

Subject: 12 volt low wattage Florescent Task Lighting
Sent: 10 Sep 06

Florescent lighting is close to the efficiency of LED lighting at much lower cost. Over the past few years I have been attempting to use the Home Depot's 12 volt battery operated (8 AA cell) florescent light (sells for about \$10) and adapting it to work with 12 volt battery source. This is done by soldering a wire to each of the battery terminals and running this to a 12 volt battery. The bottom line is it doesn't work for very long. Any voltage approaching charging voltage of about 14.5 volts will burn out the unit in short order. Turn on charging generator with the light on and the unit is typically toasted.

I have now found a much more cost effective solution. It is a simple unit of an 8 watt florescent tube inside a plastic tube for protection, circuitry to create the proper voltage to light the tube, 14 ft of wire leads, and clip leads to attach to 12 volts. It is designed to work on 12 volts while the battery is charging. See the 12V work Light "chil298" for \$3.33 at

http://www.mattstools.com/product_info.php?products_id=541

I purchased my units locally for \$2.60 at a whole sale tool place. I found the unit to use about 3.5 watts when new at 13 volts. After one month of continuous use at 13.1 volts, it draws a maximum of about 4.8 watts to 6.5 watts. At 6.25 volts it easily starts, runs, and uses between 1.9 watts to 3.6 Watts. I added a simple on-off switch in series and it becomes a highly practical low wattage, cost effective, survival task light for your base camp. I recommend stocking up on many of these units for your survival site. A typical 12 volt screw in florescent bulb is of the order of \$20 or more.

Subject: Update on LED Task Lighting
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I am now finding more and more LED Flash Lights at dollar or 99 cent stores. Keep an eye out for these. One has an aluminum body with 9 LEDs and runs on 3 AAA cells. Another is the hand-pressing type with 2 LEDs and mercury batteries. Recharging time can be done to some extent at 1/10 the run time as long as the batteries are not run too far down. The batteries last about 22 hours with the light on full time. The mechanism is defiantly worth a dollar. Wal-Mart sells the same thing for about \$4.99.