



## **Installation Guide**

### **Light Cable Replacement for the 6300 & Performer Dental Light**



### **Recommended Tools**

- SAE Hex Key Set
- Philips Driver
- Multi-Purpose Wire Stripper/Crimper
- Needle Nose Pliers
- Wire Cutters
- Adhesive Tape (Electrical or Masking)
- Voltage Detector (19v-1000v AC/5v-1000v DC)



## Light Cable Removal: Performer

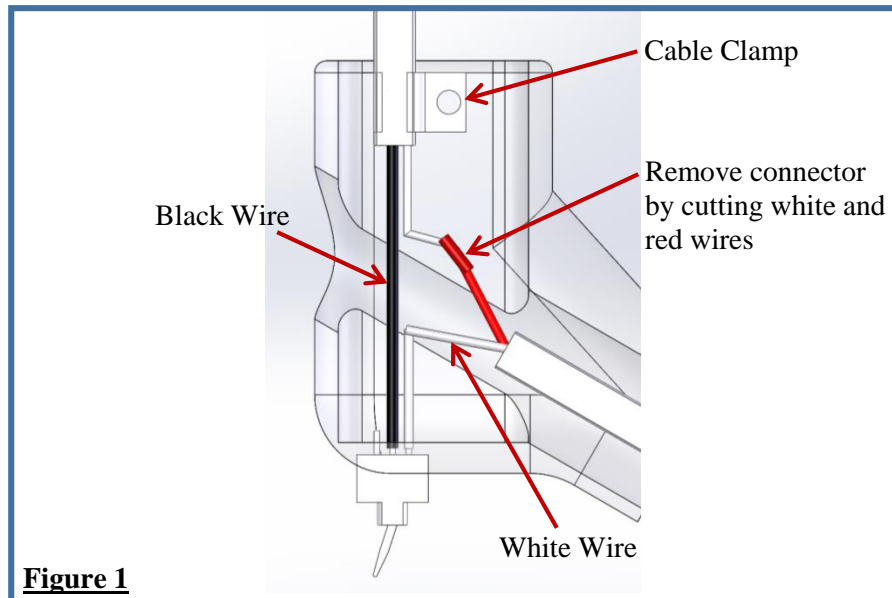
1. Turn off the power to the device then disconnect the cable from the power source.

**NOTE:** Disconnect the dental chair or junction box from its power source **BEFORE** disconnecting the light cable.



**WARNING:** Failure to disconnect the device from its power source before attempting this procedure will result in electrical shock.

2. Remove the cover from the light with a 5/32 in. hex key to access the wiring.
3. Using wire cutters:
  - Cut the Black wire 2.5 in. to 3 in. from the bottom of the On/Off Switch. **Figure 1**
  - Remove the connector connecting the white cable wire to the red wire from the dental light by cutting off the connector. **Figure 1**
4. Remove the cable clamp from inside of the housing with a 5/64 in. hex key. **Figure 1**
5. Cut the light cable at the top of the rear and front knuckles, then remove the cable from the light post, flex arm and housing. Discard the old light cable.





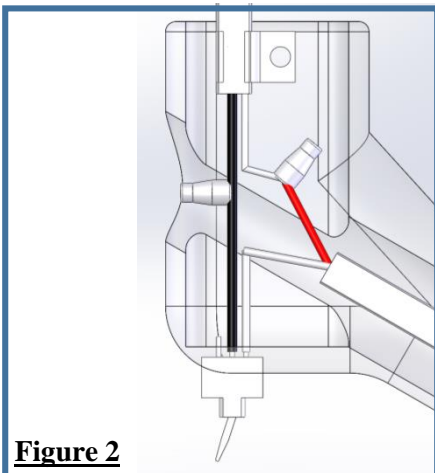
## Light Cord Installation: Performer Light

1. Cut the cable tie and remove the protective tubing from the new light cable to expose the pins.
2. Wrap the pins with tape and then lubricate two to three feet (from pin end of cable) of the light cable with the supplied wire pulling lubricant.
3. Lower the flex arm to its lowest point, then route the new cable (pin end first):
  - Up through the housing,
  - Through the front knuckle,
  - And into the flex arm groove.Continue until the opposing end of the light cable resides within the housing. Secure the light cable to the housing with the cable clamp and fastener.
4. Route the pin end of the cable through the rear knuckle, through the light post and to the transformer housing.
5. Using wire strippers and a crimper, make the following connections (**Figure 2**):
  - Strip the Black wire from the bottom of the switch 0.25 in. and connect to the Black wire from the light cable with a supplied crimp nut.
  - Strip the Red wire from the light head 0.25 in. and connect to the White wire from the light cable with a supplied crimp nut.

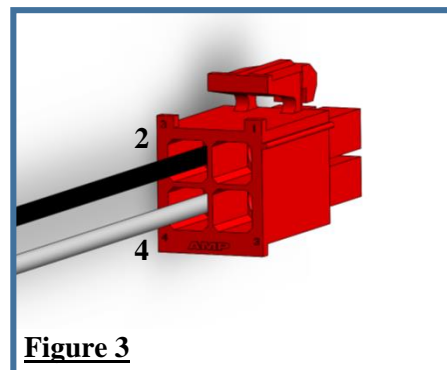


**WARNING:** Failure to properly connect the wiring may result in electrical shock and/or fire.

6. Align and seat the light switch into the housing, then re-install the cover and fasteners. Ensure that the wiring is not being pinched between the covers. **Figure 2**
7. Install the supplied Red 4 (connector may be painted red on one side only) Pin Connector to the pin side of the light cable (**Figure 3**):
  - Black wire into the #2 position.
  - White wire into the #4 position.



**Figure 2**



**Figure 3**



## Light Cable Removal: 6300 Light

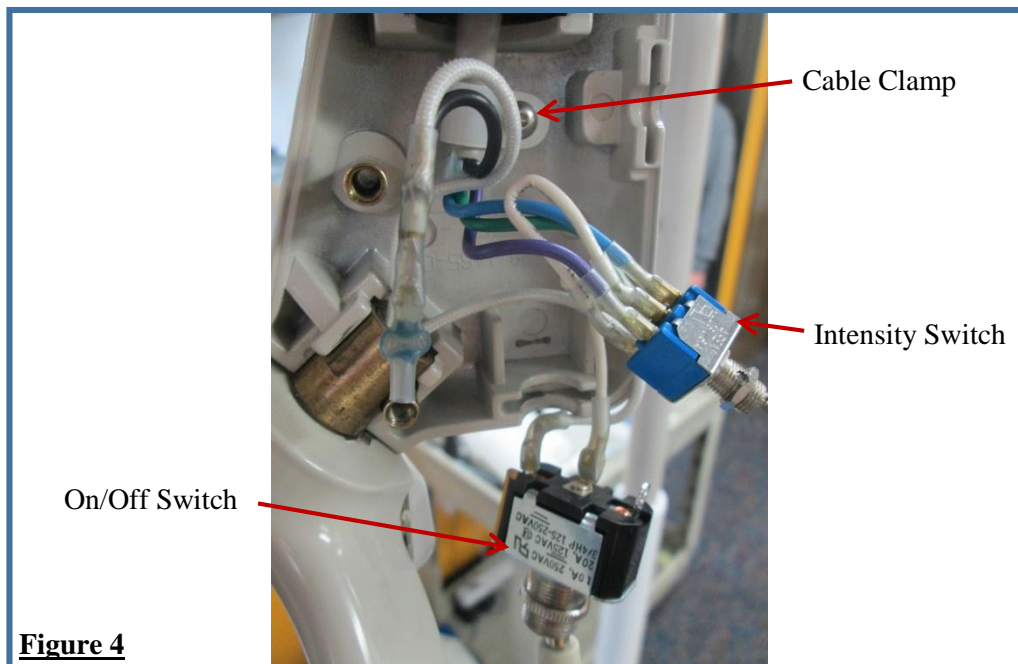
1. Turn off the power to the device then disconnect the cable from the power source.

**NOTE:** Disconnect the dental chair or junction box from its power source **BEFORE** disconnecting the light cable.



**WARNING:** Failure to disconnect the device from its power source before attempting this procedure will result in electrical shock.

2. Remove the cover from the switch housing and the flex arm cover.
3. Using wire cutters (**Figure 4**):
  - Cut the intensity switch wires 2.5 in. to 3 in. from the body.
  - Remove the connector connecting the Black cable wire to the White wire from the dental light.
4. Remove the cable clamp from inside of the housing. **Figure 4**
5. Cut the light cable at the top of the rear and front knuckles, then remove the cable from the light post, flex arm and housing. Discard the old light cable.





## Light Cord Installation: 6300 Light

1. Cut the cable tie and remove the protective tubing from the new light cord exposing the pins.
2. Wrap the pins with tape and then lubricate two to three feet (from pin end of cable) of the light cable with the supplied pulling lubricant.
3. Lower the flex arm to its lowest point and then route the new cable (pin end first):
  - Through the housing,
  - Through the front knuckle,
  - And into the flex arm groove.

Continue until the opposing end of the light cable resides within the switch housing. Secure the light cable to the housing with the cable clamp and fastener.

4. Using wire cutters/strippers and a crimper:
  - Cut the cable as necessary to only allow the length needed to make connections and remove cable jacket/sheath.
  - Strip the White wire from the dental light 0.25 - .50 in and connect to the Black wire from the light cable with the supplied crimp nut.
  - Strip intensity switch wires 0.25 - .50 in.
  - Refer to the wiring chart based on Year Assembled. **Table 1**



**WARNING:** Failure to properly connect the wiring may result in electrical shock and/or fire.

**Table 1 – Wiring Chart**

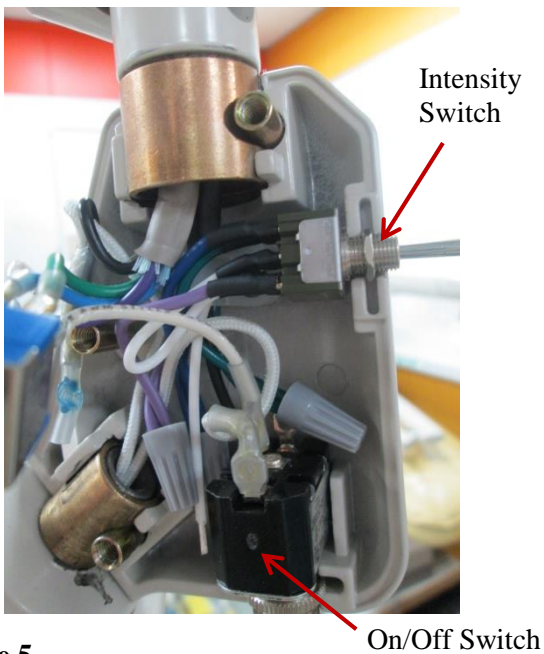
<b>Assembly Year</b>	<b>Wiring Connections</b>
Pre Jan. 1989 Cascade Post – Ceiling and Excellence Mount Lights	Brown to Violet Blue to Blue Orange to Green
Jan. 1989 – Sept. 1998 Post and Ceiling Mount Lights	White to Violet Red to Blue Brown to Green
Pre Sept. 1998 Wall, Track and Preference Mount Lights	Black to Violet Green to Blue Red to Green
Post Sept. 1998 Cascade, Preference, Wall and Track Mount Lights	Violet to Violet Blue to Blue Green to Green

## Light Cord Installation: 6300 Light (Continued)

- Align and seat the light switch and intensity switch into the housing, then re-install the cover and fasteners. Ensure that the wiring is not being pinched between the covers. **Figure 5**
- Install the supplied Red 6 Pin Connector to the pin side of the light cable (**Figure 6**):
  - Black wire into the #2 position
  - Green wire into the #3 position
  - Blue wire into the #4 position
  - Violet wire into the #5 position
- Plug the connector into the power supply. If working on a Cascade unit built Pre 1998, see the next page for connections.

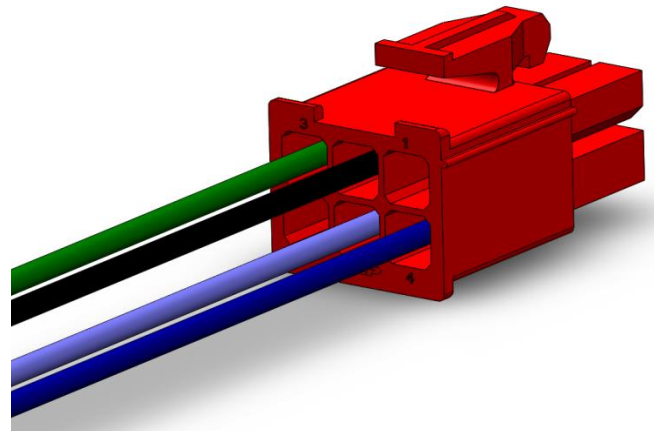
**NOTE: DCI Connectors may only be painted red on one side but it connects to the red connector on the power supply.**

**Align and seat intensity and On/Off switch.**



**Figure 5**

**Install wires in connector**



**Figure 6**

### Connecting to Power

- Ensure that the light switch is in the “Off” position, and then connect the system to its power source.
- Sweep the On/Off Switch with the Voltage Detector to ensure that the switch is safe to touch.
- Turn on the light and ensure that all of the functions work properly.





## Installation Guide for Cascade Units Built Pre-1998

1. Remove the old connector from the power supply. **Figure 7**
2. Install the new power supply connector using crimp nuts as shown. **Figure 8 and Figure 9**

