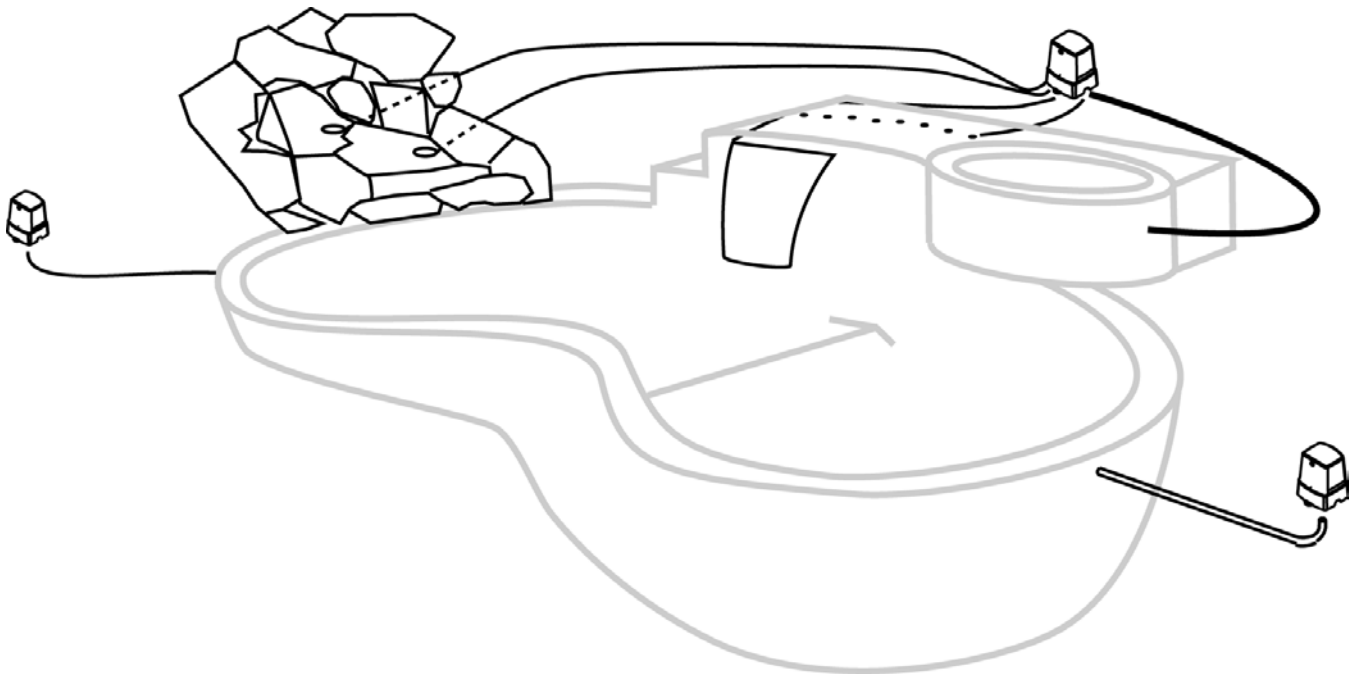




6600-AS INSTALLATION MANUAL

AUTO SYNCHRONIZED ILLUMINATORS



**WARNING: DO NOT INSTALL WITHIN 1.5M
(5 FT.) OF A POOL, SPA ,OR HOT TUB.
ADVERTISSEMENT: NE PAS INSTALLER
A MOINS DE 1,5 M D'UNE PISCINE OU
D'UNE CUVE DE RELAXATION.**

79-15015-00 REV. A

44259 NOBEL DRIVE

FREMONT, CA 94538

TEL(800)327-7877 FAX(510)490-3247



www.fiberstars.com

CONTROL OPTIONS

RM-400 WIRELESS REMOTE BY FIBERSTARS **NOTE: MAXIMUM 2 LIGHT UNITS PER RM-400**

EXTERNAL AUTO CONTROL (JANDY AQUALINK, COMPOOL, AQUADYNE, ETC.)

NOTE: Do not use Dimmable relays on Metal Halide!

LIGHT SWITCHES

WIRING THE 6600-AS AUTO SYNC SYSTEM:

1) **FOR POWER** the 6600-AS series illuminator draws 4.4 amps at start up and has a run current usage of 1.8 amps. Use these to determine the appropriate size and number of switches or relays (non-dimming) needed for power. In the most common installations all power wires can be hooked up to the same switch.

2) **FOR COLOR WHEEL** the key to the Auto Sync system is that **ALL** color wheel wires **MUST** be hooked up to the same switch.

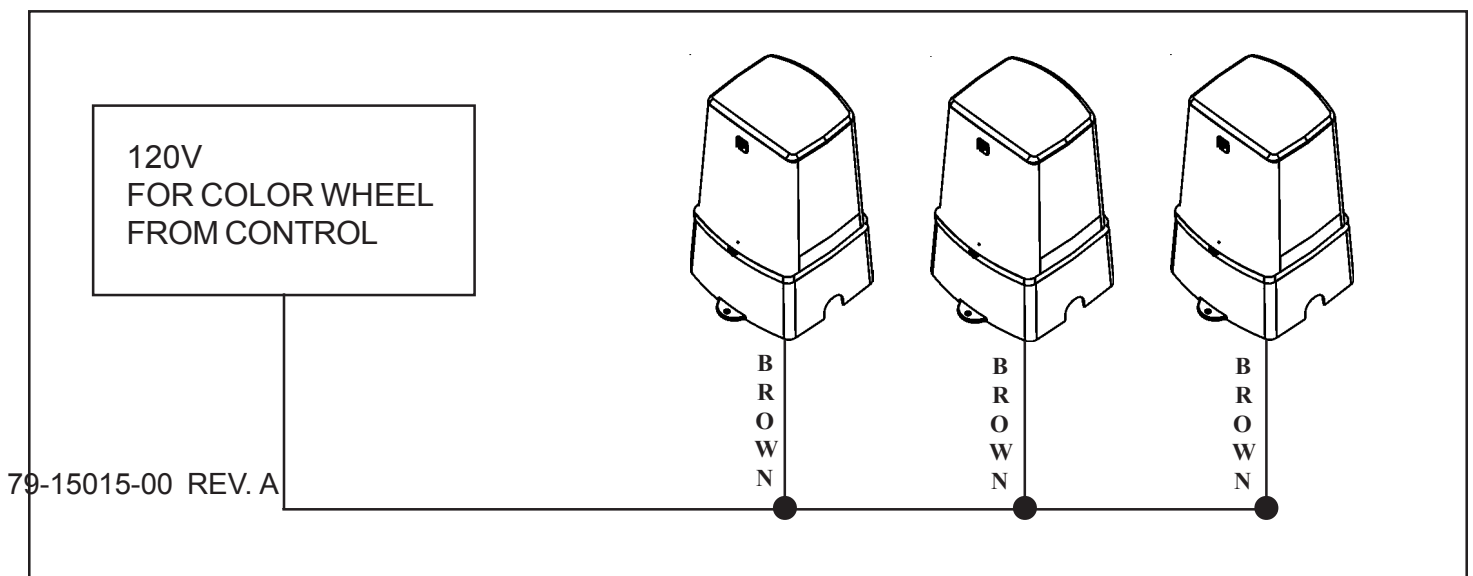
HOW IT WORKS!

Before switching on the 6600 illuminators make sure color wheel switch is in the OFF position.

Turn the power on to the illuminators, the color wheels will rotate to the **HOME** position. This action takes about 15 seconds. At this time all AS units should be holding on the same color.

After the color wheels have reached there home positions the color wheels can be switched on. The units should now be in sync.

When shutting down the system always turn the color wheels OFF so the next time the lights are turned on the color wheels can return to their home position again assuring synchronization.



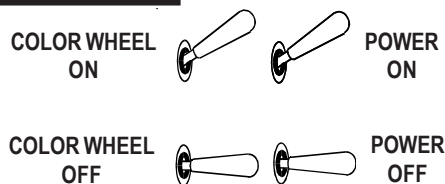
ELECTRICAL CONNECTIONS

6600-AS SERIES

120v 60HZ ONLY

TOGGLE SWITCH POSITIONS

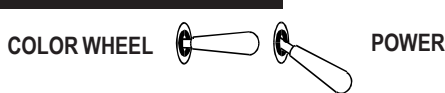
MANUAL CONTROL



EXTERNAL AUTO CONTROL



OPTIONAL RM6000 CONTROL



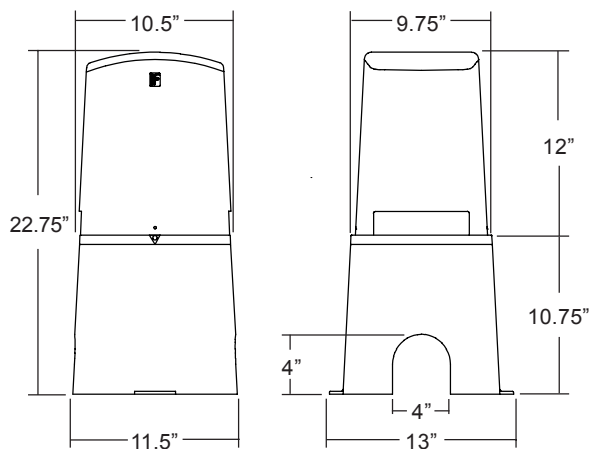
EXTERNAL
COLOR WHEEL
CONTROL
(BROWN)

GREEN
WHITE
BLACK
GROUND
NEUTRAL
HOT

EXTERNAL AUTO CONTROL HOOK-UP FOR COLOR WHEEL For Jandy Aqualink, Compool, Aquadyne, etc.

Run a 120V hot wire to the illuminator from a second relay in the control's sub panel for the color wheel control. Connect this wire to the folded brown wire with fuse. Place the Color Wheel toggle switch in the bottom position.

SPECIFICATIONS



WARRANTY
Lifetime Limited Warranty*,
including the lamp

MAXIMUM SOIL HEIGHT:
DO NOT ALLOW FILL TO
EXCEED THIS LEVEL!

LAMP

Type: Metal-Halide, proprietary design
Lamp life: 6000 hrs average
Cool down restrike period: 3 minutes
Replacement p/n: Y20-6000

CONSTRUCTION

Case: High Impact Polycarbonate
Ventilation: 110 cu ft/min air volume
Acoustic rating: 50dB(A)
Weight: 20 lbs.

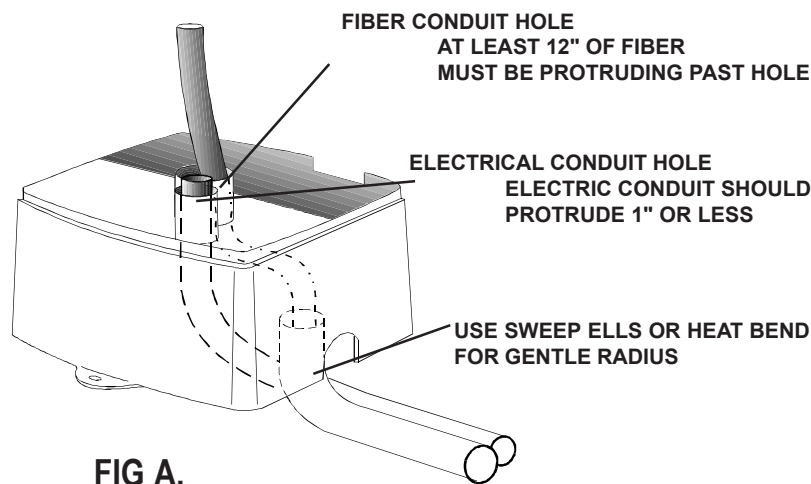
ELECTRICAL

Voltage required: 120VAC 60Hz
Power consumption: 200 Watts
Start current load: 4.4 amps
Current usage: 1.8 amps

INSTALLATION GUIDELINES

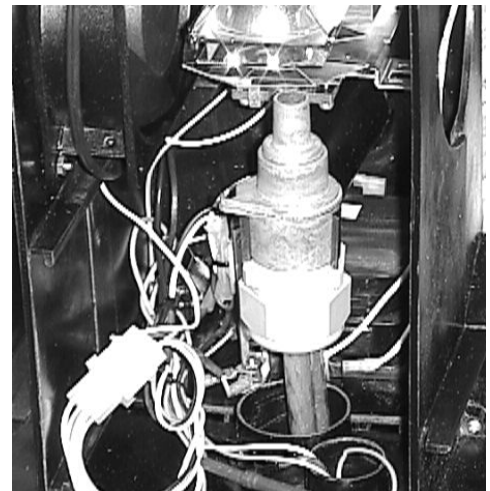
REFER TO THE DIAGRAM ON THE FRONT OF THIS MANUAL FOR THE FOLLOWING PROCEDURES

- 1) SEE OUR GENERAL INSTALLATION MANUAL FOR FIBER AND CONDUIT INSTALLATION IN THE POOL. THIS MANUAL COVERS THE 6600-AS ILLUMINATOR INSTALLATION ONLY.
- 2) CUT THE FIBER CONDUITS SO THEY WILL ENTER THE INSTALLATION BASE APPROXIMATELY HALF WAY. CUT THE ELECTRICAL CONDUIT SO IT WILL PROTRUDE PAST THE CONDUIT HOLE 1" OR LESS (FIG A.). PULL ALL FIBER OPTIC CABLES AT LEAST 12" THROUGH THE TOP OF THE INSTALLATION BASE.
- 3) FOLLOW THE PORT ASSEMBLY PROCEDURES ON THE BACK OF THIS MANUAL.
- 4) PLACE THE CHASSIS ON THE INSTALLATION BASE. SECURE THE ILLUMINATOR WITH THE TWO SCREWS SUPPLIED. SNAP THE PORT INTO THE CLIP ON THE CHASSIS. MAKE SURE IT SEATS FIRMLY INTO THE CLIP (FIG B.).
- 5) MAKE THE ELECTRIC CONNECTIONS AS SHOWN ON THE PREVIOUS PAGE. MAKE SURE NO WIRES INTERFERE WITH THE COOLING FAN OR COLOR WHEEL.
- 6)
 - a) IF INSTALLING IN THE GROUND:
BACKFILL HALF WAY UP THE INSTALLATION BASE. ALLOW AMPLE HEIGHT FOR TOP SOIL AND LANDSCAPING. DO NOT ALLOW THE VENTS ON THE BOTTOM OF THE ILLUMINATOR TO BE BLOCKED. THIS WILL CAUSE THE ILLUMINATOR TO OVERHEAT AND SHUT OFF.
 - b) IF SURFACE MOUNTING:
USE PROPER SECURING SCREWS FOR THE SURFACE TYPE YOU ARE ATTACHING TO, USING THE 2 HOLES PROVIDED ON THE BASE. EXAMPLE: FOR CONCRETE, USE PROPER CONCRETE SCREWS. FOR WOOD SURFACE, USE PROPER WOOD SCREWS



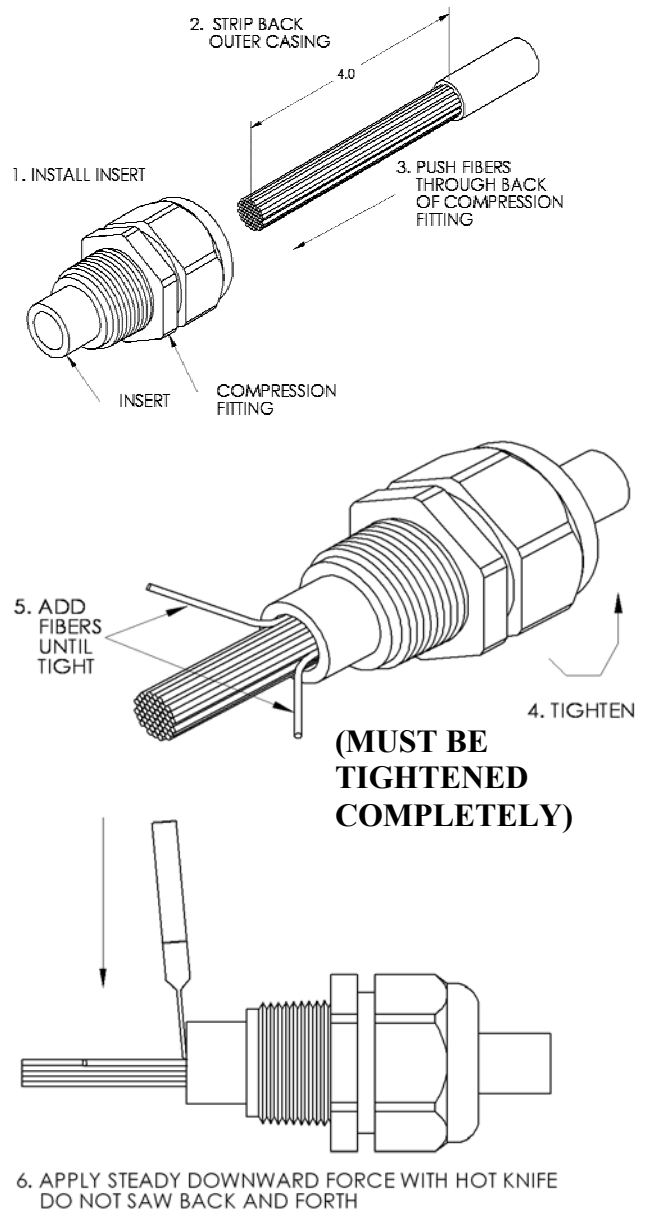
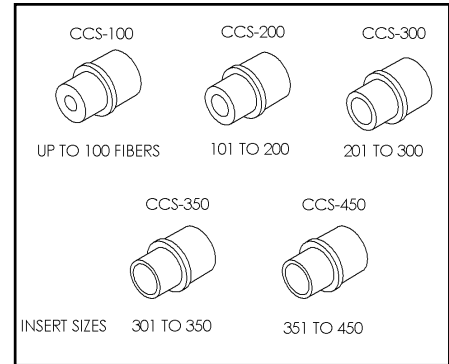
APPROVED CONDUITS FOR USE WITH FIBER OPTIC CABLES

- White PVC conduit/ pipe SCH 40 or SCH 80
- Gray PVC Conduit/pipe SCH 40 or SCH 80
- Flexible PVC pipe
- Black poly pipe
- Any other electrical conduit



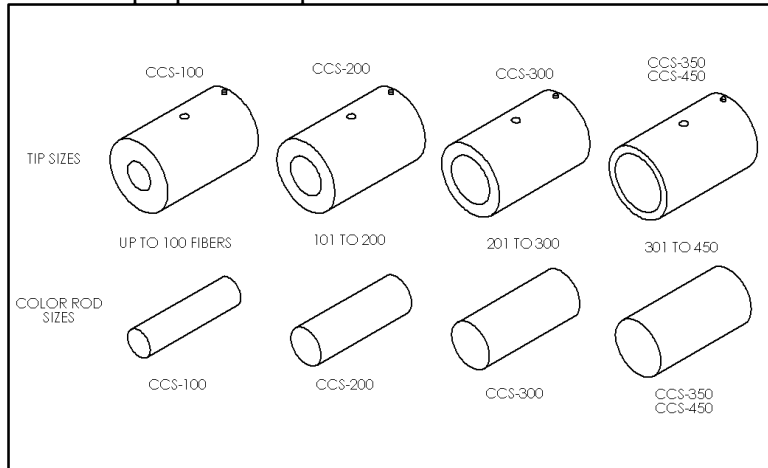
CONSTANT COLOR SYSTEM PORT ASSEMBLY/FIBER TERMINATION

- A. Insure that the total fiber count of all fiber strands is 450 or less.
- B. Install the proper size Insert into compression fitting and fully seat insert (Fig. 1).
- C. Strip back all fiber casings no less than 4 inches (Fig. 2). Take care not to nick the fibers.
- D. Insert the bare fibers into the insert so that ALL fibers protrude past the insert end (Fig. 3). Tighten the port compress nut down on the fiber casing. **IMPORTANT: MUST BE TIGHTENED DOWN COMPLETELY** (Fig. 4).
- E. **IMPORTANT:** If the insert is not completely full, insert scrap individual fibers into the insert until it is completely full (Fig. 5). This will keep the lit fibers perpendicular to the lamp and prevent the fibers from overheating.
- F. Heat up hot knife (PN FS-118 or FS-163). Once hot knife is up to temperature, apply firm downward pressure on the fibers, with the blade touching the insert at a slight angle (Fig 6). **DO NOT SAW BACK AND FORTH.** Allow the heat of the knife to slowly trim the fibers. Ease the pressure off as the knife starts to complete the cut. Turn the hot knife off and allow it to cool

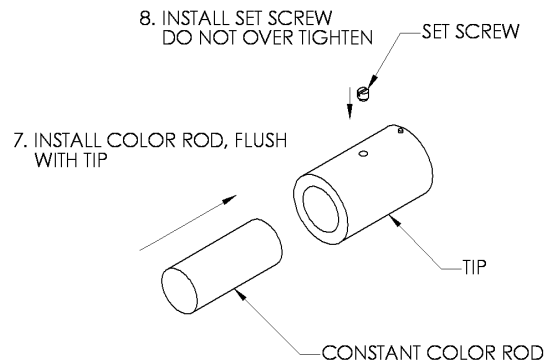


CONSTANT COLOR SYSTEM PORT ASSEMBLY/FIBER TERMINATION

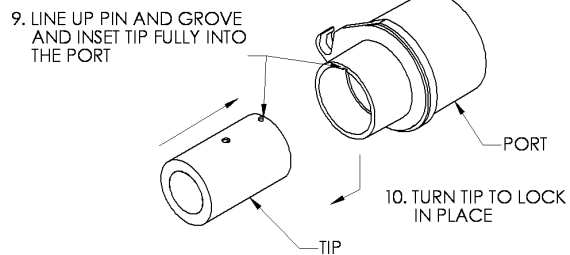
- G. Choose the proper size tip and color rod for the number of fibers.



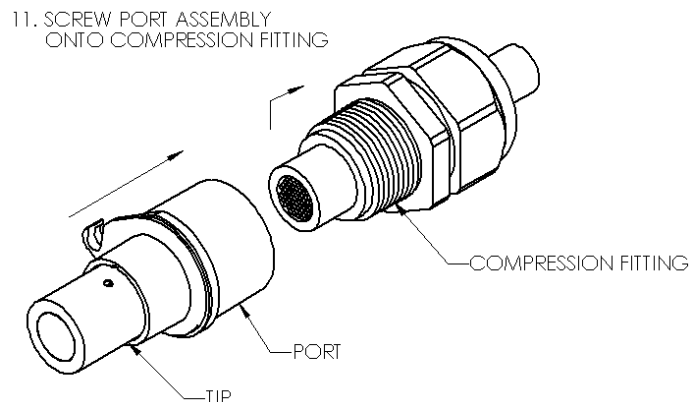
- H. Slide the constant color rod inside the insert until both ends are flush with the ends of the insert (Fig. 7). Use the set screw to lock the constant color rod in place (Fig. 8). **DO NOT OVER TIGHTEN!** Set screw should be just tight enough to keep the constant color rod in place.



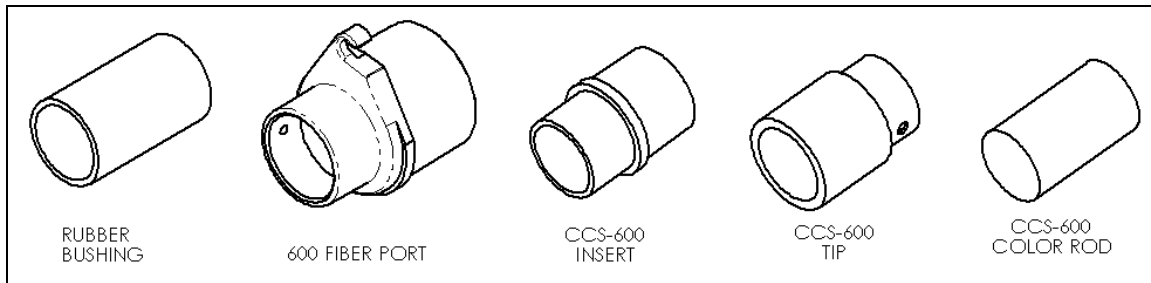
- I. Line up pin on insert with grove port and full seat insert (Fig. 9). Turn insert clockwise to lock it in place (Fig. 10).



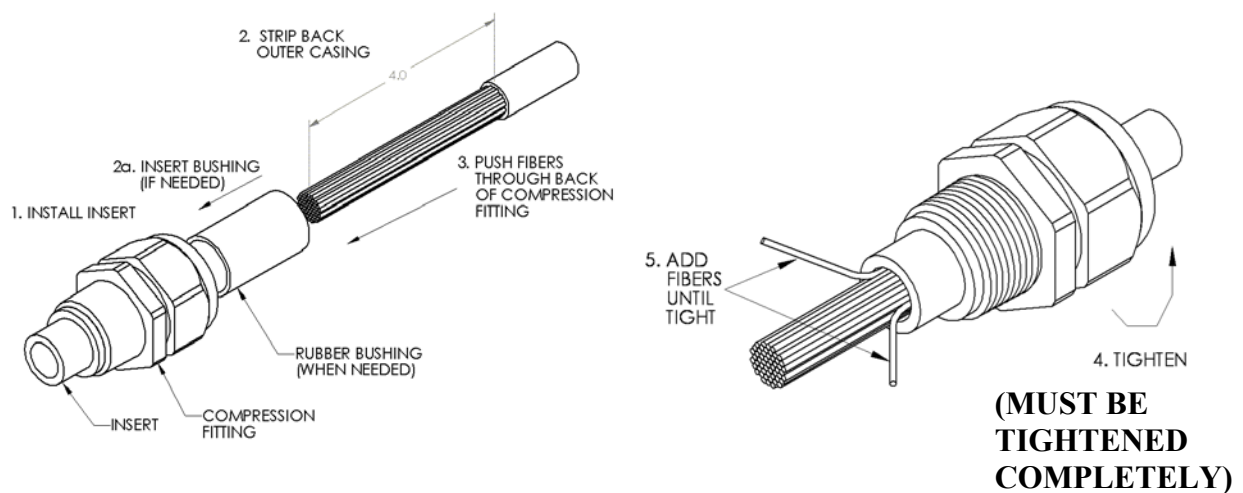
- J. Screw port assembly onto compression fitting until fully seated (Fig. 11).



CONSTANT COLOR SYSTEM PORT ASSEMBLY 600 FIBER TERMINATION

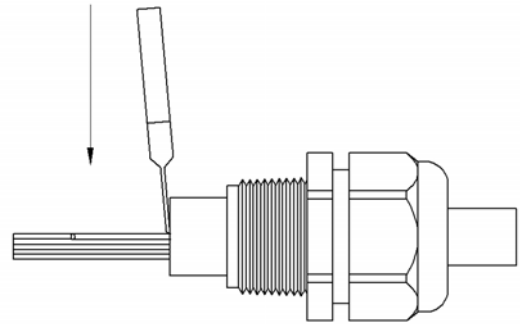


- A. Insure that the total fiber count of all fiber strands is between 451 and 600. If you have more than 600 fibers you will need a second illuminator. The Maximum capacity of this Constant Color System port is 600 fibers.
- B. Install the Insert into compression fitting and fully seat insert (Fig. 1).
- C. Strip back all fiber casings no less than 4 inches (Fig. 2). Take care not to nick the fibers.
- D. Insert the bare fibers into the insert so that ALL fibers protrude past the insert end (Fig. 3). Tighten the port compress nut down on the fiber casing. **IMPORTANT: MUST BE TIGHTENED DOWN COMPLETELY** (Fig. 4). If fiber casing will not go into the compression fitting then install the rubber bushing into the fitting half-way. (Fig 2a) Then insert the bare fibers until the fiber casing is in contact with the bushing. Tighten the port compress nut down on the bushing.
- E. **IMPORTANT: If the insert is not completely full, insert scrap individual fibers into the insert until it is completely full (Fig. 5). This will keep the lit fibers perpendicular to the lamp and prevent the fibers from overheating.**



CONSTANT COLOR SYSTEM PORT ASSEMBLY 600 FIBER TERMINATION

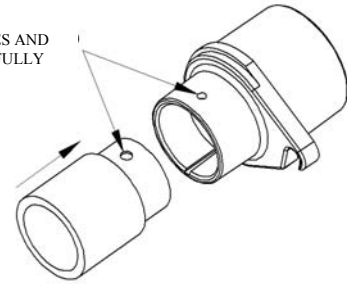
- F. Heat up hot knife (PN FS-118 or FS-163). Once hot knife is up to temperature, apply firm downward pressure on the fibers, with the blade touching the insert at a slight angle (Fig 6). **DO NOT SAW BACK AND FORTH.** Allow the heat of the knife to slowly trim the fibers. Ease the pressure off as the knife starts to complete the cut. Turn the hot knife off and allow it to cool in a safe place.



6. APPLY STEADY DOWNWARD FORCE WITH HOT KNIFE
DO NOT SAW BACK AND FORTH

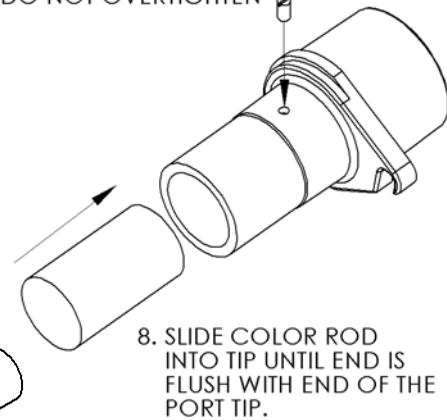
- G. Line up hole on insert with hole on the port and fully seat the insert on the port (Fig. 7).

7. ALIGN HOLES AND
INSERT TIP FULLY



- H. Slide the constant color rod inside the insert until the end is flush with the end of the tip (Fig. 8). Use the set screw to lock the constant color rod and tip in place (Fig. 9). **DO NOT OVERTIGHTEN!** Set screw should be just tight enough to keep the constant color rod and port tip in place.

9. INSTALL SET SCREW
DO NOT OVERTIGHTEN



8. SLIDE COLOR ROD
INTO TIP UNTIL END IS
FLUSH WITH END OF THE
PORT TIP.

10. SCREW PORT ASSEMBLY
ONTO COMPRESSION FITTING

