

University of Winnipeg Department of Theatre and Film

Safe Handling of Lighting Instruments

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General Procedures:

- When overhead work is in progress all floor workers must wear hard hats.
- A spotter must be in attendance whenever anyone is on a ladder or platform.
- Proper footwear must be worn when climbing ladders or platforms (refer to course outline - no heels)
- When using wrenches overhead the wrist strap must be used at all times.
- Ensure your pockets are free of any loose items which might fall (cell phones included)

HANGING A LIGHT:

1. Check and prepare the light and equipment. Faulty equipment should be set aside and identified for the instructor. Checking and preparing should include:
 - visually checking for frayed cables or loose strain reliefs on plugs
 - placing the yoke in a vertical position and ensuring the yoke, tilt and pan bolts are tight
 - checking the adjustable features of the light operate (shutters, clamp, lens tube, pan screw)
 - closing the shutters and removing any loose accessories (filters or gobos)
 - opening the pipe bolt in the clamp so that it may easily fit on the pipe
 - confirming the presence of a safety cable and checking the cable clip to ensure it closes properly
 - plugging the light into a test circuit to confirm electrical operation
 - positioning the ladder under and slightly behind the target hanging location. Ensure the spotter is in place.
2. Place the light and clamp on the pipe in approximately the correct position.
3. Finger-tighten the pipe bolt to the pipe so that it cannot come off.
4. Attach the safety cable to the pipe.
5. Adjust the light position or yoke out the light as necessary and then tighten the pipe bolt securely. When adjusting the final position of a light there should be a minimum of 8 cm (3 inches) of clear space between the body of a light and any draperies or flammable surfaces. 8 cm is equivalent to the approximate width of your hand.
6. Pan and tilt the light to the rough focus position indicated on the plot. Secure the pan and tilt bolts.
7. Add accessories such as filters, gobos or barn doors as indicated on the lighting plot.
8. Open the shutters on an Ellipsoidal or barn doors on a Fresnel and spot focus a Fresnel.
9. Cable the light and secure excess cable to the pipe above or beside the light (in a loose coil if necessary) with tie line tied in a bow. Ensure the cable extending from the light itself is not pulled tight and that longer runs of cable do not hang loose below the grid and that the body of the light is free of direct contact with tie lines or cable.

REMOVING A LIGHT: (NOTE: lights that have been recently used may be hot and gloves should be used.)

1. Detach and remove cables.
2. Close shutters on Ellipsoidals (or barn doors on Fresnels) so that they cannot catch as the light is being removed.
3. Remove accessories such as barn doors, gobos and filters.
4. Pan and tilt the light to a vertical position (pointing straight down).
5. Loosen the pipe bolt just so that it can rotate on the pipe without coming off.
6. Remove the safety cable from the pipe and clip it to itself so that it can't fall.
7. Finish loosening the pipe bolt until the light and clamp can be removed.
8. Remove the light from the pipe and lower or hand it down to a spotter.

CHANGING LAMPS:

- The light **must** be physically unplugged before it is opened.
- Theatrical bulbs can be extremely hot and can cause severe burns. If you have to change a bulb you must wait a minimum of 5 minutes after the lamp has been on and you must use gloves.
- Depending on the facility you are working in wattages may vary. Replace bulbs only of the same type and wattage as the original.