Illuminator Module Replacement & Condition Indicator

As with any intense illumination source, the v300/v600 ***Illuminator Module*** will wear out with use. Exacting tolerances and high output cooling of the ***Illuminator Module*** extends the expected life to 400+ hours under normal conditions. Please use the following procedures to replace the ***Illuminator Module*** in either your v300 or v600 Visualization System. If you have any questions, please contact our service group at 800.714.1374 or 207.657.7050.

v300 Illuminator Module Replacement

1) Turn off the v300 Visualization System and disconnect the AC Power Input Cable from the wall outlet. Disconnect the Upper DC Power Cable from the old ***Illuminator Module.***
2) Allow the old ***Illuminator Module*** to cool at least ten minutes before proceeding.
3) Loosen the plastic wing nuts on either side of the old ***Illuminator Module*** approximately one turn, and remove it from the Headgear frame.
4) Install the new ***Illuminator Module*** on the Headgear frame and tighten the plastic wing nuts.
5) Connect the Upper DC Power Cable to the ***Illuminator Module***, and plug AC Power Input Cable into a wall outlet.
6) Turn the system on and make sure the both the lamp and fan are functioning.

v600 Illuminator Module Replacement

1) Turn off the v600 Visualization System and disconnect the AC Power Input Cable from the wall outlet. Disconnect the Upper DC Power Cable from the old ***Illuminator Module.***
2) Allow the old ***Illuminator Module*** to cool at least ten minutes before proceeding.
3) Remove the new ***Illuminator Module*** from the packing tube. Enclosed in the packing tube is a cotton glove. Please use this glove for handling the new ***Illuminator Module.***
4) Remove the old ***Illuminator Module*** from the optics tube by rotating it counter-clockwise as shown in Figure 1.
5) With a gloved hand, remove the new ***Illuminator Module*** from its plastic wrapper.

Important! Do not allow the Illuminator Module bulb or reflector to come in contact with exposed skin or other foreign material. This may cause premature failure of the Illuminator Module.

6) Install the new ***Illuminator Module*** in the optics tube by screwing it clockwise.

Important! Do not force the new *Illuminator Module* into the optics tube. If you are having difficulty installing the new *Illuminator Module*, rotate it counter-clockwise one turn and then re-attempt to gently screw it into the optics tube.

7) Connect the Upper DC Power Cable to the ***Illuminator Module***, and plug AC Power Input Cable into a wall outlet.
8) Turn the system on and make sure the both the lamp and fan are functioning.

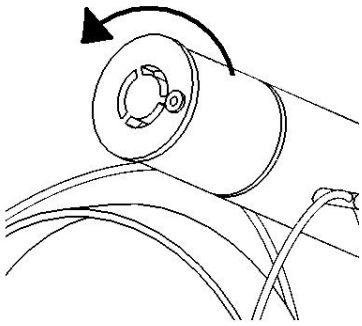

Figure 1: Removal of v600 Illuminator Module

Illumination Condition Indicator

The v300/v600 Series is equipped with one of the most sophisticated diagnostic systems of any lighting or vision system in the medical world. A powerful microprocessor constantly monitors the entire system of the lighting and cooling to ensure maximum performance. Part of this computer's function set is a display of the ***Illuminator Module's*** (1 in Fig 1) condition. Three colored LED's are visible through the air outlet vents on the rear of the illuminator.

Green: Will remain visible for the first 75% of its life expectancy.
Yellow: Will indicate 5-24% of life expectancy remains. It is suggested to order replacement at this point.
Red: Will indicate less than 5% of life expectancy remains. The bulb will alternate dim and bright 7 times at startup during this critical stage showing that the ***Illuminator module*** has reached its life expectancy.

The LED's flash a readout of the elapsed hours on the ***Illuminator Module*** 30 seconds after the power is applied:

- The red LED flashes equal to the number of hundreds of hours,
- The yellow flashes equal to the number of 10s of hours and
- The green flashes equal to the number of single hours, 124 hours would read 1 red, 2 yellow and 4 green.

This is followed in another 15 seconds by a second series of flashes showing the number of on/off cycles. This sequence differs from the first in that it is divided by 10, so 120 would be 1 yellow and 2 green flashes.

A typical life span for an ***Illuminator Module*** (1 in Fig 1) is in excess of 400 hours. For the first year of use, should your illuminator fail prior to 400 hours, a pro-rated warranty will apply.