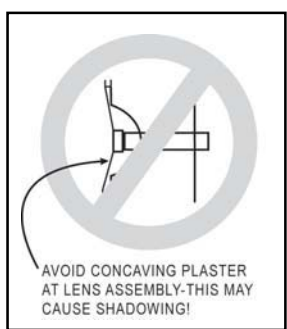


LNS-2G OR LNS-2GB INSTALL

LNS-2GI INSTALL



LNS-2G OR LNS-2GB FINISHING



LNS-2GI FINISHING

LENS HOUSING PREP - VINYL LINER POOLS

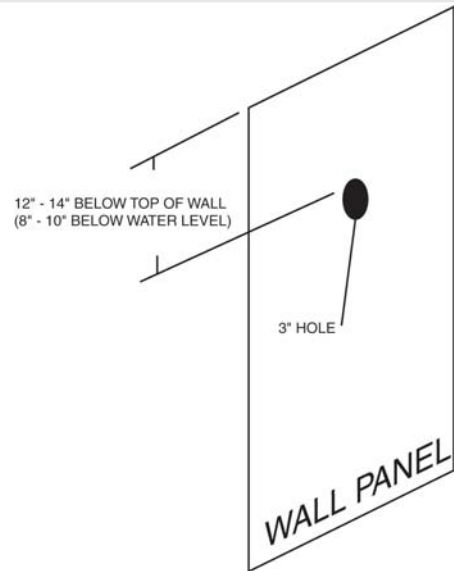
For: LNS-2V

1) Following the placement guidelines on page 3, locate the wall panel where the lens assembly will be placed. Drill a 3" hole 12" to 14" down from the top of the wall.

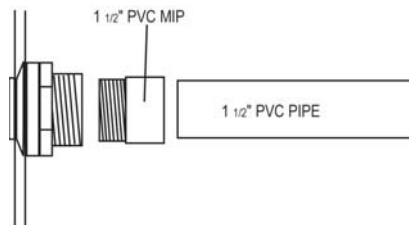
2) Install the lens housing as described in the LNS-2V instruction manual. Attach a 1-1/2" PVC Male adapter (MIP) to the lens housing. Run 1-1/2" PVC back to the illuminator location (you may reduce to 1" PVC for all fiber sizes except 300).

3) To install lens and fiber **BEFORE LINER** installation: Feed the fiber kit through the lens housing and pipe as shown in the LNS-2V instruction manual. Proceed with the liner installation.

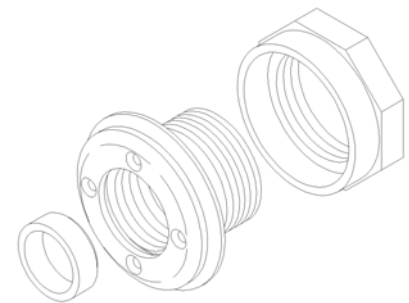
4) To install lens and fiber **AFTER LINER** installation: Place the liner in the pool and begin filling. When the water is a few inches below the lens housing, attach the face plate with the screws. Cut out the liner in the center of the faceplate and run the fiber through. Proceed with filling the pool.



VINYL LINER WALL PREP



LNS-2V LENS ASSEMBLY

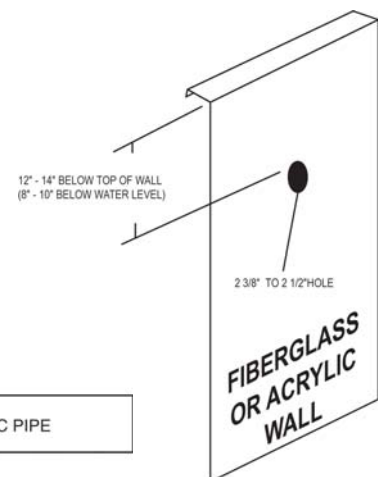


LENS HOUSING PREP - FIBERGLASS POOLS

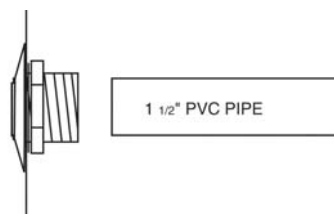
For: LNS-2A

1) Following the placement guidelines on page 3, locate the wall panel where the lens housing will be placed. Drill a 2-3/8" to 2-1/2" hole 12" to 14" down from the top of the wall.

2) Install the lens housing as described in the LNS-2A instruction manual. Glue 1-1/2" PVC pipe into the back of the housing. Run the pipe back to the illuminator location. (You may reduce to 1" PVC for all fiber sizes except 300. Use at least 6" of pipe before reducing to 1").



LNS-2A LENS HOUSING



FIBERGLASS/ACRYLIC WALL PREP



Feature Light Fixtures



FLW Light Fixture (White)



FLG Light Fixture (Grey)



FLW-A Light Fixture (White)



FLW-V Light Fixture (White)



WF-200 Acrylic Feature Light

FEATURE LIGHT FIXTURES

Fiberstars' feature light fixtures are great for lighting up falls or features. Note: Maximum capacity for each fixture is 75 strands of fiber.

FLW (white, for gunite pools)

These feature lights glue inside 1" PVC pipe. Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, centering device, and heyco fitting included.

FLG (grey, for gunite pools)

These feature lights glue inside 1" PVC pipe. Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, centering device, and heyco fitting included.

FLW-A (white, for fiberglass pools)

These feature lights glue inside a bushing that threads into our LNS-2A (included). Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, Lens O-ring, LNS-2A Lens Housing, centering device, and heyco fitting included.

FLW-V (white, for vinyl liner pools)

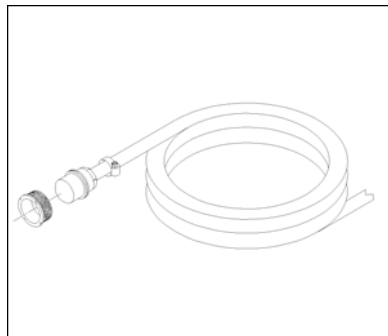
These feature lights glue inside a bushing that threads into our LNS-2V (included). Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, Lens O-ring, and LNS-2V Lens Housing, centering device, and heyco fitting included.

WF-200

This acrylic wall feature light has a strain relief for up to 25 Strands of fiber. Use 25 strand fiber. Fixture and strain relief included.

Part #	Description	List \$
FLW	Feature Light for Gunite, White	\$63.60
FLG	Feature Light for Gunite, Grey	\$63.60
FLW-A	Feature Light for Fiberglass, White	\$76.49
FLW-V	Feature Light for Vinyl, White	\$76.49
WF-200	Acrylic Wall Feature Light with fiber connection -NO Fiber Included	\$74.95

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.



Pool/Spa Supplemental Light Kits

FIBER OPTIC KITS FOR UNDERWATER LIGHTING

SPECIAL NOTICE! All fiber kits include our Sealed Lens assemblies, which are the KL2-SF for kits with up to 75 strands OR the KL2-PF for 100 strands and up. You only have to purchase the Lens Housings to complete the installation if you are using a fiber kit. (Refer to Page 48 for Sealed Lens Assembly Instructions.)

Fiber Construction Type: High Quality LK Grade Fiber Optic Strands
 Individual Fiber Thickness: .75mm
 Outer Casing Material: PVC based polymer

Part #	Description	List \$
Pool Fiber Bulk Rolls		
B150	150 Strand Fiber, By The Foot - *	\$14.84
B150-50	150 Strand Fiber, 50' Roll	\$741.16
B150-250	150 Strand Fiber, 250' Bulk Roll	\$3,710.96
B225	225 Strand Fiber, By The Foot - *	\$21.97
B225-50	225 Strand Fiber, 50' Roll	\$1,097.54
B225-250	225 Strand Fiber, 250' Bulk Roll	\$5,487.67
B300	300 Strand Fiber, By The Foot - *	\$29.06
B300-50	300 Strand Fiber, 50' Roll	\$1,452.63
B300-250	300 Strand Fiber, 250' Bulk Roll	\$7,263.08

***SO - SPECIAL ORDER**

Part #	Description	List \$
Supplemental Fiber Bulk Rolls		
B12	12 Strand Fiber, By The Foot - *	\$2.57
B25	25 Strand Fiber, By The Foot - *	\$5.18
B50	50 Strand Fiber, By The Foot - *	\$6.45
B50-125	50 Strand Fiber, 125' Roll	\$805.72
B50-250	50 Strand Fiber, 250' Bulk Roll	\$1,614.00
B50-500	50 Strand Fiber, 500' Bulk Roll	\$3,228.05
B75	75 Strand Fiber, By The Foot - *	\$7.73
B75-125	75 Strand Fiber, 125' Roll	\$968.42
B75-250	75 Strand Fiber, 250' Bulk Roll	\$1,936.83
B75-500	75 Strand Fiber, 500' Bulk Roll	\$3,873.66
B100	100 Strand Fiber, By The Foot - *	\$9.04
B100-125	100 Strand Fiber, 125' Roll	\$1,128.50
B100-250	100 Strand Fiber, 250' Bulk Roll	\$2,259.64
B100-500	100 Strand Fiber, 500' Bulk Roll	\$4,519.25

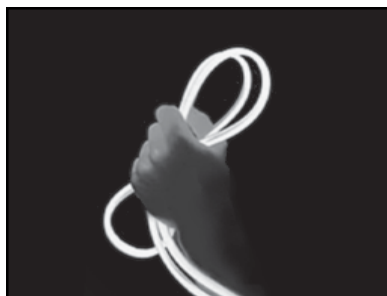
*** - SPECIAL ORDER**

Part #	Description	List \$
Pool Fiber Kits (with Sealed Lens attached)		
B150KL2-15	150 Strand, 15' Pool Fiber Kit	\$264.63
B150KL2-25	150 Strand, 25' Pool Fiber Kit	\$419.27
B150KL2-40	150 Strand, 40' Pool Fiber Kit	\$651.28
B225KL2-14	225 Strand, 14' Pool Fiber Kit	\$365.40
B225KL2-18	225 Strand, 18' Pool Fiber Kit	\$449.34
B300KL2-14	300 Strand, 14' Pool Fiber Kit	\$471.31
B300KL2-18	300 Strand, 18' Pool Fiber Kit	\$599.12

Part #	Description	List \$
Supplemental Fiber Kits (with Sealed Lens attached)		
B50KL2-25	50 Strand, 25' Supplemental Fiber Kit	\$166.57
B50KL2-50	50 Strand, 50' Supplemental Fiber Kit	\$333.15
B75KL2-25	75 Strand, 25' Supplemental Fiber Kit	\$200.13
B75KL2-50	75 Strand, 50' Supplemental Fiber Kit	\$398.99
B100KL2-15	100 Strand, 15' Supplemental Fiber Kit	\$139.46
B100KL2-25	100 Strand, 25' Supplemental Fiber Kit	\$232.44
B100KL2-40	100 Strand, 40' Supplemental Fiber Kit	\$373.15
B100KL2-50	100 Strand, 50' Supplemental Fiber Kit	\$466.12



Perimeter Fiber



Perimeter Fiber

PERIMETER FIBER

FSCA (Frosted)

Has a unique profile with 30 strands. Coping available from Cardinal, Arbor, Pacific Pools, Modem pool systems, and their distributors. Maximum run length 200'.

FSSB (Frosted)

Our unique 30 strand perimeter fiber is frosted for a bold look. FSSB fits all of Fiberstars tracks, past and present. Maximum run length 200'.

FSSB-CBL42 (Frosted)

Cabled fiber in a flat black design. We took our 42 strand cabled fiber and put it in our FSSB casing for the easiest to use cabled fiber ever. Fits all Fiberstars tracks and Stegmeier forms/tracks. Maximum run length 150'.

Part #	Description	List \$
Frosted Jacket - Flat Back		
FSCA-200	30 Strands, 200' Roll - Fits Cardinal, Arbor, Pacific Pools and Modem pool systems	\$492.68
FSSB	30 Strand, by the foot - SPECIAL ORDER	\$3.75
FSSB-125	30 Strand, 125' Roll - Fits all Fiberstars tracks	\$468.09
FSSB-150	30 Strand, 150' Roll - Fits all Fiberstars tracks	\$561.65
FSSB-200	30 Strand, 200' Roll - Fits all Fiberstars tracks	\$748.89
FSSB-500	30 Strand, 500' Roll - Fits all Fiberstars tracks	\$1,872.25
FSSB-1000	30 Strand, 1000' Roll - Fits all Fiberstars tracks	\$3,743.45
FSSB-CBL42	42 Strand Cabled, by the foot - SPECIAL ORDER	\$6.45
FSSB-CBL42-125	42 Strand Cabled, 125' Roll - Fits all Fiberstars tracks	\$807.00
FSSB-CBL42-150	42 Strand Cabled, 150' Roll - Fits all Fiberstars tracks	\$968.42
FSSB-CBL42-200	42 Strand Cabled, 200' Roll - Fits all Fiberstars tracks	\$1,291.22
FSSB-CBL42-500	42 Strand Cabled, 500' Roll - Fits all Fiberstars tracks	\$3,228.05
FSSB-CBL42-1000	42 Strand Cabled, 1000' Roll - Fits all Fiberstars tracks	\$6,456.08
Clear Jacket - ROUND		
CBL42	42 Strand Cabled, by the foot - Round -SPECIAL ORDER	\$6.45
CBL42-125	42 Strand Cabled, 125' Roll - Round	\$807.00
CBL42-150	42 Strand Cabled, 150' Roll - Round	\$968.42
CBL42-200	42 Strand Cabled, 200' Roll - Round	\$1,291.22
CBL42-500	42 Strand Cabled, 500' Roll - Round	\$3,228.05
CBL42-1000	42 Strand Cabled, 1000' Roll - Round	\$6,456.08
EdgeLite - Clear Jacket, ROUND Fiber (Note: For use in Fort Wayne coping.)		
EL	30 Strand, by the foot - Frosted, Round -SPECIAL ORDER	\$3.38
EdgeLite Deluxe - CABLED, ROUND Fiber, 49 Strands (Note: For use in Fort Wayne coping.)		
ELD	49 Strand, by the foot - Cabled, Round -SPECIAL ORDER	\$4.84

PERIMETER FIBER TRACK & ACCESSORIES



TRK-OVC50 C Track



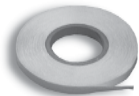
TRK-OVW50 Track



TRK-VLW100 Track



FS-120 Fitting



FS-130 Tape



FS-136 Silicone

TRK-OVC Track

Clear track for our flat-back perimeter fiber. Made of a PVC material for durability and boxed in 50 foot rolls. Fits all FSSB style fibers.

TRK-OVW Track

White track for our flat-back perimeter fiber. Made of a PVC material for durability and boxed in 50 foot rolls. Fits all FSSB style fibers.

TRK-VLW Track

Clear track for our flat-back perimeter fiber. Snaps into most vinyl-liner bead receivers. Made of a PVC material for durability and boxed in 4 foot sections, 100 feet to a box. Fits all FSSB style fibers.

TRK-BBW Track

White track for our flat-back perimeter fiber. For use on top of gunite bond beam. Made of a PVC material for durability and boxed in 50 foot rolls. Fits all FSSB style fibers.

FS-120 Fitting

Clear fitting to finish off the entrance/exit of perimeter fiber in the conduit. A nice touch to make your installation look professional. Fits inside 1" pipe and conduit. Use FS-136 silicone to seal.

FS-130 Tape

Clear, double-sided tape for temporarily holding flat-backed perimeter fiber to tile. Follow with FS-136 for a permanent installation.

FS-136 Silicone

Clear silicone adhesive for permanently attaching flat-backed perimeter fiber. Oxime-based adhesives are the only silicones tested and approved by Fiberstars. Also available in cases of 24 (Part # FS-138).

Part #	Description	List \$
TRK-OVC50	50' Clear Track	\$62.10
TRK-OVW50	50' White Track	\$62.10
TRK-VLW100	100' Vinyl Liner Clear Track 4' sections	\$165.29
TRK-BBW50	50' White Bond Beam Track	\$85.25
FS-120	Clear finish fitting for perimeter	\$11.65
FS-130	180' Roll clear double-sided tape	\$43.90
FS-136	10.3 oz. tube of Oxime-cure silicone	\$9.70
FS-138	Case of 24 Oxime-cure silicone	\$219.49



Perimeter Fiber

EASY-INSTALL TRACKS FOR PERIMETER FIBER

Supplier	Application	Part Number	Perimeter Fiber	Description
Fiberstars	Gunite, Tile	TRK-OVW	FSSB, FSSB-CBL42	White, flexible track
	Gunite, Tile	TRK-OVC	FSSB, FSSB-CBL42	Clear, flexible track
	Gunite, Tile w/ Brick, Stone or Coping	TRK-BBW	FSSB, FSSB-CBL42	White, flexible track for use on top of bond beam, brick or coping mud locks it in.
	Vinyl Liner	TRK-VLW	FSSB, FSSB-CBL42	White, flexible track that inserts into most vinyl liner bead receivers
	Vinyl Liner	PW-30	PW-30	Fiber casing has a tail that inserts into most vinyl liner bead receivers. (30 strand-cabled fiber incl.)
Stegmeier	Gunite, Cantilever Deck	7FS112	FSSB, FSSB-CBL42	Capstone profile deck form, pre-formed comers available
	Gunite, Cantilever Deck	77SV112	ELD	Capstone profile deck form, pre-formed comers available
	Gunite, Cantilever Deck	17FS112	FSSB, FSSB-CBL42	Regular profile deck form, pre-formed comers available
	Gunite, Cantilever Deck	17SV112	ELD	Regular profile deck form, pre-formed comers available
	Vinyl Liner, Cantilever Deck	8CF112	FSSB, FSSB-CBL42	Capstone profile deck form, pre-formed comers available
	Vinyl Liner, Cantilever Deck	8CF152	ELD	Capstone profile deck form, pre-formed comers available
	Vinyl Liner, Cantilever Deck	18CF112	FSSB, FSSB-CBL42	Regular profile deck form, pre-formed comers available
	Vinyl Liner, Cantilever Deck	18CF152	ELD	Regular profile deck form, pre-formed comers available
	Gunite, Coping and Tile	3FOR2	FSSB, FSSB-CBL42	Attaches to top of tile with supplied adhesive, brick or coping mud locks it in.
	Gunite, Coping and Tile	3FOR6	ELD	Attaches to top of tile with supplied adhesive, brick or coping mud locks it in.
	Gunite Renovation	7REN4F	FSSB, FSSB-CBL42	Requires a 1/8" wide x 5/8" deep saw cut.
	Gunite Renovation	7REN6S	ELD	Requires a 1/8" wide x 5/8" deep saw cut.
Mortex	Gunite, New or Renovation	TAC-IT	FSSB, FSSB-CBL42	Unique clip system that attaches to cove strip
	Vinyl Liner Top Mount	Flat	FSSB, FSSB-CBL42	Liner track with integral perimeter track
	Vinyl Liner Top Mount	Round	ELD	Liner track with integral perimeter track
Ft. Wayne	Vinyl Liner	EdgeLite	Ft. Wayne Round Fiber	Proprietary coping and fiber system
	Vinyl Liner	EdgeLite Deluxe	Ft. Wayne Round Fiber	Proprietary coping and fiber system
Cinderella	Vinyl Liner	CP-7	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
	Vinyl Liner	HM-7	FSSB, FSSB-CBL42	Liner track with integral perimeter track
	Vinyl Liner	VM-7	FSSB, FSSB-CBL42	Extrusion mounts on any vertical surface
Cardinal Systems	Vinyl Liner	Coping	FSCA	Vinyl liner coping with integral track
Arbor Aluminum	Vinyl Liner	Coping	FSCA	Vinyl liner coping with integral track
Pacific Pools	Vinyl Liner	Coping	FSCA	Vinyl liner coping with integral track
Modern Pool Systems	Vinyl Liner	FORTLT-8	ELD	Vinyl liner tracks with integral track - round fiber
	Vinyl Liner	FWTLT-8	FSCA	Vinyl liner tracks with integral track - flat back fiber
	Vinyl Liner	FOFTLT-8	FSSB, FSSB-CBL42	Vinyl liner tracks with integral track - flat back fiber
Esther Williams	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Fox	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Kafko	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Pleasure Way	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Technican-Pacific	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Imperial Pools	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Sentry Pools	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Quaker Plastics	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track

INSTALLING PERIMETER FIBER

NOTE: Use only 1" PVC SCH40 Pipe. Use sweep elbows or heat-bend the pipe. Any sharp angles will prevent fiber optic cable from going through the pipe!

The basic concept behind perimeter lighting is to run the fiber from the illuminator around the pool, spa, or other application then back to the illuminator. This allows the fiber to be lit from both ends for maximum brightness. **Note: You may want to create an 8" loop on both ends of the fiber, prior to porting, when back at the Illuminator. This will allow you to "borrow" fiber in case you experience any shrinkage problems.**

1" PVC conduit should be run to the pool wall at the same level the fiber is to be located. The fiber can go to and from the illuminator in this same conduit.

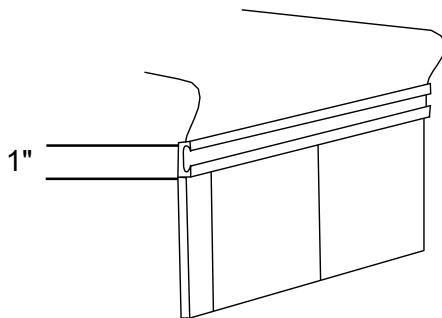
Fiberstars' FS-120 wall fitting slides into 1" PVC after the fiber is run through it, to give the entry point a finished look.

1" flexible PVC conduit may also be used to transition the fiber through elevation changes, as shown here for a raised bond beam...

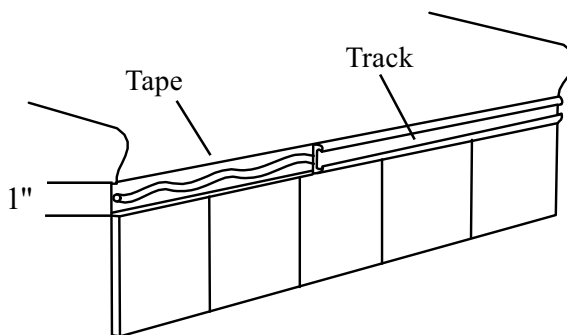
...or for step transitions...

...or for raised spas.

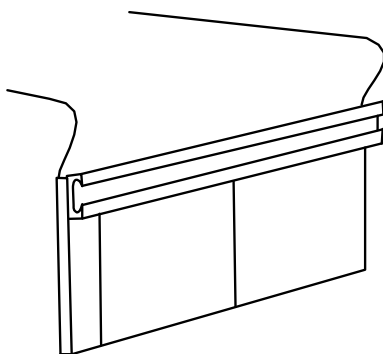
INSTALLING PERIMETER FIBER



Preparation is the key to a successful Fiberstars perimeter lighting installation. This shows one method where the tile is installed 1" lower than normal, allowing for TRK-OVW (white) or TRK-OVC (clear) track to be flush with the tile. The fiber is then snapped into the track.

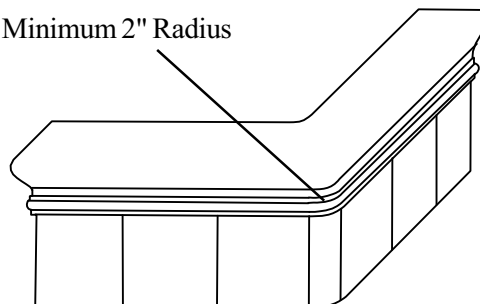


When installing TRK-OVW or TRK-OVC in a recess or when dropping the tile 1", use double sided tape and put the track in place. Finish the installation by running a bead of silicone on the top and bottom of the track.

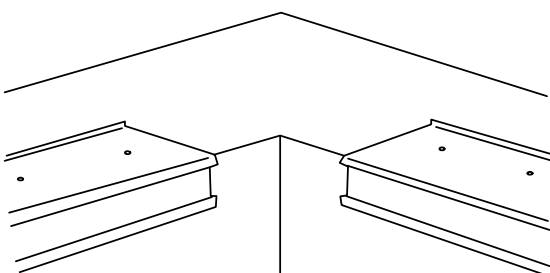


This is another method, using TRK-OVW or TRK-OVC directly on top of the tile. FS-130 double-sided tape is put on first temporarily, then the track is pressed in place. FS-136 silicone is then used on the top and bottom of the track to finish the installation. The fiber is then snapped in place.

Minimum 2" Radius

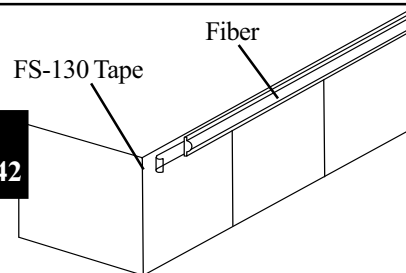


When preparing for perimeter lighting, a 2" radius should be maintained on all corners. This will allow the fiber to lay flat. If using track, stop the track 1" from the beginning of a corner to allow the fiber tubing to lay flat.



TRK-BBW is a track for use on top of the bond beam (after brown-out). The track is nailed directly to the bond beam, and brick or coping is installed on top. The fiber is then snapped into the track. Note that the track is stopped short of the corners to allow the fiber to make a radius and lay flat. Silicone should be used to hold the fiber in the corner.

FSSB & FSSB-CABL42



Using FSSB fiber with no track is the simplest way to install perimeter fiber. FS-130 double-sided tape is applied to the top of the tile, then the fiber is pressed in place temporarily. Neutral-cure silicone is then used on the top and bottom of the fiber to hold it permanently. You should use about one tube for every 30 linear feet. Oxime-based, neutral-cure silicone is the only approved adhesive for Fiberstars fiber.

Tools / Parts List



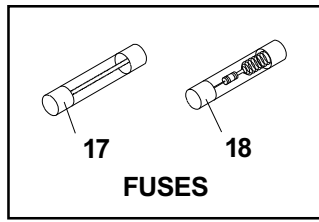
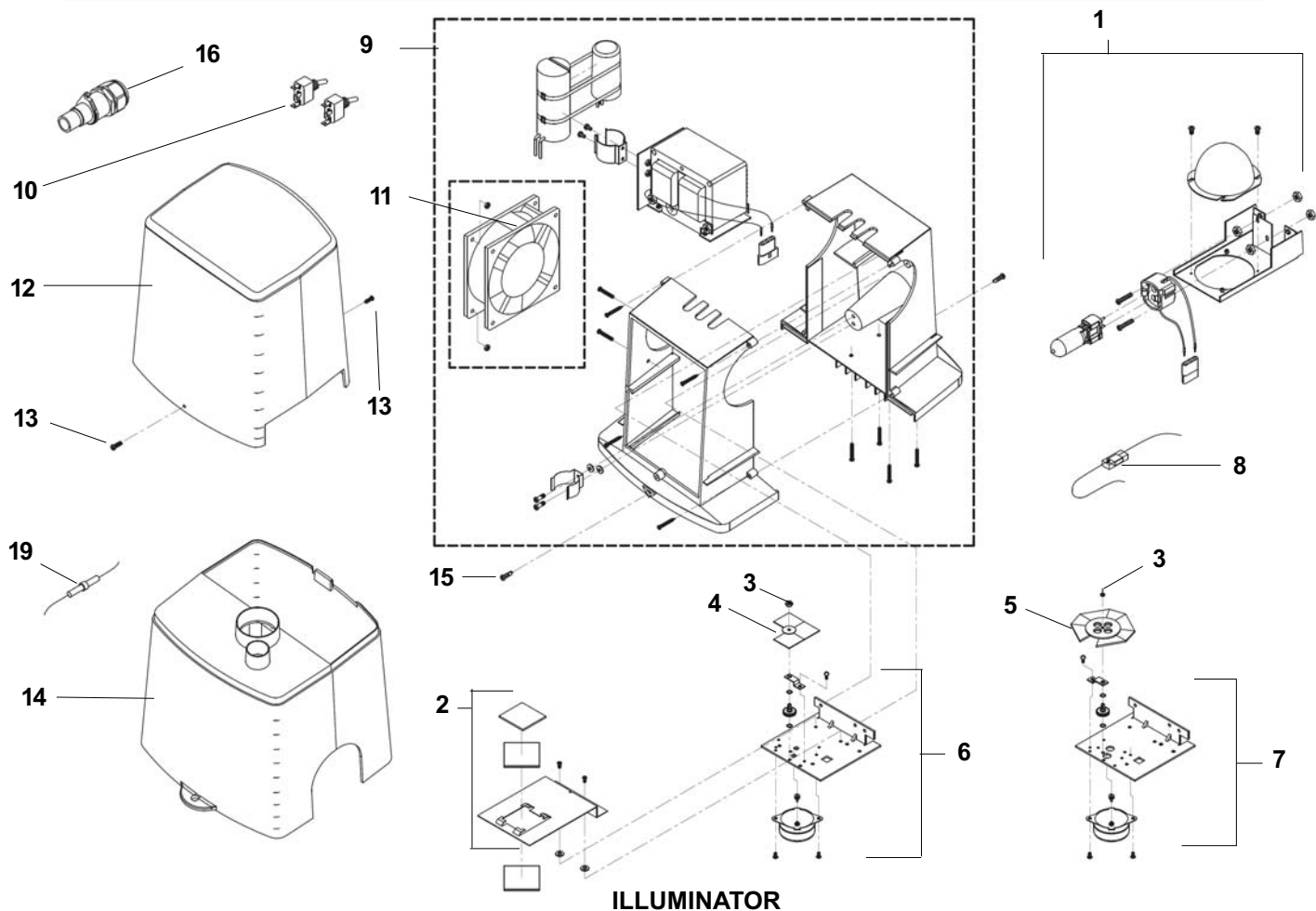
TOOLS/MISCELLANEOUS AND PARTS

Part #	Description	List \$	Part #	Description	List \$
22-15006-00	Lens Gasket - Large	\$1.91	J20-2000	Replacement Kit, Lamp & Gasket Jazz 400 Pool	\$195.46
A10980	Port Assembly 1500 / 2000	\$37.60	J30-3000	Replacement Kit, Pilot Screw & Washer, Jazz Pool	\$3.17
A11213	Color Wheel 2008 / 6008	\$94.93	J30-4000	Replacement Kit, Top Cover (Face Ring, Stainless Steel), Jazz Pool	\$52.98
A11246	Screw Chassis to Base 2000 / 6000	\$0.36	J30-5000	Replacement Kit, Compression Clamp, Jazz Pool	\$15.57
A11526	Toggle Switch 3 Position	\$11.76	J30-6000	Replacement Kit, Lens, Jazz Pool	\$35.63
A11598	Fuse 1/10A Auto-Control 2000 / 6000	\$2.87	J30-7000	Replacement Kit, Gasket, Lens, Jazz Pool	\$21.48
A11603	Screw Cover 2000 / 6000	\$0.36	JSP-1000	Replacement Kit, Color Wheel, Jazz Spa	\$83.55
A11604	Top Assembly 2000	\$71.39	JSP-2000	12V, 35W Halogen Bulb, Jazz Spa	\$63.73
A12240	Port Assembly 6000	\$37.60	JSP-3000	Replacement Kit, Pilot Screw & Washer, Jazz Spa	\$2.23
A12269	Fuse 7A Main Power 6000	\$2.87	JSP-4000	Replacement Kit, Top Cover (Face Ring, Stainless Steel), Jazz Spa	\$29.79
A7002	Fan (FS250 / 2000 / 6000 Series)	\$33.88	JSP-5000	Replacement Kit, Compression Clamp, Jazz Spa	\$27.13
A7003	Fan Cord	\$7.13	JSP-6000	Replacement Kit, Lens, Jazz Spa	\$36.06
A7012	Fuse Holder	\$4.69	JSP-7000	Replacement Kit, Gasket, Lens, Jazz Spa	\$10.36
A8092	Color Wheel Nut (All Models)	\$0.36	L20-2000	Lamp Replacement Kit, UI-2/3, Single / Dual Sided	\$211.43
A8630	Color Wheel Motor 3.6 RPM 19.7V	\$112.72	LLF-01	Large Laminar Lid	\$67.45
A8633	Color Wheel Motor Flange	\$1.20	LLF-02	Large Laminar Deck Ring	\$33.73
A8935	Color Wheel Motor, 1 RPM, 19.7V	\$191.13	LLF-03	Large Laminar Arms (Quantity 2)	\$67.45
A9150	Screw Motor Flange	\$0.36	LLF-04	Large Laminar Can	\$203.43
A9163	Relay Color Wheel	\$29.10	LLF-05	Large Laminar Jet only	\$299.79
A9173	Toggle Switch 2 Position	\$12.25	LLF-06	Large Laminar Knobs (Quantity 2)	\$11.24
A9182	Fuse 2.5A Main Power	\$2.87	ML-01	Mini Fountain Lid	\$53.96
A9792/A9903	Centering device - large	\$12.93	ML-02	Mini Fountain Deck Ring	\$25.70
A9787/A9904	Centering device - small	\$12.93	ML-03	Mini Fountain Arms (Quantity 2)	\$53.96
A9811	Sensor Sync Units	\$6.38	ML-04	Mini Fountain Can	\$160.60
B10724	Fiber Glo lens only	\$12.93	ML-05	Mini Fountain Jet only	\$224.84
B11458	Broadcast lens only	\$12.93	ML-06	Mini Fountain Knobs (Quantity 2)	\$11.24
B9155	Lamp Socket	\$6.02	PT-03C	Color Wheel FS250	\$68.29
B9937	EvenGlo Lens Only	\$12.93	PT-03D	Color Wheel 2004 / 6004	\$53.49
C12467	Circuit Board Master (Replaces C11227)	\$216.25	PT-05D	Color Wheel Sync 6004-AS	\$93.98
C12468	Circuit Board Slave (Replaces C-9514)	\$203.70	PT-05DR	Color Wheel Sync 2004-AS	\$93.98
C9516	Transformer C/W Motor 6008 Sync Units	\$80.06	Y10-4005	Color Wheel Motor Assembly 1504 / 2004	\$54.75
D12028	Baffle 1500 / 2000	\$4.43	Y10-4010	Color Wheel Motor Assembly 6004	\$54.75
D9144E	Transformer 125V	\$81.31	Y10-8005	Color Wheel Motor Assembly 2008	\$56.42
E12312	Bottom Assembly 2000 / 6000	\$94.05	Y10-8010	Color Wheel Motor Assembly 6008	\$56.42
FS-115	Disposable Epoxy Kit	\$29.04	Y10-8011	Color Wheel Mtr Assy 2008-M&S, 6008-M&S only	\$56.42
FS-117	Lens Tightening Tool	\$10.71	Y10-8020	PC Board & Motor Assembly 2004-AS	\$214.78
FS-118	Heavy Duty Hot Knife, 60 Watt with new style chisel blade	\$161.32	Y10-8030	Color Wheel Mtr Assy Sync-M(6000 V.3)(2000 V.2)	\$376.87
FS-118A	Pkg. of 5 Rplcmnt Blades old style X-ACTO	\$10.71	Y10-8031	Color Wheel Mtr Assy Sync-S(6000 V.3)(2000 V.2)	\$376.87
FS-118A1	New Style Replacement Blade for the new style FS-118 and FS-163 hot knives	\$53.53	Y10-8040	Circuit Board With Sensor-M (6000 V.3) (2000 V.2)	\$227.22
FS-120	Clear Finish Fitting for Perimeter	\$11.65	Y10-8041	Circuit Board With Sensor-S (6000 V.3) (2000 V.2)	\$227.22
FS-130	180' Roll Clear Double-Sided Tape	\$43.90	Y10-8050	PC Board & Motor Assembly 6004-AS	\$214.78
FS-136	10.3 oz. Tube of Oxime-Cure Silicone	\$9.70	Y10-8051	Hot Mirror, C/W, Motor, PC Board Assy 6004-AS	\$444.28
FS-138	Case of 24 Oxime-Cure Silicone	\$219.49	Y20-2050	Lamp Bracket Assembly 2000	\$47.30
FS-163	Butane Hot Knife	\$211.99	Y20-6000	Lamp Assembly 6000	\$141.33
FX-8000	FX120V & Jazz Non-Sync Color Wheel Motor Assy	\$112.40	Y20-6050	Hot Mirror Bracket Assembly 6000	\$135.52
FX-L	12V Halogen Lamp Replacement Kit for FX Light	\$106.19	Y30-0020	Thermal Overload (All Models)	\$12.63
HI-109	Lamp 150W 21V Halogen	\$40.73	Y30-6010	RM6000 Transmitter Replacement	\$47.11
HI-111	Lamp 250W 24V Halogen	\$46.49	Y30-6015	RM-400 Transmitter Replacement	\$71.58
HID-440	409 Series Replacement Lamp Ass.	\$359.04	Y30-6900	Fuse Holder (Inline) Universal	\$19.27



6004 Series Illuminator - Parts Exploded

6004 SERIES ILLUMINATOR - PARTS EXPLODED (See Page 59 for prices)

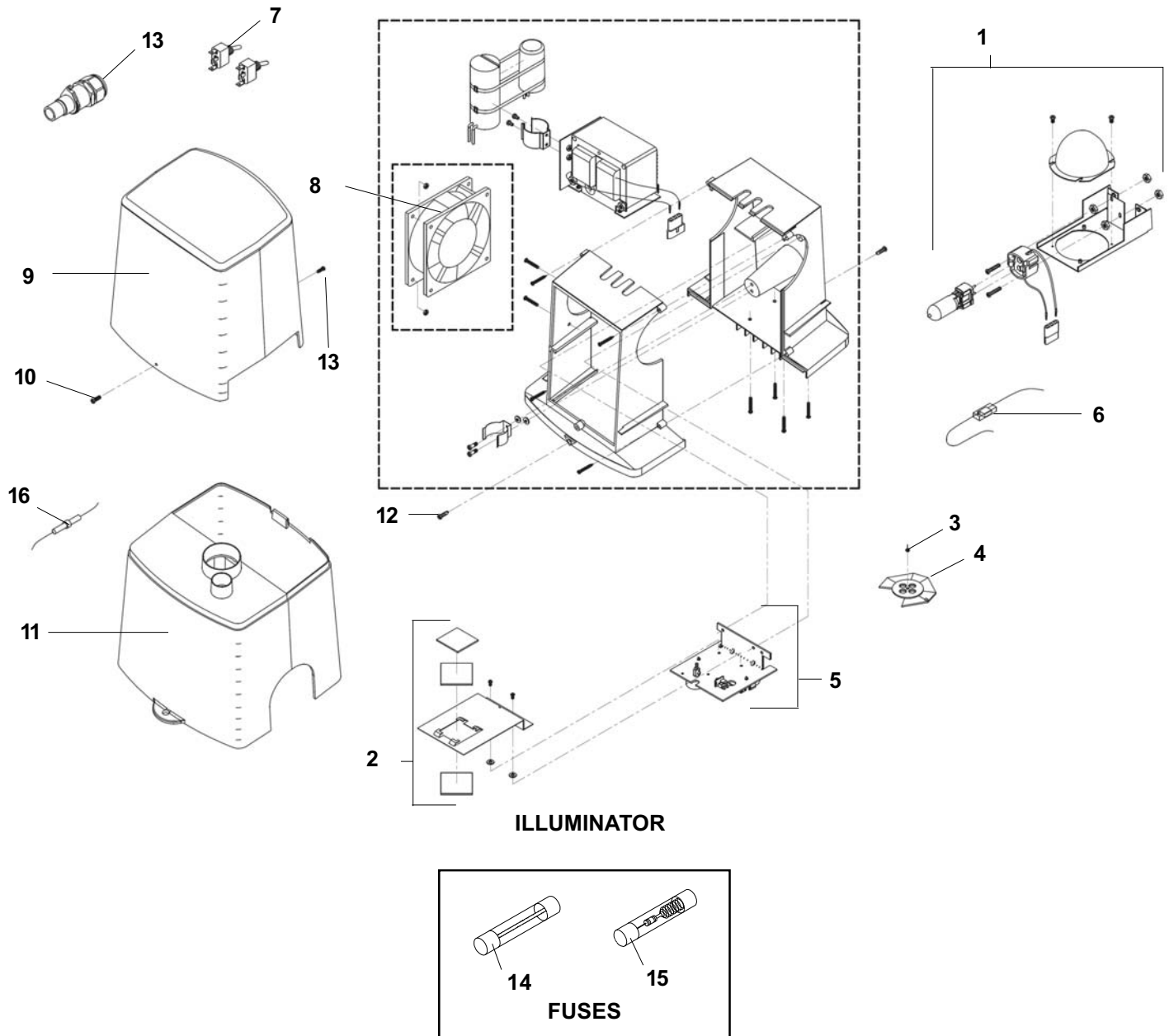


KEY	DESCRIPTION	PART#	KEY	DESCRIPTION	PART#
1	LAMP ASSEMBLY	Y20-6000	12	TOP COVER	A11604
2	HOT MIRROR BRACKET ASSEMBLY	Y20-6050	13	TOP COVER SCREW (#8-32 X .5)	A11603
3	COLOR WHEEL NUT	A8092	14	BASE	E12312
4	COLOR WHEEL ONLY (6004)	PTO3D	15	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLING)	A11246
5	COLOR WHEEL ONLY (6008)	A11213	16	FIBER PORT ASSY.	A12240
6	COLOR WHEEL MOTOR ASSY. (6004)	Y10-4010	17	FUSE, MAIN POWER, 7 AMP	A12269
7	COLOR WHEEL MOTOR ASSY. (6008)	Y10-8010	18	FUSE, COLOR WHEEL MOTOR, .1 AMP	A11598
8	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y30-0020	19	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y30-6900
9	CHASSIS - NOT AVAILABLE				
10	TOGGLE SWITCH, 3-POSITION	A11526			
11	FAN	A7002			

6004-AS Series Illuminator - Parts Exploded



6004-AS SERIES ILLUMINATOR - AUTO SYNCH- PARTS EXPLODED



ILLUMINATOR

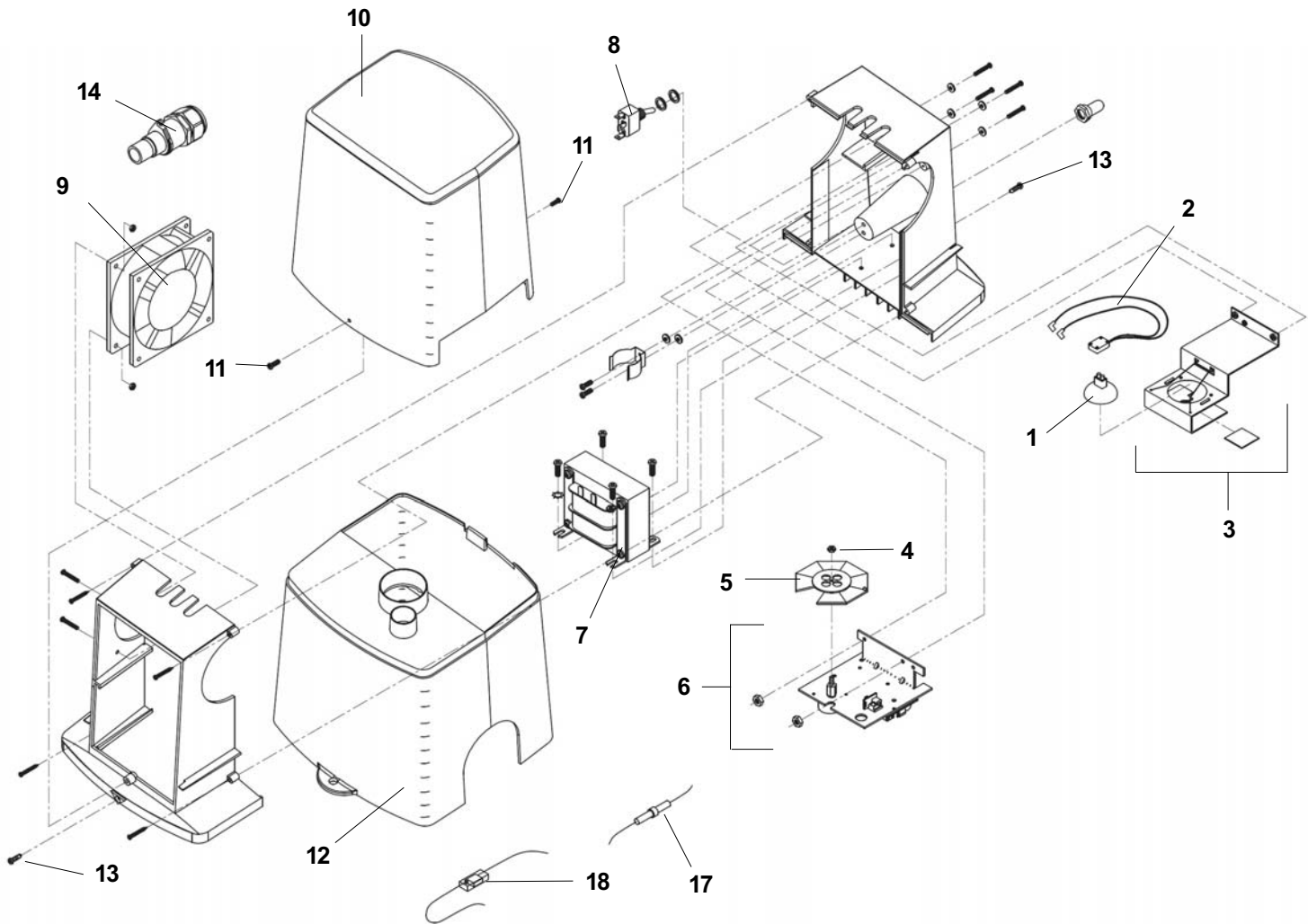
FUSES

KEY	DESCRIPTION	PART#	KEY	DESCRIPTION	PART#
1	LAMP ASSEMBLY	Y20-6000	7	TOGGLE SWITCH, 3-POSITION	A11526
2	HOT MIRROR BRACKET ASSEMBLY	Y20-6050	8	FAN	A7002
3	COLOR WHEEL NUT	A8092	9	TOP COVER	A11604
4	COLOR WHEEL ONLY 6004-AS SYNC	PTO5D	10	TOP COVER SCREW (#8-32 X .5)	A11603
5	COLOR WHEEL MOTOR ASSY. AND PC BOARD 6004-AS SYNC	Y10-8050	11	BASE	E12312
2&5	HOT MIRROR, MOTOR, COLOR WHEEL, AND PC BOARD ASSEMBLY 6004-AS SYNC	Y10-8051	12	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLING)	A11246
6	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y30-0020	13	FIBER PORT ASSY.	A12240
			14	FUSE, MAIN POWER, 7 AMP	A12269
			15	FUSE, COLOR WHEEL MOTOR, .1 AMP	A11598
			16	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y30-6900

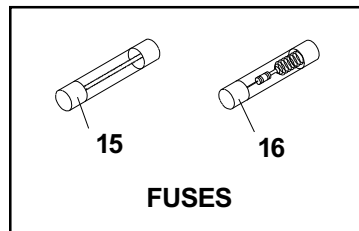
2004-AS Series Illuminator - Parts Exploded



2004-AS ILLUMINATOR AUTO SYNCH- PARTS EXPLODED



ILLUMINATOR

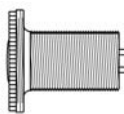


FUSES

KEY	DESCRIPTION	PART#	KEY	DESCRIPTION	PART#
1	LAMP 250W 24V	HI-111	10	TOP COVER	A 11604
2	LAMP SOCKET	B9155	11	TOP COVER SCREW (#8-32 X.5)	A 11603
3	LAMP BRACKET ASSY.	Y 20-2050	12	BASE	E12312
4	COLOR WHEEL NUT	A 8092	13	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLING)	A 11246
5	COLOR WHEEL ONLY 2004-AS SYNC	PTO5DR	14	FIBER PORT ASSY.	A 10980
6	CLR WHL MOTOR ASSY. AND PC BOARD 2004-AS SYNC	Y 10-8020	15	FUSE, MAIN POWER, 2.5 AMP	A 9182
5&6	HOT MIRROR, MOTOR, COLOR WHEEL, AND PC BOARD ASSEMBLY 2004-AS SYNC	Y 10-8021	16	FUSE, COLOR WHEEL MOTOR, .1 AMP	A 11598
7	TRANSFORMER, 120VAC - 19.7VAC	D9144E	17	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y 30-6900
8	TOGGLE SWITCH, 3-POSITION	A 11526	18	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y 30-0020
9	FAN	A 7002			



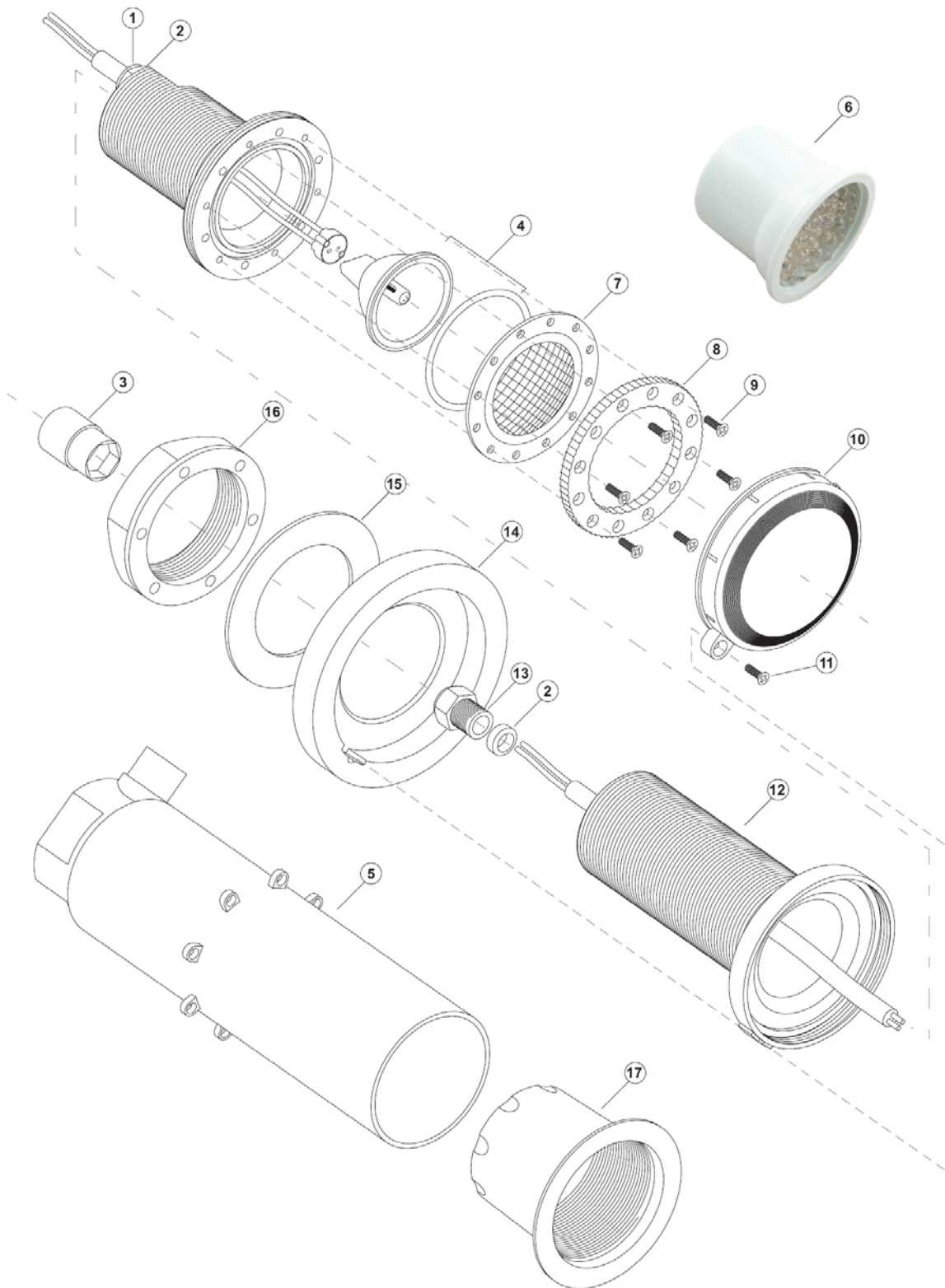
PAL Pool Light System - Parts Exploded



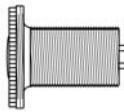
**PAL-2000
LIGHTING
SYSTEM**

**PAL-2000 CONCRETE/FIBERGLASS
LIGHT**

PAL-2000



PAL Pool Light System - Parts Exploded



**PAL-2000
LIGHTING
SYSTEM**

PAL-2000 CONCRETE/FIBERGLASS LIGHT

PAL-2000

Key	Part #	Description
1	TBA	Gland nut for lamp body
2	TBA	Gland seal, lamp and cassette body
3	TBA	Conduit adapter, 1/2"s - 3/4" spg
4	FPAL-X	Xenon lamp kit, 12v, 50w for pool light
5	FPAL-CA	Concrete adapter kit (requires 39-2RCAS)
6	FPAL-LAL	LED array, LAL, color lock with O-ring
7	TBA	Lens diffuser, prismatic design
8	TBA	Clamp ring, clear prismatic
9	TBA	Lens screw, stainless, set of six
10	FPAL-LB	Lens cover, snap-on plastic, Blue
10	FPAL-LG	Lens cover, snap-on plastic, Green
10	FPAL-LR	Lens cover, snap-on plastic, Red
10	FPAL-LO	Lens cover, snap-on plastic, Orange
10	FPAL-LC	Lens cover, snap-on plastic, Clear
10	FPAL-CK	Lens cover, snap-on plastic, set of 4 colors
11	TBA	Screw, nylon, lens cover
12	TBA	Cassette body, less nut
13	TBA	Gland nut for cassette body
14	FPAL-TRW	UL warning plate, white
14	FPAL-TRB	UL warning plate, black
14	FPAL-TRG	UL warning plate, gray
14	FPAL-TRT	UL warning plate, tan
15	TBA	Cassette gasket seal, rubber
16	TBA	Cassette nut for fiberglass installs
17	FPAL-CN	Concrete wall fitting (use with 39-2RCUK)

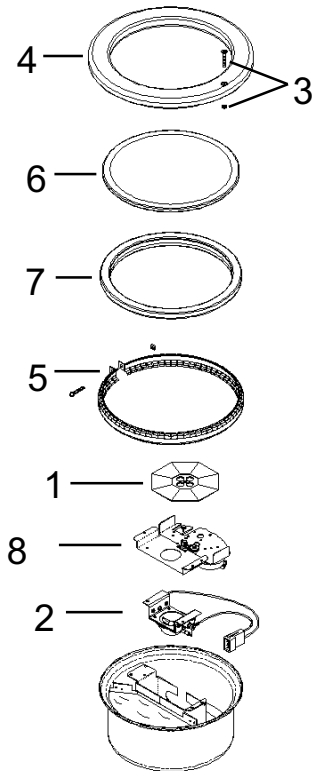
Complete Light Assemblies

FPAL-WHT	PAL-2000RU, white, 12v 50w, 79 ft.
FPAL-C	PAL2000LAL, white, 12v LED array, 79 ft



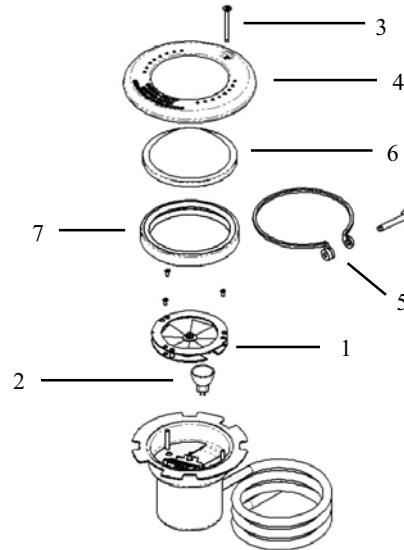
Jazz Light - Parts Exploded

THE JAZZ™ POOL LIGHT REPLACEMENT PARTS EXPLODED



KEY	DESCRIPTION	PART#
1	COLOR WHEEL (NON-SYNC)	J10-1000
2	LAMP KIT, 50W METAL HALIDE FOR J400 SERIES (INCLUDES REPLACEMENT GASKET #7)	J20-2000
3	PILOT SCREW, WITH CAPTIVE GUM WASHER	J30-3000
4	FACE RING, STAINLESS STEEL	J30-4000
5	COMPRESSION CLAMP	J30-5000
6	LENS, FIBERSTARS, 8-3/8" DIA., TEMPERED	J30-6000
7	GASKET, LENS	J30-7000
8	SYNC & NON-SYNC COLOR WHEEL MOTOR ASSEMBLY	FX-8000

THE JAZZ SPA LIGHT (120V & 12V) REPLACEMENT PARTS EXPLODED



KEY	DESCRIPTION	PART#
1	COLOR WHEEL	JSP-1000
2	12V 35W HALOGEN LAMP	JSP-2000
	(INCLUDES ITEMS #3-PILOT SCREW & #7-GASKET)	
3	PILOT SCREW, WITH CAPTIVE GUM WASHER	JSP-3000
4	FACE RING, STAINLESS STEEL	JSP-4000
5	COMPRESSION CLAMP	JSP-5000
6	LENS	JSP-6000
7	GASKET, LENS	JSP-7000