

**Knowledge Domain: Electrical Simple**  
**Unit: Lighting/ Indicators**  
**Skill: Cleaning Bulb Connections**

**Tools and Parts Required:**

- 1) Necessary tools to remove the fixture
- 2) Flat-headed screwdriver
- 3) Abrasive pad (sandpaper)
- 4) Wire brush
- 5) Dry rag
- 6) Steel wool
- 7) Safety gloves and goggles
- 8) A light fixture and light bulb (preferably rusty or dirty)

**Introduction**

Light bulb connections can get dirty. Dust, grease, humidity, dirt, and pollution can affect light fixtures and light bulbs. Light bulb connections should be cleaned regularly.

**Example**

The pictures below show the methods to clean light connections.



**Identification and Diagnosis**

You can visually inspect whether a light bulb connection needs cleaning. You will see dust, grease, rust or corrosion on the light bulb connection. Clean the light bulb connection to increase the efficiency of light bulbs.

**Procedure**

1. Use safety gloves and goggles when cleaning the light bulb connections.

2. Turn off the lamp or machine and unplug it.
3. Remove the light bulb.
4. Clean the light bulb base with a dry, clean rag to remove dust.
5. If there are large flakes of rust on the light bulb base, remove the rust with flat-headed screwdriver.
6. Then use a wire brush, steel wool, or abrasive pad for removing fine rust, grease from the light bulb base.
7. Rub the light bulb base with abrasive pad until the bare metal is visible.
8. Again clean the light bulb base with a dry, clean rag.

Does the light bulb fixture need to be cleaned? Usually, if the light bulb needs cleaning, the light fixture does as well. Be certain that the electricity is off before attempting to clean a light fixture.

9. Use the same cleaning methods (steps 1-8) to clean the light fixture.

Complete the repair:

10. Re-install the light bulb.
11. Turn on the lamp.

### **Exercise**

Your instructor will give you a light bulb (incandescent, fluorescent, or LED). Refer to the identification and diagnosis section above and identify whether the light bulb base requires cleaning. Clean the light bulb base using proper method. Clean the light fixture.

Your instructor must verify your work.

### **Preventative Maintenance and Calibration**

Light fixtures should be cleaned when the light bulbs are replaced. Light bulbs and fixtures should be cleaned when the fixture is serviced.

Never touch halogen light bulbs or operating theater lamp bulbs with your finger. The oil from your skin will decrease the life of the bulb. Halogen and operating theater lamp bulbs can be cleaned with a clean, lint free cloth, using the BTA Skill *Electrical-Lights Fixtures-Cleaning High Temperature Bulbs*