

IMPROVING OR REPLACING NON-COMPLIANT LIGHTS IN OURAY COUNTY

Q: How can I tell if my light is non-compliant or could be improved?

A: The fixture is not compliant with the Ouray County Light Ordinance if light rays go above 5 degrees below the horizontal or out to the side so that light can pass across the property line. You can identify a non-compliant fixture during the day by noting if the source of the light (the lamp or bulb) can be seen from the side or above. At night the glare from the direct rays of such a lamp or bulb will be visible.

Light going directly up contributes to light pollution of the night sky. Light going to the side can trespass across property lines, may cause glare that actually reduces visibility, and can adversely affect the natural nighttime environment.

The Town of Ridgway has a similar ordinance and many examples of good lighting. The City of Ouray has begun moving towards a lighting ordinance also.

Solutions:

Porch light with clear glass or visible bulb

1. Replace fixture with an opaque fixture or inexpensive insert (\$13 and up).
2. Replace the glass with opaque or heavily frosted glass and use the lowest possible wattage (40 watts or less incandescent or low wattage Compact Fluorescent Lamp). The glass can even be painted with heat resistant paint.
3. A strip of metal can be bent around the bulb or fixture to block the glare. The top can remain open if the light is under an overhang.
4. Avoid flood lights. They always produce glare unless surrounded by a metal strip as in #3.

Commercial lights

1. Replace wall sconces with “full cut-off” fixtures that direct the light down and not out or up. See the lights on the Ridgway Library, for example.
2. Use lights only when needed. Indiscriminate use of lighting doesn't enhance security.
3. Parking lot lights should be full cut-off (the bottom will be flat so light can only go down).

If you have **Yard/Barn Lights** (usually old-style inefficient 175 watt Mercury Vapor) with light going up and out as well as down, HERE ARE SOME OPTIONS:

1. Shields can be purchased for about \$35.
2. An energy efficient yard light with shield is \$135 or so. The payback due to conserved energy is only a few years. A shielded 70 watt High Pressure Sodium (HPS) light does the work of the obsolete 175 watt Mercury Vapor light, using less than half the energy. See examples in the Ridgway Elementary School parking lot and around Ridgway.
3. Put lights on switches and remove all “dusk to dawn” light sensors so that the light is only on when illumination is needed, if possible.
4. Timers are available that keep the light on only through the first part of the night, saving energy and reducing unneeded illumination of the natural nighttime environment.

COMPLIANCE IS EASY AND HELP IS AVAILABLE:

Good sources of information and acceptable fixtures include the following:

1. Green Earth Lighting, <http://www.greeneearthlighting.com/>, for shields and all types of fixtures.
2. Starry Night Lights, <http://www.starrynightlights.com/>, all sorts of fixtures
3. International Dark Sky Association, <http://darksky.org/>, link to Lighting on left of home page.
4. House of Lights, Montrose, next to Office Depot, 2305 S. Townsend, 252-1921, especially for home lights. They have fixtures and inexpensive inserts in stock and can order from multiple catalogs. Home Depot and other similar stores don't have many, if any, compliant fixtures at this time.
5. Contact the Ouray County Land Use Office, 626-9775, for additional information.

Effective Outdoor Lighting

Help eliminate light pollution. Select the best fixture for your application using this guide. Use the lowest wattage bulb appropriate for the task and turn off the light when it's not being used.

Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



SC 600

GOOD FIXTURES



EXAMPLES OF GOOD LIGHTING FIXTURES



BAD Barn Light style fixtures are very inefficient, sending about 20% of the light upward and another 20% horizontally outward, creating glare.

GOOD Many existing dusk-to-dawn security lights and residential streetlights can be retrofitted with the Hubbell Skycap.

GOOD The Hubbell Skycap turns any standard Barn Light into a full-cutoff light with wide area coverage.



BAD Non-cutoff fixtures like this "acc" ornamental cause light pollution.

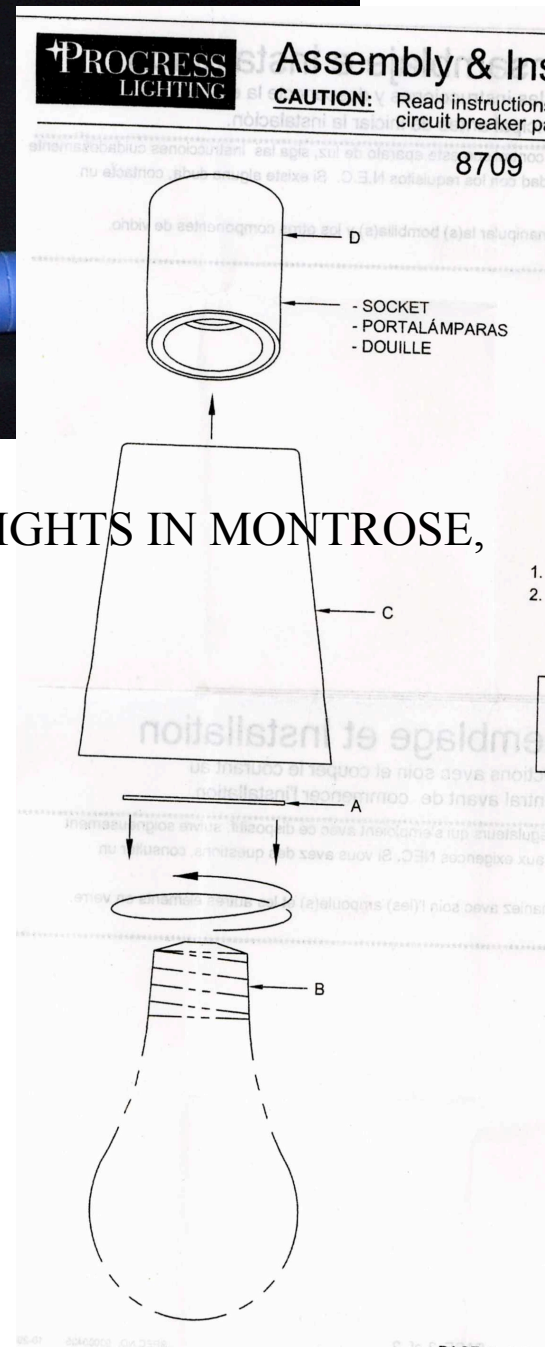
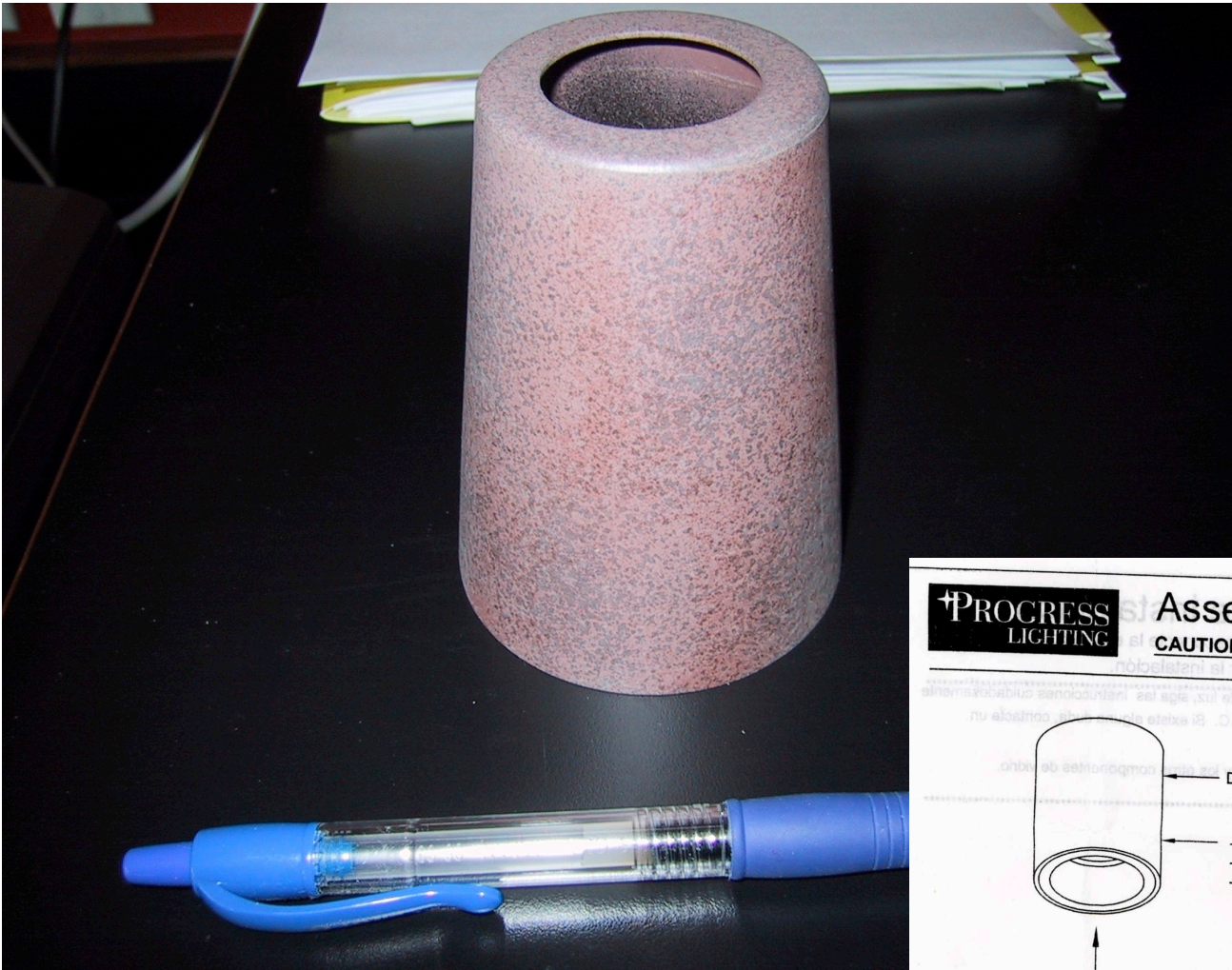
GOOD Even post-top ornamental fixtures, like this Salem Cutoff from GE Lighting, can be cutoff with clear panels and lamp/reflector located above.



GOOD Flat-lens cobra head fixtures, like this American Electric Series 125 Roadway Cutoff luminaire, provide excellent roadway lighting with greatly reduced glare and no uplight.



GOOD If floodlights must be used, they should always have top and side shielding, and be pointed at least 45° below the horizontal.



THESE INSERTS ARE \$13 AT HOUSE OF LIGHTS IN MONTROSE, NEXT TO OFFICE DEPOT.

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